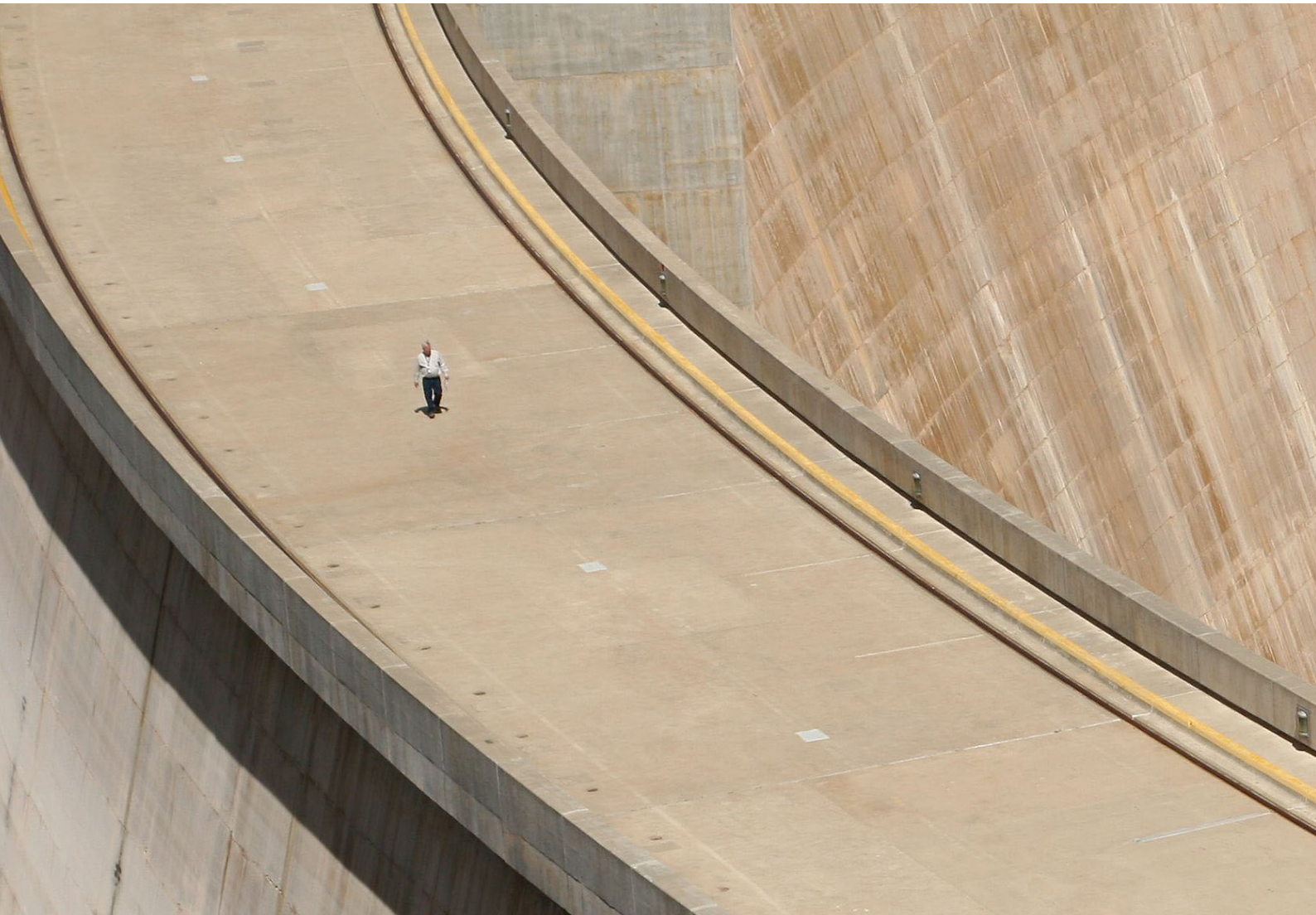


More from less — material resource efficiency in Europe
2015 overview of policies, instruments and targets in 32 countries



Slovakia 

May 2016



This country profile is based on information collected by the Slovak 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 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>

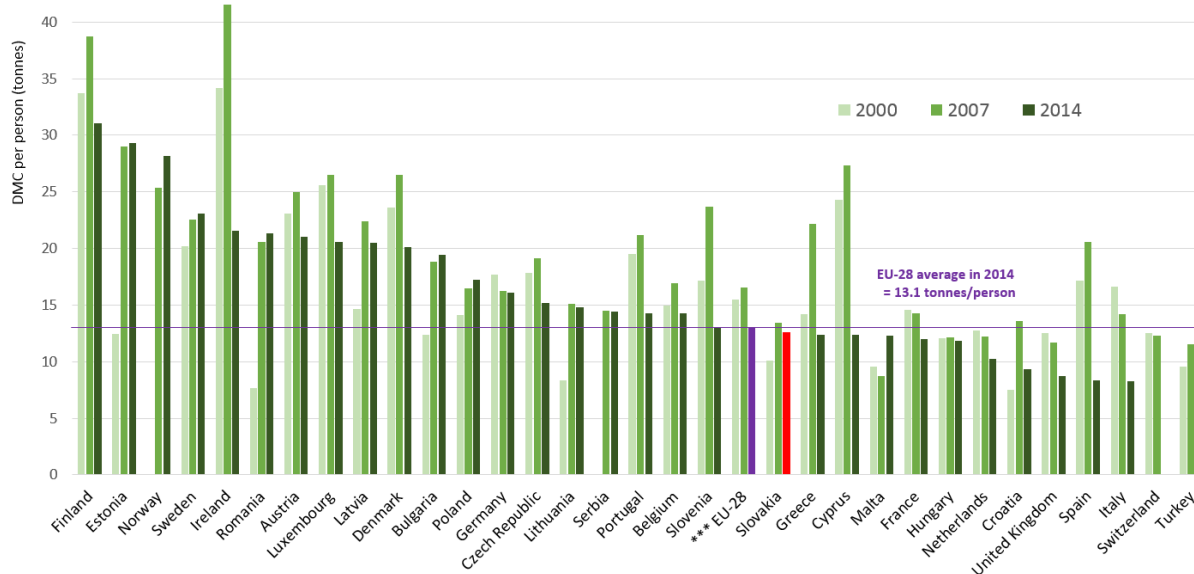
For information on climate- and energy-related policies, including those on energy efficiency, in the participating countries, please visit: <http://www.eea.europa.eu/themes/climate/ghg-country-profiles>

Slovakia, facts and figures

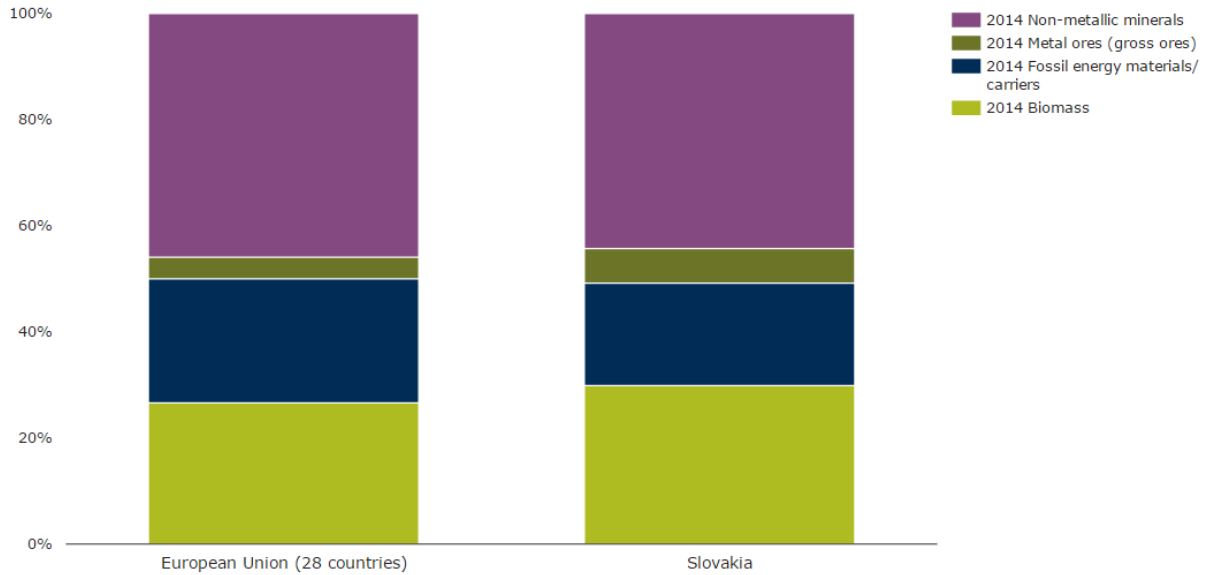
Source: Eurostat

	<p>GDP: EUR 79 billion (0.5 % of EU-28 total in 2014)</p>
	<p>Per person GDP: EUR 21,100 (in purchasing power standard) (77 % of EU-28 average per person in 2014)</p>
	<p>Use of materials: 68 million tonnes DMC (1.0 % of EU-28 total in 2014) 12.6 tonnes DMC/person (96 % of EU-28 average per person in 2014) Resource productivity 1.07 EUR/kg (54 % of EU-28 average in 2014)</p>
	<p>Structure of the economy: agriculture: 3.4 % industry: 22.5 % services: 74.1 % (2014 est.)</p>
	<p>Surface area: 49,000 square kilometres (1.1 % of EU-28 total)</p>
	<p>Population: 5.4 million (1.1 % of EU-28 total)</p>

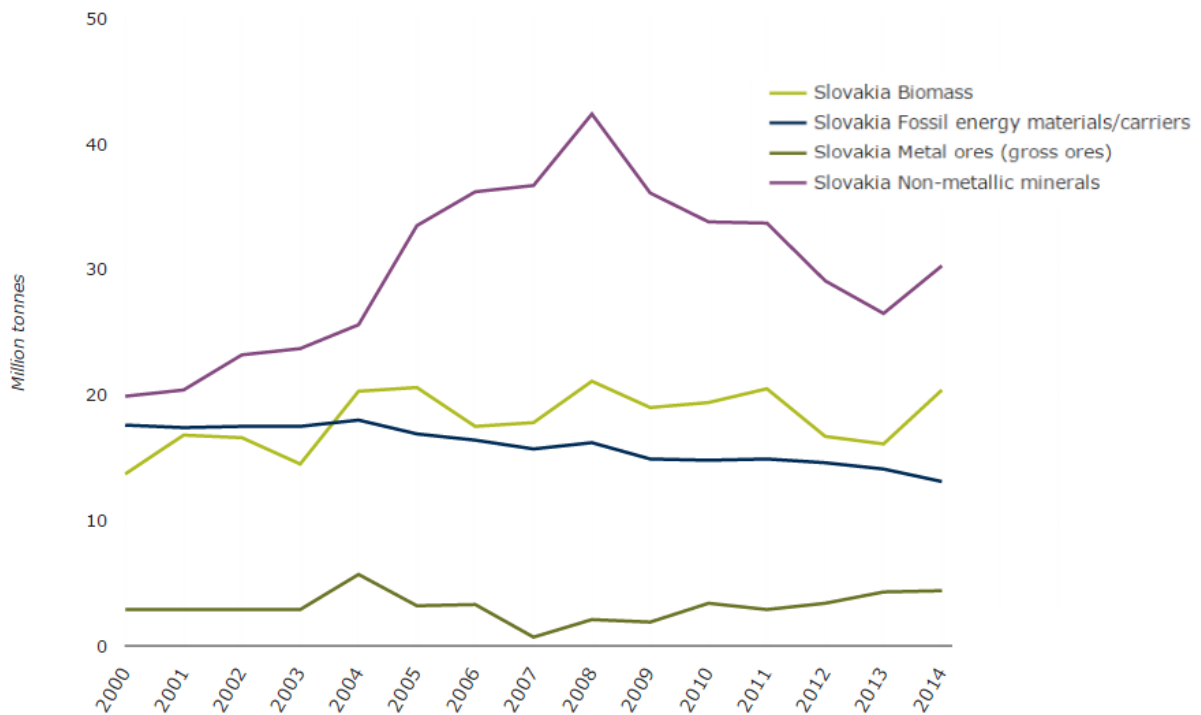
Use of materials (DMC) per person, participating countries and EU-28
(2000, 2007 and 2014)



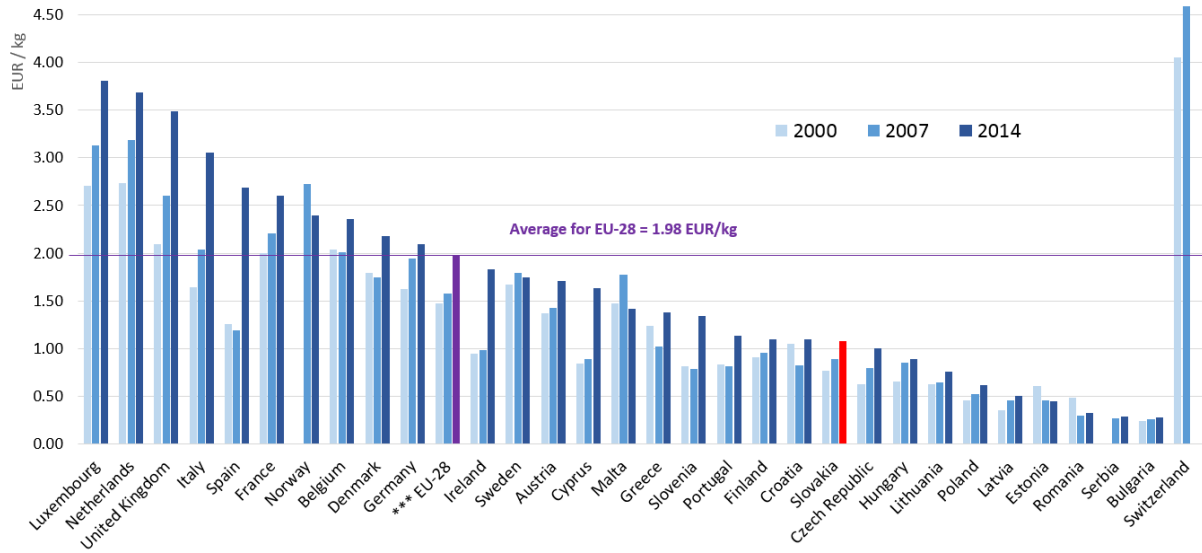
Domestic material consumption by category, EU-28 average and Slovakia (2014)



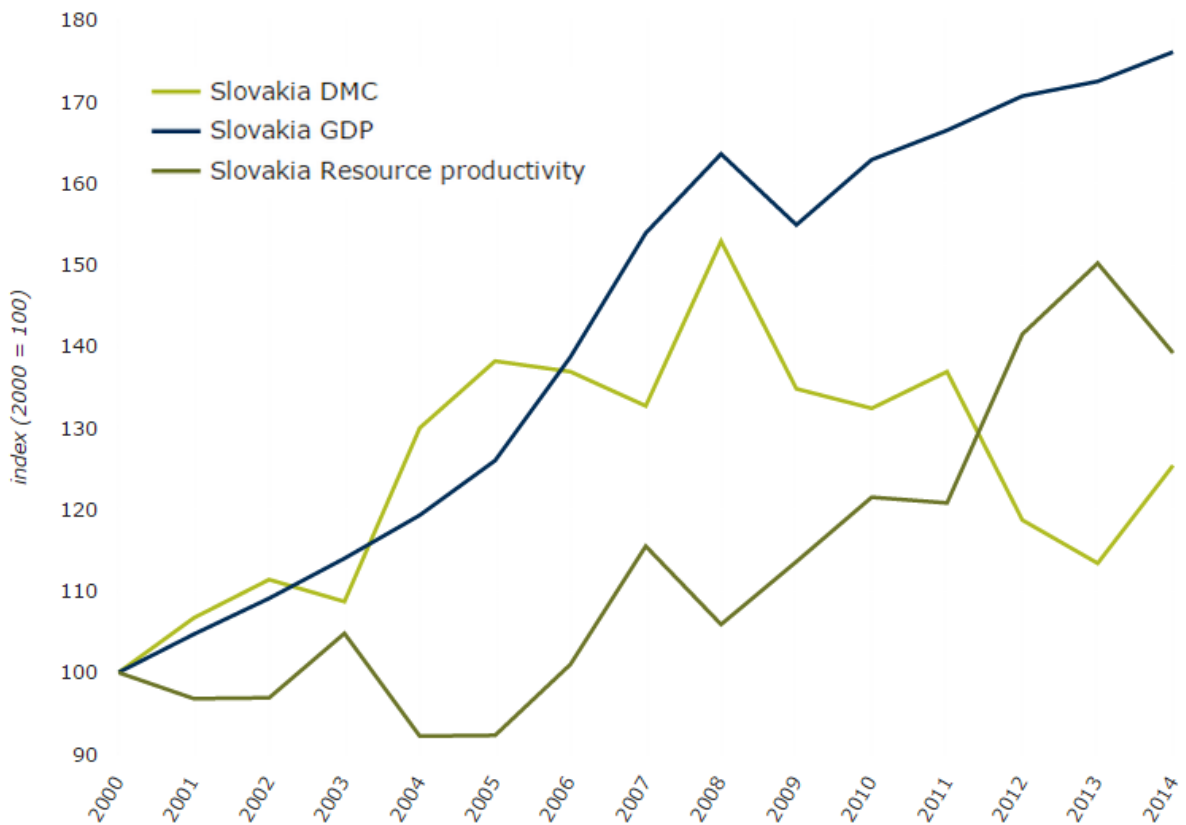
Trends in material consumption, Slovakia by category (2000–2014)



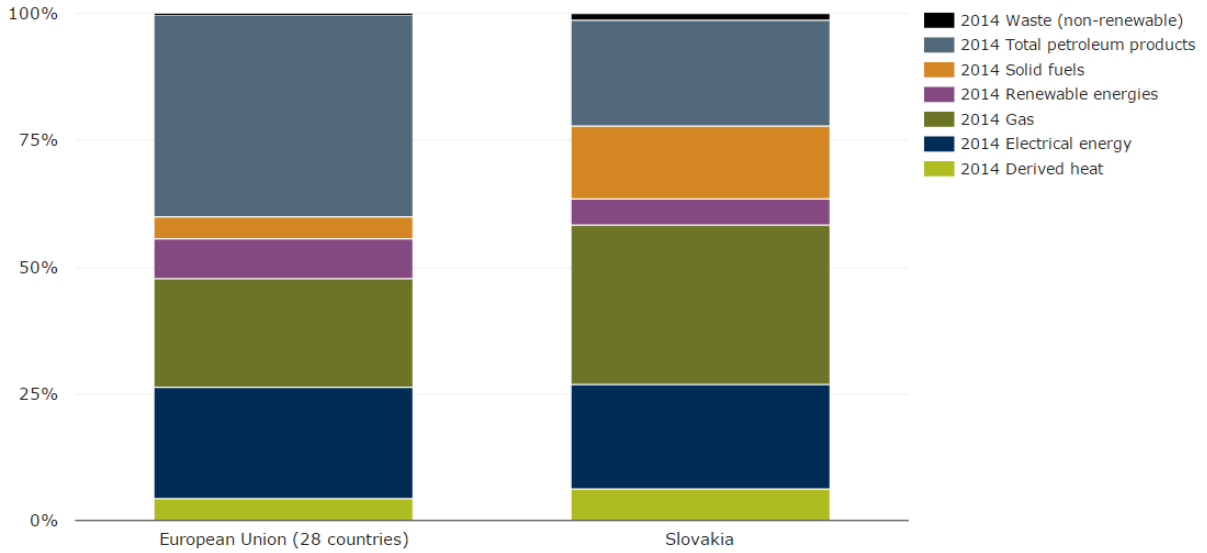
**Resource productivity (GDP/DMC), participating countries and EU-28
 (2000, 2007 and 2014)**



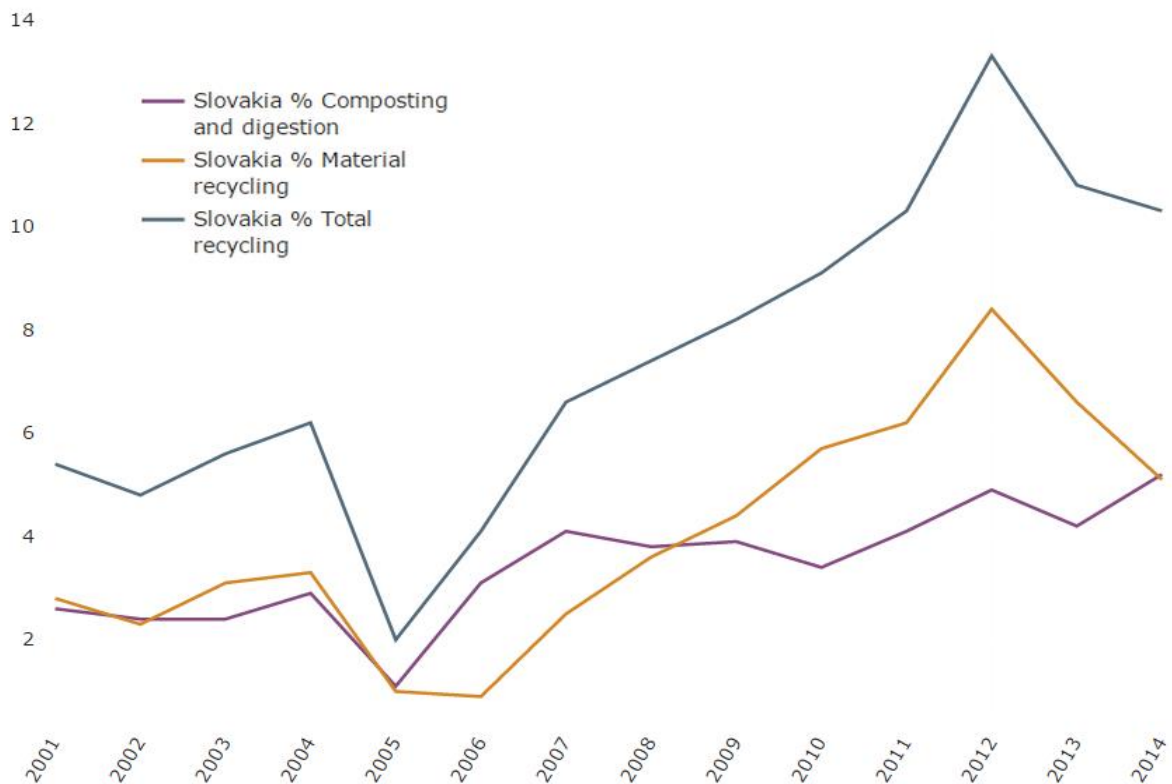
GDP, DMC and resource productivity trends, Slovakia (2000–2014)



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



Recycling of municipal waste, Slovakia (2001–2014)



Introduction

Slovakia has neither a dedicated National Resource Efficiency Strategy nor an Action Plan, but several national strategies address the topic.

Scope of material resource efficiency

Neither the term *resource efficiency* nor its scope are explicitly defined.

Driving forces of material resource efficiency

Resource supply security, food security and the idea of sustainable development. As well as the activities within the European Union (EU) are the main drivers for the implementation of resource efficiency principles. The challenge for Slovakia is to apply the principles of sustainable development in the everyday life, assess the planned and realised activities through the its criteria and the basic principles of the resource efficiency set in the National Sustainable Development Strategy (2001) and the National Sustainable Development Action Plan (2005–2010)”

<http://www.tur.vlada.gov.sk/637/trvalo-udrzatelny-rozvoj.php> (in Slovak)

Additional drivers are the international targets for the use of renewable resources, decreasing carbon dioxide emissions, energy security, security of supply and access to resources and other tasks.

Priority material resources, sectors, and consumption categories

Priority materials

Examples of selected material streams identified in national policies that aim to introduce resource efficiency:

Rural Development Programme of the Slovak Republic 2014–2020

- Facilitating the supply and use of renewable sources of energy, by-products, wastes and residues and of other non-food raw material, for the purposes of the bio-economy.

Raw material policy

The strategic raw materials for the needs of the national economy in the Slovak Republic:

- crude oil and natural gas: domestic geological reserves relative to total consumption are negligible. In this context, the diversification of import capacities and completing the necessary reserve storage capacities for oil and petroleum products and the development of underground natural gas reservoirs are of crucial importance;
- coal: for the strategic security of electricity efficient use of domestic brown coal and lignite is crucial;
- metals: geological reserves are limited, raw materials for industry's needs are provided by imports;
- industrial minerals mined in the Slovak Republic: magnesite, cement materials, rock salt, high-purity limestone, bentonite, zeolite, ceramic clays, gypsum, anhydrite and talc are crucial for the development of Slovakia's domestic and industrial infrastructure for export.

Concept of the geological research and exploration of the territory of the Slovak Republic

Mineral resources research and exploration:

- a strong focus on the source of critical raw mineral resources in Slovakia (antimony, indium, beryllium, magnesium, cobalt, niobium, fluorine, platinum group elements, gallium, rare earths, including yttrium and scandium, germanium, tantalum, graphite, tungsten), review the possibility of the occurrence of minerals in a rock complexes in the deposits of the Western Carpathians,

Waste management plan 2016–2020

The plan is focused on the following waste streams – municipal waste, bio-waste, paper and paperboard waste, glass waste, plastic waste, ferrous and non-ferrous waste, waste electrical and electronic equipment (WEEE), batteries and accumulators, end-of-life vehicles, end-of-life tyres, construction and demolition waste, waste oils, packaging waste, wastes containing polychlorinated biphenyls (PCBs) and PCB contaminated equipment.

<http://www.enviroportal.sk/indicator/detail?id=561> (available in English)

Priority industries and economic sectors

The strategy of the Ministry of Economy of the Slovak Republic for the period 2012–2016 based on the Government Programme of the Slovak Republic (2012)

Activities supporting economic growth – increasing the competitiveness of Slovakia, effective investment promotion, intensifying industrial research and development, support for small- and medium-sized enterprises (SMEs), increasing the efficiency of enterprises owned by the state, increasing energy security and the efficient use of energy, promotion of employment and the

efficient use of EU funds. The strategy is focusing on the economy generally, it does not explicitly single out individual sectors or industries as priorities.

<http://www.economy.gov.sk/strategia-mh-sr-na-obdobie-2012-az-2016-vychadzajuca-z-pvv-sr/138493s>

Measures of economic policy to promote economic growth (2013)

This document was prepared by the Ministry of Economy in co-operation with the Ministry of Finance and the Ministry of Agriculture and Rural Development. There are a set of measures that have to apply to many areas of economy and spheres of society to promote economic growth. All the measures present a comprehensive development plan conceived for the short medium and long terms. <http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=22419>

Energy Efficiency Action Plan 2014–2016 and Outlook to 2020

The strategic framework of energy efficiency in is composed of Concepts of Energy Efficiency and their implementing instruments: three-year Energy Efficiency Action Plans. The action plans, on one hand, propose energy efficiency measures which ensure the objectives of energy saving, and, on the other, periodically evaluate the measures and the fulfilment of their objectives. In the pursuit of the national energy efficiency target, measures are broken down into energy consumption in the building, industrial, public transport and appliances sectors; energy transformation; transmission and distribution measures; and horizontal measures.

https://ec.europa.eu/energy/sites/ener/files/documents/NEEAP_EN_ENER-2014-01001-00-00-EN-TRA-00.pdf

National Renewable Energy Action Plan

In October 2010, the Slovak government prepared the National Renewable Energy Action Plan in which national targets for share of renewable energy use in transport and an energy sectors in 2020 are specified. <http://www.economy.gov.sk/strategy-documents/131028s>

The concept of using agricultural and forestry biomass for energy purposes:

- resources and energy potential of biomass produced in the agriculture sector: agricultural biomass, forest biomass;
- the actual state of biomass utilisation for energy purposes;
- barriers to implementing biomass utilisation for energy purposes (technical, economic, legislative and staffing barriers);
- draft of the concept of utilisation of the energy potential of agricultural biomass: utilisation of agricultural biomass in the agricultural sector and on the biomass market.

<http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=9359>

Research and Innovation Strategy for Smart Specialisation in the Slovak Republic (2014 -2020)

A basic precondition for elaboration of a Smart Specialisation Strategy is that the country demonstrates its ability to strategically manage limited sources with the aim of sustainable development and developing the country in harmony with principles of smart, sustainable and inclusive growth in order to strengthen both its and the EU's competitiveness. The objective of this strategy is to stimulate a structural change in the Slovak economy towards growth based on increasing innovation and excellence in research and innovation to support the sustainable growth of incomes, employment and quality of life. No specific sector is addressed in this strategy.

<http://www.economy.gov.sk/strategia-vyskumu-a-inovacii-pre-inteligentnu-specializaciu-sr/142232s>

Priority consumption categories

FOOD: involvement of **communities** and **households** in the community and home composting for the reduction of biodegradable waste going to landfills, The **Waste Prevention Programme** of the Slovak Republic 2014–2020 aims to reducing of the generation of bio-waste and its share in mixed municipal waste.

Policy framework

National strategies or action plans for material resource efficiency

Many of national policies and strategies across all sectors of the Slovak economy address resource efficiency:

The Slovak Republic's Strategy for Sustainable Development

http://www.thegef.org/gef/sites/thegef.org/files/documents/Slovakia_NSSD_Final.pdf

Innovation Strategy of the Slovak Republic for 2014–2020

https://lt.justice.gov.sk/Attachment/Vlastn%C3%BD%20materi%C3%A1l_doc.pdf?instEID=-1&attEID=51522&docEID=287000&matEID=5788&langEID=1&tStamp=20130102100012757

The National Reform Programme of the Slovak Republic in 2014

http://www.finance.gov.sk/en/Components/CategoryDocuments/s_LoadDocument.aspx?categoryId=600&documentId=563

Waste Prevention Programme of the Slovak Republic 2014–2018

<http://www.minzp.sk/sekie/temy-oblasti/odpady-obaly/program-predchadzania-vzniku-odpadu/>

The Strategy of Limiting Storage of Biodegradable Waste going to Landfill

http://www.minzp.sk/files/sekcia-enviromentalneho-hodnotenia-riadenia/odpady-a-obaly/registre-a-zoznamy/strategia_bloodpad.pdf

Waste Management Plan of the Slovak Republic 2016–2020

http://www.minzp.sk/files/sekcia-enviromentalneho-hodnotenia-riadenia/odpady-a-obaly/registre-a-zoznamy/poh-sr-2016-2020_vestnik.pdf

National Forest Programme of the Slovak Republic

<http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=363>

Long-term Strategy for the Use of Agricultural and Non-Agricultural Crops for Industrial Purposes

<http://www.rokovania.sk/File.aspx/ViewDocumentHtml/Mater-Dokum-181418?prefixFile=m>

Concept of Development of Slovak Agriculture for 2013–2020

<http://www.enviroportal.sk/lesnictvo/koncepcia-rozvoja-podohospodarstva-sr-na-roky-2013-2020>

The Concept for Geological Research and Exploration of the Territory of the Slovak Republic for period 2012–2016 (with an outlook to 2020)

<http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=20780>

Raw materials policy (2004)

<http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=10191>

The concept of using agricultural and forestry biomass for energy purposes

<http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=9359>

Energy Policy of the Slovak Republic (2014)

<http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=23993>

Energy Security Strategy of the Slovak Republic (2008)

<http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=14372>

The Concept of Energy Efficiency (2007)

<http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=8637>

The Concept of Using Renewable Energy Sources (2003)

<http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=7903>

Strategy for a Higher Utilisation of Renewable Energy Sources in the SR (2007)

<http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=8456>

The circular economy and closing material loops

Policy action is driven by EU requirements as well as national priorities. The material resource efficiency policy and the policy approach towards closing the material loop(s) are divided between specific policies (waste, biomass, minerals, sectoral); no specific policy exists.

Waste Management Plan 2016–2020

Recycling of municipal waste—implementation of extended producer`s responsibility for special fractions of municipal waste, review of possibility to increase fees for waste landfilling and possible change of fees reallocation mechanism, to adopt unified methodology for municipal waste composition determination, to consider possibility of introducing a new collection system for non-refillable beverage packaging.

Specific waste streams – municipal waste, bio-waste, paper and paperboard waste, glass waste, metals, WEEE, batteries and accumulators, end-of-life vehicles, end-of-life tyres, construction and demolition waste, waste oils, packaging waste, wastes containing PCBs and PCB contaminated equipment. To increase separate collection of recyclable fractions of municipal waste, to increase recycling of construction and demolition waste, establish support of using materials from recycled waste in manufacture, financial support of re-use and preparing for re-use projects at the municipal level.

Waste Prevention Programme 2014–2018 focuses on:

- stakeholders – for example, municipality and entrepreneurs;
- selected waste streams – for example, biodegradable and hazardous wastes;
- product lifecycles – design, production, consumption and end-of-life.

The Strategy for the Implementation of the Reduction of Biodegradable Waste Going to Landfills

The objective of this strategy is reduction of biodegradable municipal waste going to landfill. To meet this objective, the following measures have been adopted:

- involving people from municipalities into community and home composting,
- increase the separate collection of paper and paperboard,
- support the building of biogas plants, which will produce biogas from waste,
- legislative support for the waste use as alternative fuel, the new technical standards for the production and composition of this alternative fuel, support of construction facilities and suitable technologies,
- Legislation amendment of prohibition for kitchen waste crusher use.

General policy objectives for material resource efficiency

Raw materials policy (2004):

- Sustainable utilisation of minerals and domestic raw material resources in market condition

Waste Management Plan of the Slovak Republic 2016–2020:

The strategic objective of waste management is diverting waste from landfills, in particular municipal waste. Main objective of the waste management of the Slovak Republic to 2020 is the minimisation of negative impacts of waste generation and waste handling on human health and the environment.

Measures are focused on:

- promotion of the reuse and recycling of municipal waste and construction and demolition waste;
- implementation of proximity and self-sufficiency principles;
- implementation of extended producer` responsibility;
- implementation of BAT and BEP.

Waste Prevention Programme:

- Focusing on prevention of waste instead of material recovery through measures for special waste streams – mixed municipal waste, biodegradable municipal waste, paper and paperboard waste, waste packaging, construction and demolition waste, hazardous waste, waste from mining industry

Energy Policy of the Slovak Republic (2014):

- Main goal: to achieve a competitive low-carbon energy industry ensuring the safe and efficient supply of all forms of energy at affordable prices with regard to consumer and environmental protection, sustainable development, security of supply and technical safety.

Energy Security Strategy of the Slovak Republic (2008):

- To ensure energy security, mainly in term of the security of the supply of coal, oil, gas, renewable energy, uranium, heat and electricity.

The Concept of Energy Efficiency (2007):

It provides a framework for activities on energy efficiency with a view to 2016. The main objectives are:

- the gradual reduction of energy intensity to the EU-15 level;
- to create a motivational background for the effective behaviour of citizens and market participants;
- to promote sustainable solutions and innovation; and
- to introduce advanced energy-efficient technologies in all sectors of the Slovakian economy.

The Concept of Using Renewable Energy Sources (2003):

- Created a base frame of development and promotion of using renewable energy in all sectors.

Strategy for a Higher Utilisation of Renewable Energy Sources in the Slovak Republic (2007):

- Contains targets for the use of renewable energy sources to be achieved in electricity and heat generation by 2010 and 2015. These targets have been set based on the potential of individual energy sources, the current situation in their utilisation and their expected use in the future.

Rural Development Programme of the Slovak Republic 2014–2020:

- Promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy in the agricultural, food and forestry sectors.
- Slovakia is committed to obtaining 14 % of its energy from renewable sources in gross final energy consumption by 2020. One of the ways of achieving this objective will be in support of investment in the construction of installations for solar and wind energy, hydropower and biomass, provided that the energy generated is consumed by the beneficiary's own company.

The Concept of Using Agricultural and Forestry Biomass for Energy Purposes (2004):

- To monitor the impact of existing legislation to promote renewable energy sources and biomass.

Concept of Development of Slovak Agriculture for 2013–2020:

- Strategic priority for forestry: ensuring sustainable forest management.

National Forest Programme of the Slovak Republic:

- Strategic goal to achieve ecological forest management.
- The main priorities are to support nature-friendly forest management; support the development and use of environmentally-friendly technologies and techniques; support the conservation, improvement and enhancement of biodiversity; and support the use of forest biomass for energy purposes.

National Programme of Wood Potential Utilisation of the Slovak Republic with strategic goals:

- Ensuring wood supply in changing natural and social conditions through active sustainable forest management.
- Efficient use of wood, support of employment in the forestry-wood sector;
- Promoting an appreciation of the potential of wood based on SMEs in the regions using locally available resources, with a view to increasing employment and related regional development.
- Improving domestic demand for wood products in accordance with the principles of sustainability.
- Achieving increased use of forest biomass, as well as by-products, in wood processing for energy purposes.

Strategy for implementing Voluntary Environmental Policy Instruments in the Slovak Republic:

This Strategy was launched in November 2007 and is focused on promoting voluntary instruments such as green public procurement (GPP), EMAS, eco-labels and voluntary environmental agreements. Currently support for material resource efficiency is indirect, but there are many tools related to it.

Institutional set up and stakeholder involvement

Institutional set up for material resource efficiency policies

The Ministry of the Economy, the Ministry of the Environment, the Ministry of Agriculture and Rural Development and their special organisations, for example , the Slovak Innovation and Energy Agency <http://www.siea.sk/> in co-operation with other ministries are mainly responsible for the implementation the resource efficiency policies.

Key responsibility for the energy policy preparation and implementation in the Slovak Republic lies with the Ministry of the Economy; the policy is approved by government and implemented by other relevant ministries – mainly Ministry of the Environment and the Ministry of Transport, Construction and Regional Development.

The Ministry of the Environment covers environmental issues linked with energy.

Process to ensure stakeholder participation

Examples of the activities to ensure stakeholder participation in the field of environmental management are (Slovak Environment Agency):

- all stakeholders are involved in the process of the legislative procedures.
- Working groups are established as necessary.
- Some of strategic documents must be supported by a strategic environmental assessment.

Suggestions for international support mechanisms to exchange experience

Common meetings, webinars, conferences, and bilateral co-operation

Policy instruments

Policy instruments commonly used for material resource efficiency

There are some economic/financial instruments in the Slovak Republic concerned with improving material resource efficiency. Financial instruments include fees for the use of natural resources and payments for environmental pollution. There are, for example, separate levies for exploration, mining and extracted minerals. Concerning environmental pollution, there are charges for air pollution from large and medium sources.

There are no financial instruments for investors to reduce their risk in resource efficiency investment.

Energy Efficiency Action Plan 2014–2016 with an outlook to 2020

https://ec.europa.eu/energy/sites/ener/files/documents/NEEAP_EN_ENER-2014-01001-00-00-EN-TRA-00.pdf#page=6&zoom=auto,-202,831 (in English)

Overview of the most significant policy measures (and funds made available to support implementation) for the fulfilment of the target under Article 7 of Directive 2012/27/EU:

Source of financing	Measure to which the support applies
State Housing Development Fund – Residential Building Insulation	- Improvements in the thermal performance of residential buildings.
State Housing Development Fund – EU-funded Residential Building Insulation – Integrated Operational Programme, 2014–2020 ESIF	- Improvements in the thermal performance of residential buildings;.

Source of financing	Measure to which the support applies
Operational Programme Environmental Quality, 2014–2020 European Structural and Investment Fund (ESIF)	<ul style="list-style-type: none"> - Energy auditing at SMEs and the implementation of measures derived from energy audits; - Reductions in the energy intensity of public buildings; - Production, approval and implementation of plans for sustainable energy and reductions in greenhouse gas emissions; - Introduction of energy management systems, including energy audits and environmental management; - Support for the development of energy services regionally and locally; - Construction, reconstruction and modernisation of heat distribution systems; - Construction, reconstruction and modernisation of electricity and heat production plants via high-performance combined production with a maximum thermal input of 20 MW; - Improvements in the energy efficiency awareness of children and young people; - Energy efficiency information campaign; - Monitoring and information system – interconnection with most energy efficiency support mechanisms;
Operational Programme Integrated Infrastructure, 2014–2020 ESIF	<ul style="list-style-type: none"> - Renewal and modernisation of the fleet; - Building and upgrading the transport infrastructure; - Support for the development and use of public passenger transport, including support for the creation of integrated transport systems
Integrated Regional Operational Programme, 2014–2020 ESIF	<ul style="list-style-type: none"> - Support for the development of non-motorised transport, especially cycling; - State Housing Development Fund: EU-funded residential building insulation (see above);
Slovseff III Green Programme	<ul style="list-style-type: none"> - Improvements in the thermal performance of multi-family buildings; - Improvements in energy efficiency in industry;
Voluntary Agreement	<ul style="list-style-type: none"> - Provision of energy services in the public sector and in the buildings sector via gas, electricity and heat suppliers.

Operational Programme Quality and Environment as financial support schemes

The Ministry of the Economy, in co-operation with the Centre for Scientific and Technical Information, aim to support Horizon 2020 and SMEs.

Examples of good practice

Methodological Guide for Public Authorities and Entities: *Green public procurement*

The Slovak Environment Agency (SEA) published guidance on GPP in 2014, which aims to help public authorities buy goods and services with a lower environmental impacts. Guidance mainly refers to EU GPP criteria for priority product groups and includes recommendations on how environmental considerations can be included at each stage of the procurement process. The focus on material efficiency/circular economy in the GPP guidance is mainly included in the EU GPP criteria recommended to public authorities by the guidance. The recommendations include recycled content for products and packaging; resource efficiency; environmental waste management; reuse; take-back options; recyclability; etc. The guidance also talks about the specific environmental, social and health, political and economic benefits of GPP implementation, and encourages public authorities to procure products with a long lifetime, based on lifecycle costs.

The Slovak Environment Agency, in co-operation with the Ministry of the Environment, continues organising GPP seminars for public procurers. Two hundred and twenty public procurers were educated in 2014, and eight further seminars are planned for this year. The Slovak Environment Agency launched collecting Slovakian examples of good GPP practice to present first at the GPP seminars, and it will then prepare a good practice brochure.

<http://www.sazp.sk/public/index/go.php?id=1704>

Slovakia participated in the project **Sustainable Aggregates Planning** in South East Europe (SNAP-SEE). Results of this project could be an important source of information in the process of the elaboration of national and regional documents. More information is available at:

http://www.snapsee.eu/index.php?option=com_content&view=article&id=576&Itemid=433

Targets and indicators

Targets for material resource efficiency

Concept Development of Agriculture for 2013–2020 (2013)

Increase production of agricultural commodities to meet 80 % of current consumption in Slovakia;

Waste Management Plan of the Slovak Republic 2016–2020

The waste management objective in the field of municipal waste is to increase the preparation of household wastes, such as paper, metal, plastic and glass, for reuse and recycling, as well as from other sources wherever possible as long as the sources contain waste similar to household waste, to at least 50 % by volume of the waste generated in the preceding calendar year by 2020.

The waste management objective for construction and demolition waste is to increase the preparation of construction and demolition waste, including waste from backfilling, for reuse, recycling and recovery as a substitute for other materials to at least 70 % of the volume of the waste generated in the preceding calendar year by 2020. This objective applies to waste specified in Group 17 of the Waste Catalogue established by the implementing legislation, with the exception of hazardous waste and waste under catalogue number 17 05 04.

The objective for WEEE collection, in accordance with the principle of producer responsibility, in the given calendar year is specified as: 4 kilograms of household WEEE per inhabitant in 2014 or 2015, or the average volume of WEEE collected in the Slovak Republic in the last three years, whichever is greater; in 2016, a volume equivalent to 48 % of the average volume of EEE placed on the market in the Slovak Republic in the last three years, annually increasingly, in 2020 a volume equivalent to 60% of the average volume of EEE placed on the market in the Slovak Republic in the last three years.

The objective for the collection of spent batteries and accumulators for individual producers of portable batteries and accumulators is 40 % (2015) and 45 % (2016) of the quantity of spent portable batteries and accumulators equivalent to the quantity of portable batteries and accumulators which the producer has placed on the market in the Slovak Republic in the previous calendar year. The objective for the recycling of spent batteries and accumulators for the relevant calendar year is 100 % of the quantity of spent batteries and accumulators collected in the previous calendar year.

Strategy for a Higher Utilisation of Renewable Energy Sources in the Slovak Republic (2007)

- inventory contemporary knowledge of potential of individual renewable energy sources (total and technical), draft possibilities of the commercial utilisation of technologies, the proposed targets: to achieve 4 % renewables share in total energy consumption in 2010 and 7 % by 2015, a 19 % share of electricity production in 2010.

Energy Efficiency Action Plan 2014 – 2016 with Outlook up to 2020 (2014)

SR national indicative energy efficiency targets pursuant to Directive 2012/27/EU:

Energy efficiency targets – final energy consumption savings:

- annual target: 3 416 terajoules per year;
- three- year target (non-cumulative): 10 247 terajoules;
- 2020 target (cumulative): 79 695 terajoules; 23 %.

Energy efficiency targets – primary energy consumption savings:

- annual target: 5 344 terajoules per year;
- three-year target (non – cumulative): 16 031 terajoules;
- 2020 target (cumulative): 124 689 terajoules; 20 %.

Energy savings targets in accordance with Directive 2006/32/EC (valid until 1 January 2017)

- annual target: 1 %; 3 122 terajoules;
- three- year target up to 2010: 3 %; 9366 terajoules;
- medium-term target up to 2013: 6 %; 18 722 terajoules;
- long-term target up to 2016: 9 %; 28 098 terajoules;
- long-term target up to 2020: 11 %; 34 342 terajoules.

National Renewable Energy Action Plan (2010):

- national overall target of renewable energy sources in gross final consumption of energy by 2020: 14 %; 1 572 million tonnes of oil equivalent, 66 petajoules of energy from renewable sources;
- sector targets for the shares of energy renewable sources by 2020: 14.6 % in heating and cooling; 24 % of electricity; and 10 % in transport.

Waste prevention programme of the Slovak Republic 2014–2020

- Reducing the amount of landfilled biodegradable municipal waste to 40 % of the total amount of biodegradable municipal waste generated in 1995 (944 000 tonnes).

All targets listed in this section are mandatory (as opposed to aspirational)

Indicators to monitor use of materials and resource efficiency:

Resource productivity (based on EU lead indicator GDP/DMC):

<https://www.enviroportal.sk/indicator/detail?id=461>

<http://www.enviroportal.sk/indicator/detail?id=1762>

Exploitation and utilisation of minerals:

<http://www.enviroportal.sk/indicator/detail?id=181>

<http://www.enviroportal.sk/indicator/detail?id=1663>

Green growth indicators – environmental and resource productivity:

<http://www.enviroportal.sk/indicator/111?langversion=en>

System of environmental indicators, sustainable consumption and production (SCP) and sectorial indicators, sustainable development indicators: <https://www.enviroportal.sk/indikatory>

Key indicators:

Exploitation and utilisation of minerals: <http://www.enviroportal.sk/indicator/detail?id=181>
(<http://www.enviroportal.sk/indicator/detail?id=1663>)

Resource productivity: <https://www.enviroportal.sk/indicator/detail?id=461>
(<http://www.enviroportal.sk/indicator/detail?id=1762>)

Waste– generation, recovery, disposal, municipal waste and waste streams:
<https://www.enviroportal.sk/indicator/128?langversion=sk>
(<http://www.enviroportal.sk/indicator/128?langversion=en>)

National set of green-growth indicators: <https://www.enviroportal.sk/indicator/111?langversion=en>

All indicators are available in English.

Optional questions

Which way should resource efficiency go in the future?

Resource efficiency is a key way to the future. For industry, especially for manufacturing, end-of-pipe policy will not be enough for cleaning wastewater and air, recycling and improvements in energy efficiency. It will be necessary to apply new methods and eco-innovation –manufacturing production (product design, optimisation of the production value chain, etc.) and consumers will have to change wrong ways of thinking and consumption patterns.