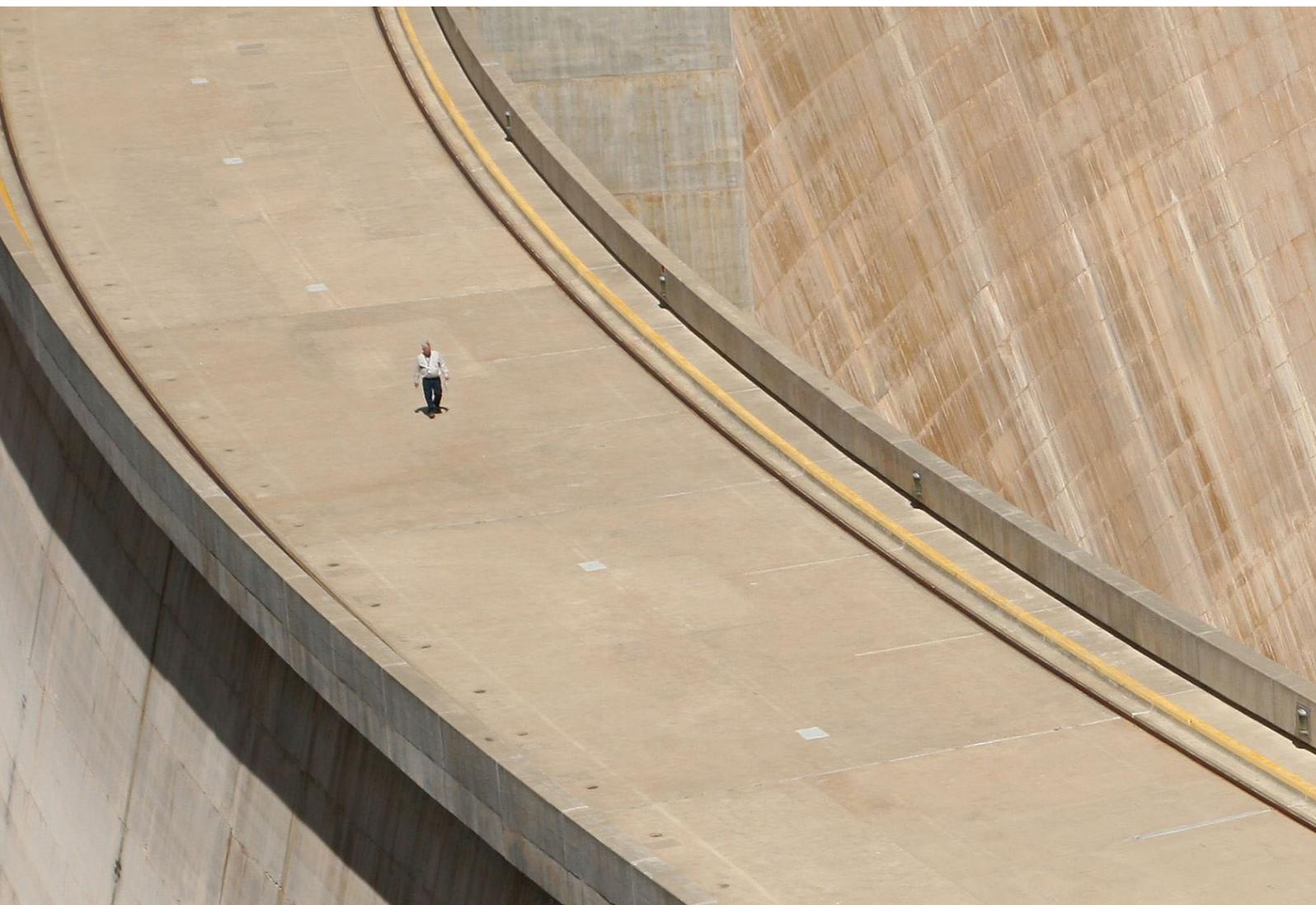


More from less — material resource efficiency in Europe  
2015 overview of policies, instruments and targets in 32 countries



**Lithuania** 

May 2016

This country profile is based on information collected by Deividas Čėsnaš from the Ministry of Environment, Economics and International Relations Department. 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>

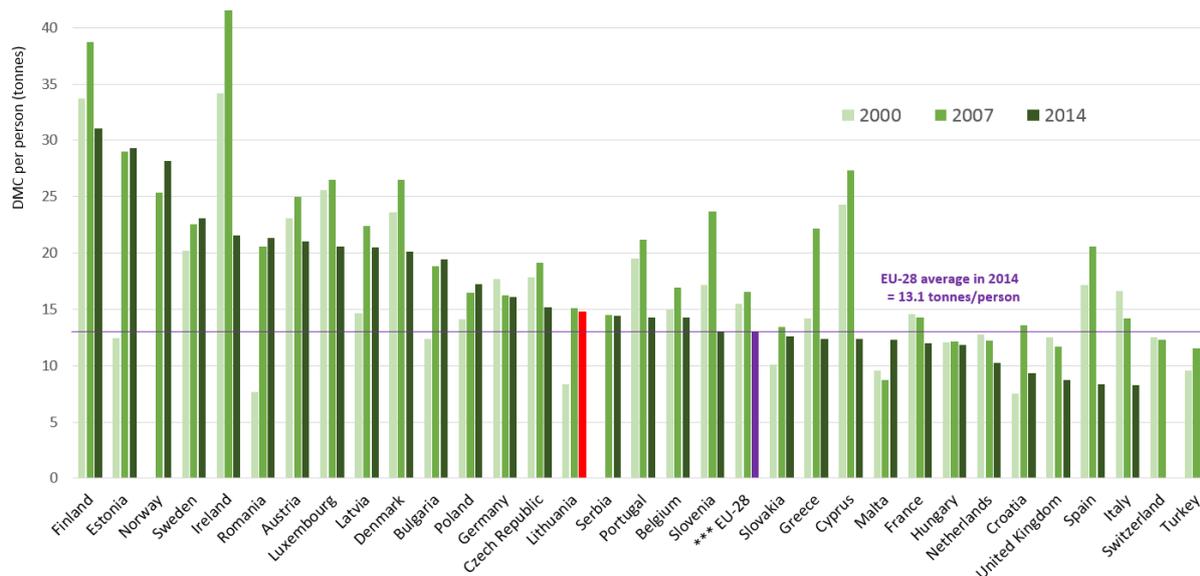
For information on climate- and energy-related policies, including those on energy efficiency, in the participating countries, please visit: <http://www.eea.europa.eu/themes/climate/ghg-country-profiles>

## Lithuania, facts and figures

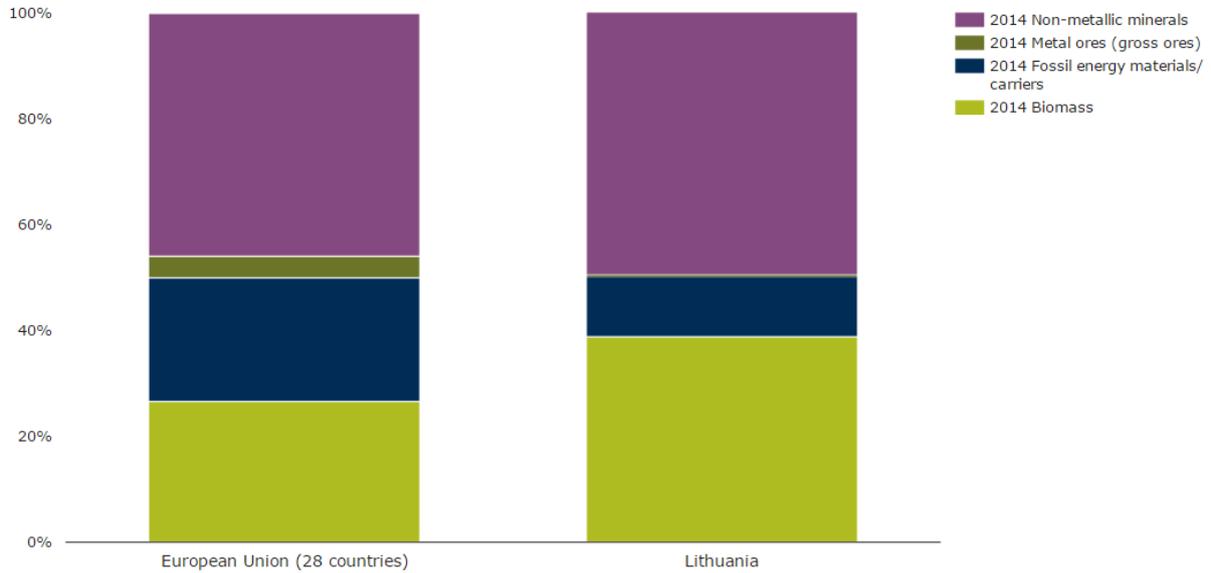
Source: Eurostat

 	<p><b>GDP:</b> EUR 36 billion (0.3 % of EU-28 total in 2014)</p>
	<p><b>Per person GDP:</b> EUR 20,600 (in purchasing power standard) (75 % of EU-28 average per person in 2014)</p>
	<p><b>Use of materials:</b> 44 million tonnes DMC (0.7 % of EU-28 total in 2014) 14.8 tonnes DMC/person (113 % of EU-28 average per person in 2014) Resource productivity 0.76 EUR/kg (38 % of EU-28 average in 2014)</p>
	<p><b>Structure of the economy:</b> agriculture: 3.7 % industry: 28.2 % services: 68.1 % (2014 est.)</p>
	<p><b>Surface area:</b> 65,300 square kilometres (1.5 % of EU-28 total)</p> <p><b>Population:</b> 2.9 million (0.6 % of EU-28 total)</p>

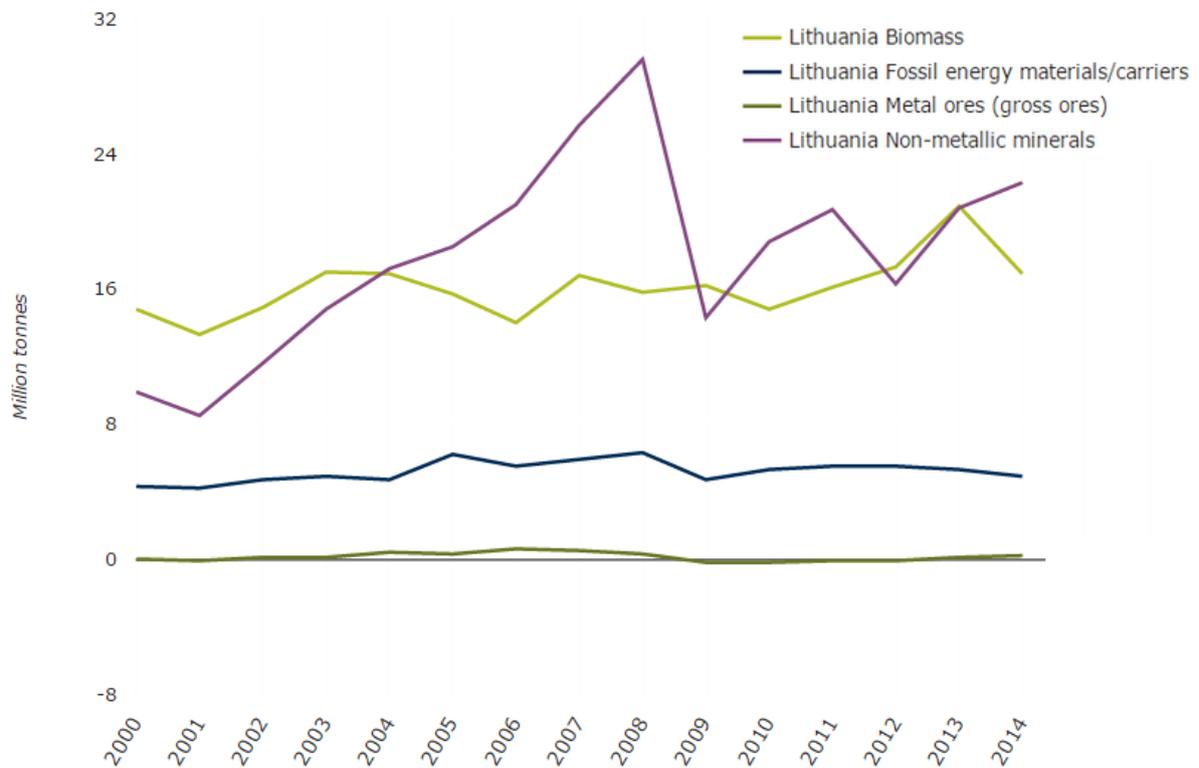
Use of materials (DMC) per person, participating countries and EU-28  
(2000, 2007 and 2014)



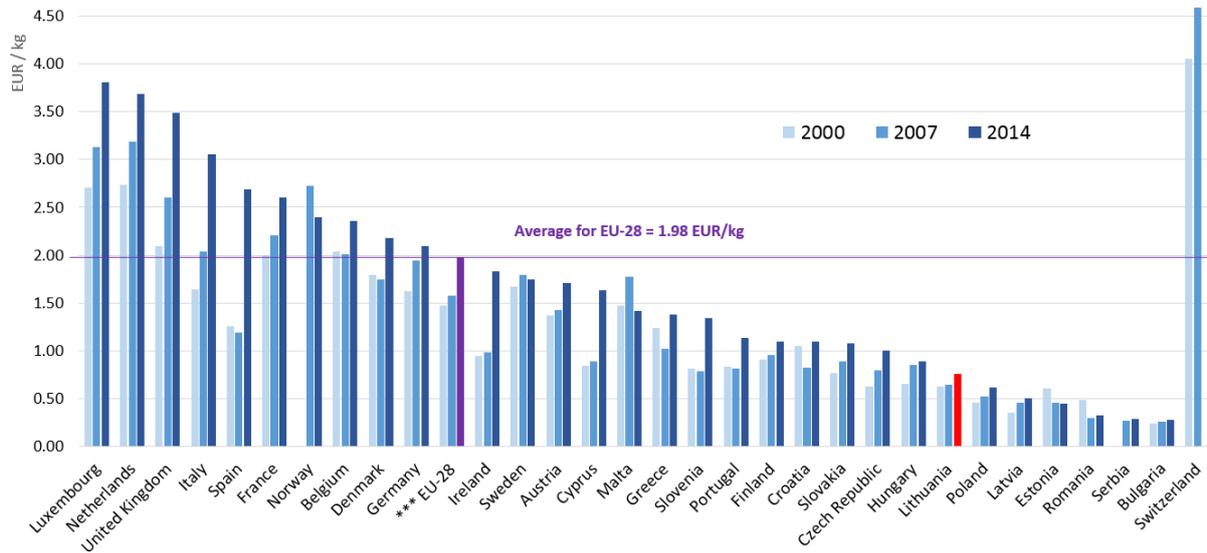
**Domestic material consumption by category, EU-28 average and Lithuania (2014)**



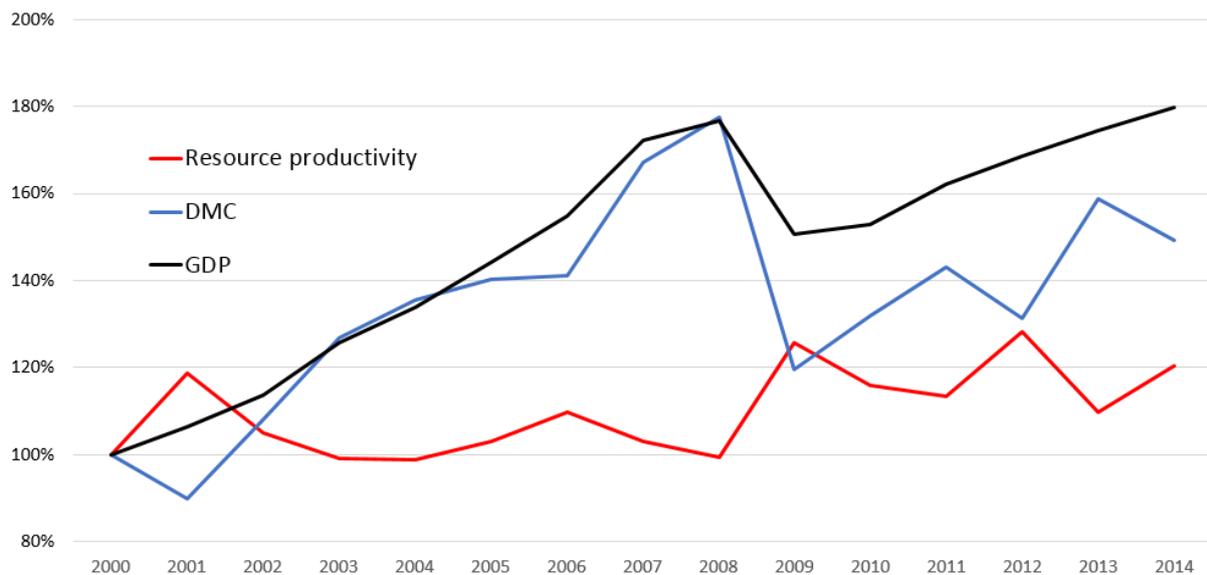
**Trends in material consumption, Lithuania by category (2000–2014)**



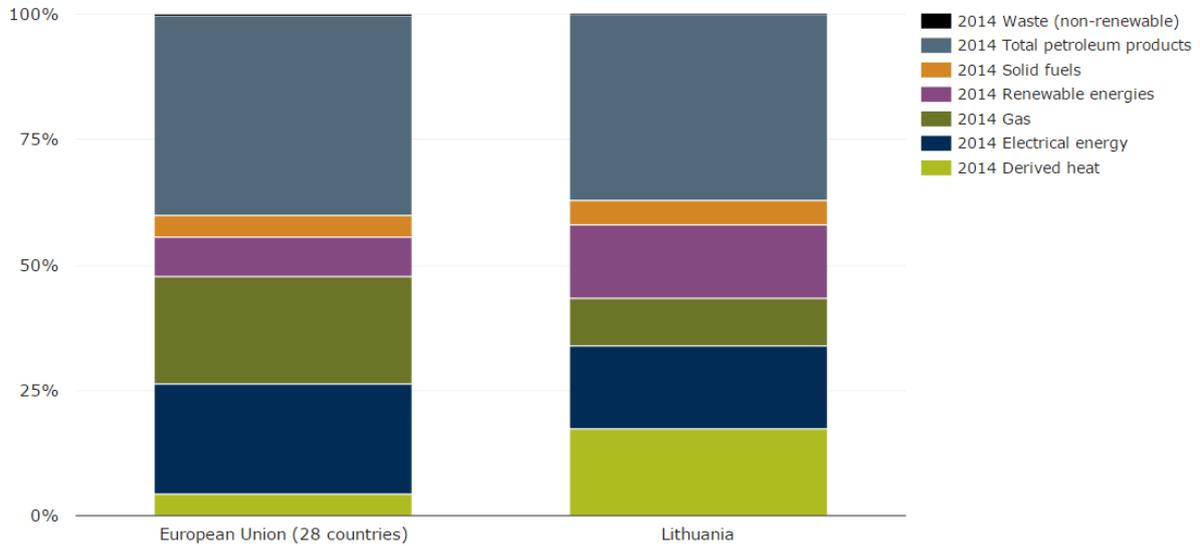
**Resource productivity (GDP/DMC), participating countries and EU-28  
 (2000, 2007 and 2014)**



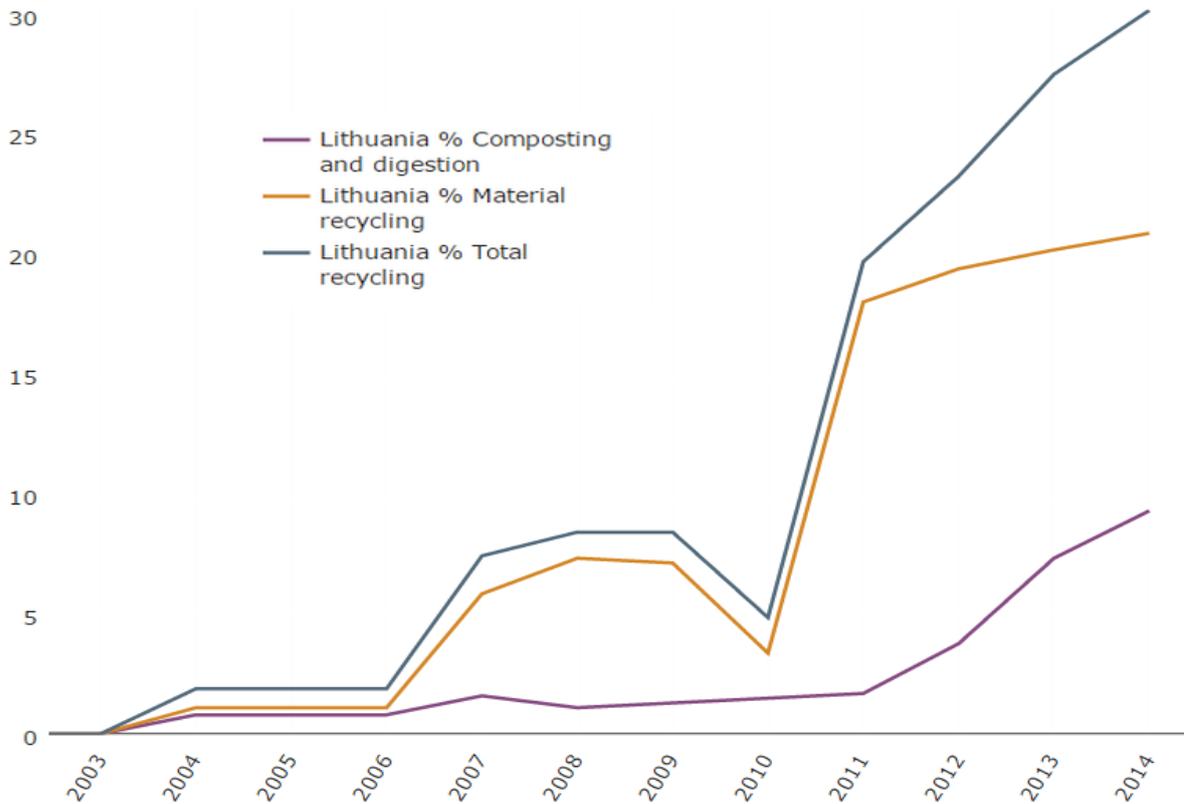
**GDP, DMC and resource productivity trends, Lithuania (2000–2014)**



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



### Recycling of municipal waste, Lithuania (2003–2014)



## Introduction

There is neither a separate national strategy nor an action plan entirely dedicated to resource efficiency, although goals and targets on resource efficiency may be found in many other strategic documents (see section on policy framework for details).

## Scope of material resource efficiency

There is no explicit definition of resource efficiency.

## Driving forces of material resource efficiency

The major factors and concerns that drive material resource efficiency policies in Lithuania are geopolitical and energy security concerns, requirements of the European Union (EU), competitiveness and economic interests.

The environmental concerns are, however, the strongest factors and they play the most significant role as they limit certain aspects of economic development. The environmental protection strategy is a comprehensive policy document that facilitates the elaboration of numerous legal acts stipulating environmental protection.

## Priority material resources, sectors, and consumption categories

In Lithuania, there is no policy document exclusively dedicated to resource efficiency, but there are indirect links to it in other documents.

## Priority materials

Sectorial strategic documents identify relevant resources as a priority, for example: in the National Waste Prevention Programme, priority is given to packaging, waste electrical and electronic equipment (WEEE), and biodegradable, hazardous and construction waste. These priority waste streams have the biggest negative impact on the environment and public health, and create large quantities of waste compared to other streams.

In the National Strategy on Environment Protection (to 2030) a several categories of natural resources have been identified as a long-term priorities:

- underground resources;
- water resources;
- forests;
- fish resources;
- hunted fauna resources.

Additionally, municipal and industrial wastes are priorities in this Strategy, which establishes the principle of waste recycling. The use of waste for energy production is also emphasised as a political guideline.

### Priority industries and economic sectors

Sectorial strategic documents identify relevant resources as priorities, for example: the National Forestry Sector Development Programme for 2012–2020 identified increasing the volume of fine non-merchantable timber and forest-felling residues used for biofuel production as one of the tasks that must be implemented. A target has been set for this: the volume of forest felling residues and non-merchantable timber used for biofuel production should reach 500 000 cubic metres by 2020 (the value in 2014 was 328 000 cubic metres).

### Priority consumption categories

The National Sustainable Development Strategy emphasizes the importance of giving preference to environmentally-friendly services and products that are produced and used with the smallest amount of energy and other natural resources, without toxic substances, and which have the lowest possible impact on the environment throughout their lifecycles. Sectorial strategic documents identify relevant resources.

## Policy framework

### National strategies or action plans for material resource efficiency

**National Sustainable Development Strategy:** the general strategic objective of this document is the efficient consumption of natural resources. It suggests that the growth in the consumption of natural resources is expected to be half the rate growth of production and services.

<http://www.am.lt/VI/en/VI/files/0.901665001073997792.pdf>

The **National Environmental Protection Strategy** was adopted on 16 April 2015 by Lithuania's parliament. It sets priorities for environmental policy, as well as goals up to 2030 and a vision of Lithuania's environment up to 2050. The strategy has four priorities: sustainable use of natural

resources and waste management, increasing environmental quality, sustainable ecosystems, and climate change.

[http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc\\_l?p\\_id=1026546&p\\_tr2=2](http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=1026546&p_tr2=2)

The **Strategy for the National Climate Change Management Policy by 2050**: adopted on 6 November 2012 by Decree No. XI-2375 of Lithuania's parliament.

<http://www.am.lt/VI/files/File/Lankstinukas%20Klimato%20kaita%20ENG.pdf>

**Action Plan** on the Implementation of the goals and objectives for 2013–2020 of the **Strategy for the National Climate Change Management Policy**, adopted on 23 April 2013 by the Resolution No 366 of the government.

**National Waste Prevention Programme**: the aim of the programme is to provide an analysis of the current state of waste prevention, including the identification of priority waste streams, objectives, tasks and measures for implementation. As a result, in accordance of waste hierarchy, the highest priority has to be given to waste prevention, promoting sustainable consumption and the responsible use of materials and resources.

**National Waste Management Plan for 2014–2020**: the aim of the plan is to establish strategic waste management objectives, targets and measures for the state and municipalities, also for national and EU structural funding policies.

**The National Forestry Sector Development Programme for 2012–2020** was approved by Lithuanian Government Resolution No. 569 of 23 May 2012. The purpose of the programme is to implement the Lithuania's long-term forestry strategy and determine the objectives and tasks for the development of the forestry sector up to 2020.

<https://www.e-tar.lt/portal/en/legalAct/TAR.4766FD6E972D>

Material resource efficiency is addressed within the framework of the **Investment Promotion and Industrial Development Programme** for 2014–2020, approved by the government Resolution No. 986 of 17 September 2014.

Examples of other strategic documents that include a broad scope of resources efficiency:

- National Reform Programme (2011);  
[http://ec.europa.eu/europe2020/pdf/nrp/nrp\\_lithuania\\_en.pdf](http://ec.europa.eu/europe2020/pdf/nrp/nrp_lithuania_en.pdf)
- National Progress Programme (2012);
- National Renewable Energy Resources Development Strategy (2010);
- National Energy Independence Strategy (2012);
- Multi-apartment Buildings Renovation Programme (2004, revised in 2013);
- Public Building Renovation Programme (2014);
- National Communication Development Programme for 2014-2022 (2013);
- National Rural Development Programme 2014-2020;
- Lithuanian Innovation Development Programme 2014-2020;
- Green public procurement criteria approved by the order of Environment minister;

## The circular economy and closing material loops

The National Waste Management Plan and National Waste Prevention Programme are the documents in which waste avoidance principles and measures have been clearly established and have to be implemented to ensure the rational consumption of energy and resources, thus contribute to the transition towards a circular economy.

## General policy objectives for material resource efficiency

### **National Sustainable Development Strategy:**

- increase the efficiency of consuming local resources and to preserve natural and culturally valuable objects;
- in the face of the growth of total consumption of products and services, make sure that the growth does not worsen environmental quality, giving preference to environmentally-friendly services and products that are produced and used with the smallest amount of energy and other natural resources, without toxic substances and which have the lowest possible impact on the environment throughout their lifecycles – there is a set of sustainable development indicators at <http://www.am.lt/VI/files/0.619006001427371915.pdf>
- make knowledge and science important factors which help to ensure rapid economic and social development; the effective use of natural resources and a clean and healthy environment; speed up the creation of a knowledge-based society;
- use the waste energy resources effectively;
- introduce a water resource management system based on the river basin principle to enable the entire national population to take an active part in the setting of water-body protection objectives and in selecting implementing measures.

### **The National Environmental Protection Strategy**

One of the main long-term goals of Lithuania's environmental protection policy is to ensure protection and a rational, stable, long-term use of national natural resources. There is no reference to material resources in the strategy, only natural resources.

**The Strategy for the National Climate Change Management Policy by 2050** sets binding short-term (by 2020), indicative medium-term (by 2030 and 2040) and long-term (by 2050) climate change mitigation and adaptation goals and objectives for industry, transport, agriculture and households; environmental protection and the rational use of national resources – forestry, ecosystems, biodiversity and landscape; spatial planning and regional policy; health care; research and development; education and provision of information to the public; and international co-operation. The vision of the climate change management policy is that by 2050 Lithuania will have ensured

adaptation in domestic economic sectors to the environmental changes caused by climate change and climate change mitigation (reduction of greenhouse gas emissions); developed a competitive low-carbon economy; implemented eco-innovative technology; achieved energy generation and consumption efficiency and the use of renewable energy sources in all sectors of the domestic economy, including energy, industry, transport, agriculture, etc. The strategic goal of Lithuania's climate change mitigation policy is to make sure that the growth of the country's economy is much faster than the increase of greenhouse gas emissions, which is directly linked to the sustainable use of resources and the achievement of decoupling.

### **National Waste Management Plan for 2014–2020:**

Waste prevention objectives:

- avoid the generation of waste;
- reduce the amount of generated and not recovered waste;
- reduce the amount of harmful substances in materials and products;
- reuse or extend the life span of products.

Objectives for 2014–2020 period:

1. In a country with a growing economy, to ensure that waste generation from manufacturing, construction and others sectors grows more slowly and the amount of waste generated does not exceed the average of EU Member States.

Targets:

- 1.1. promote prevention in manufacturing and other economic sectors;
- 1.2. increase materials and resources efficiency;
- 1.3. improve competencies and knowledge of waste prevention among businesses, farmers, agricultural companies and authorities.

2. Ensure that, despite growing consumption, the generation of municipal waste, including packaging, WEEE and biodegradable waste grows more slowly and that the amount of municipal waste does not exceed the average of EU Member States.

Targets:

- 2.1. improve waste management legislation establishing requirements relating to the municipal waste prevention and re-use;
- 2.2. promote sustainable consumption;
- 2.3. promote the reuse of products and prepare for reuse operations;
- 2.4. increase public awareness and improve municipal staff training on waste prevention.

### **The National Forestry Sector Development Programme for 2012–2020:**

The strategic objective of forestry development is to increase the multiple benefits provided by forests to society, taking into account the long duration of forest growth, different forms of ownership and their interaction, and also by ensuring the implementation of sustainable forest management in all Lithuania's forests. To achieve the strategic goal of forestry development while implementing the programme, four forestry development objectives have been established:

1. preserve Lithuanian forests and increase their area and resources;
2. ensure the rational use of Lithuania's forest resources and increase the productivity of the stands;
3. increase the efficiency and competitiveness of forestry;
4. preserve and increase the sustainability of forest ecosystems taking account of their ecological and social roles and the impacts of climate change.

### **Investment Promotion and Industrial Development Programme for 2014–2020:**

One of the goals of the Investment Promotion and Industrial Development Programme for 2014–2020 is to encourage enterprises to use raw materials and energy more efficiently.

Goals:

- energy intensity (kilograms of oil equivalent per EUR '000 of added value in industry) in Lithuanian manufacturing industry is expected to decrease from 222.9 in 2012 to 182.9 in 2020.
- the quantity of waste (re)processed by enterprises or otherwise used in manufacturing and other business (other than phosphogypsum waste) should increase from 90 % in 2011 to 92 % by 2020. The percentage refers to the value reached in 2011 when the quantity of waste (re)processed by enterprises or otherwise used in manufacturing and other business activities was 90 %.

## **Institutional setup and stakeholder involvement**

### **Institutional set up for material resource efficiency policies**

The Ministry of the Environment is responsible for the natural resources policy. The ministry is obliged to ensure the rational use of natural resources, including forests and subsurface resources.

The Ministry of the Environment works in close cooperation with Ministry of Finance, Ministry of Economics and Ministry of Agriculture in preparing legal acts.

The Lithuanian Geological Survey under Ministry of the Environment is responsible for material resource evaluation, approval and accounting, the issue of permissions to use mineral resources and the inspection of raw material deposits used by licence-holders.

The Lithuanian Geological Survey does not put any limits on resource extraction (except quartz sand extraction), as there are natural limits to natural resources. It is responsible for estimating these natural limits and assessing the qualifications of mining companies. Later, during extraction, the Lithuanian Geological Survey is responsible for the supervision of the technological side of mining, the amount of extracted and residual materials, and supplies a data on extracted natural resources to the Ministry of Finance, which is responsible for taxes.

### Process to ensure stakeholder participation

The Lithuanian Geological Survey arranges national working meetings and international scientific conferences, related to the professional management and environment protection topics of raw material mining.

The main interested parties are private companies, the Association of Geological Enterprises, the Peat Producers Association and the Association of Lithuanian Quarries. There is great Industrial interest in resource efficiency, because natural resources are naturally limited.

### Suggestions for international support mechanisms to exchange experience

Cooperation through international organisations like EEA, UN and OECD. Promotion of international seminars, consultations and the creation of internet database for best practise sharing and country comparison would provide added value.

## Policy instruments

### Policy instruments commonly used for material resource efficiency

Some of the most important policy instruments used to improve material resource efficiency in Lithuania are economic/financial instruments (taxes and fines) set on the extraction of minerals, ground and surface water and hydrocarbon resources (oil and gas). The economic instruments are established by the Law on Taxes on State Natural Resources and Taxes on Hydrocarbons; this lays down, in an annex, the tax to be paid on extracted amounts of natural resources. In accordance with this law, those, whether individuals or legal entities, extracting state natural resources require an extraction permit, issued in accordance with the Lithuanian Law on Environmental Protection, and are obliged to pay tax on the amount of minerals extracted. The only exemption is for the owners and operators of the land who use the natural resources for their own purposes (not for selling) and have a small-quarry certificate.

For the extracted amounts, which exceeds a permit's limits, for amounts extracted without a permit or for undeclared amounts extracted, a fine of 10 times the tax is applied.

Other administrative instruments are also used to ensure that set limits of extraction for peat and quartz sand are not exceeded. The last amendments of the Law on Taxes on State Natural Resources and Taxes on Hydrocarbons was made in 2012 and taxes on minerals such as sand, gravel, dolomite, etc. were increased in order to stimulate the replacement of extracted minerals with demolition and construction waste when it is technically feasible.

As for waste management, Lithuania follows the relevant European Directives and also has national economic instruments in place. To improve material resource efficiency for certain specific waste streams the following economic instruments are applied:

- 1) taxes on packaging and chargeable products;
- 2) guarantees on WEEE treatment;
- 3) deposit systems for beverage packing.

### Examples of good practice

- **Waste Management Forum**

Conference – discussion forum Waste Management is the place where sustainability leaders, representatives of municipality councils and administrations, producers, importers and their organisations, residents, consumers, mass media, representatives of the Government, non-governmental organisations, consultants, collectors of mixed, urban, secondary materials and hazardous and specific waste, waste management operators, analysts, investors, researchers, meet and discuss actual waste management issues as well as waste prevention and resource productivity. The discussion forum is held each year in September.

- **Second hand trade**

The trade of second hand clothes is widely common in Lithuania. Bigger cities have one or more flea markets (typically held on Saturday or Sunday, frequency depending on season) where citizens can sell their goods or buy things they need. There are some internet pages which perform the same function as flea markets and people can buy used clothes, accessories, shoes, furniture etc. or sell things they don't need in their daily life.

- **Public awareness campaigns**

Recently in Lithuania more and more attention is paid to public awareness raising concerning waste management issues. Therefore various types of seminars (for example, seminars about waste prevention and management in the Community gardens, schools etc.) concerning waste prevention and management are organised; videos, TV reportages, advertising panels (for example, informational videos for reducing the amount of lightweight plastic bags) are showed; articles in newspapers (concerning different flows of waste) are published in order to improve public awareness.

## Targets and indicators

### Targets for material resource efficiency

The general strategic objective of the National Sustainable Development Strategy includes the effective consumption of natural resources. Its outlined target for 2020 is that the growth of the consumption of natural resources is will half that of the growth of production and services.

An example of sector-oriented targets that must be implemented through the National Forestry Sector Development Programme for 2012–2020 is increasing the volume of fine non-merchantable timber and forest- felling residues used for biofuel production .

A target has been set for this task: the volume of forest felling residues and non-merchantable timber used for biofuel production should reach 500 000 cubic metres by 2020, compared with 328 000 cubic metres in 2014.

Increase the forest coverage to 35% of the territory of the country by 2030

Targets in waste management:

Achieve that 50% of household waste (paper, plastic, metal, glass) are prepared for reuse or recycling in 2020

Achieve that 70% (by weight) of non-hazardous construction and demolition waste are prepared for re-use, recycling and other material recovery

Achieve that biodegradable municipal waste disposed in landfills declines from 505,000 t in 2011 to 268,100 t in 2020, and that the disposal of biodegradable municipal waste in landfills is discontinued by 2030

Achieve that 65 % (by weight) of municipal waste are recycled or otherwise used in 2020

### Indicators to monitor use of materials and resource efficiency:

There are no separate indicators dedicated to resource efficiency, although there are a set of 84 that monitor sustainable development, of which resource efficiency is an important element.

Some examples include:

- groundwater consumption;
- waste recycling;
- final energy consumption in branches of economy per unit of gross domestic product (GDP);

- water consumption in industry per unit of GDP;
- share of renewable energy;
- sources in total energy consumption.

## Optional questions

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

In order to reach the efficient use of resources, the National Waste Management Plan and National Waste Prevention Programme will be focused on the waste hierarchy, especially waste prevention and reuse.