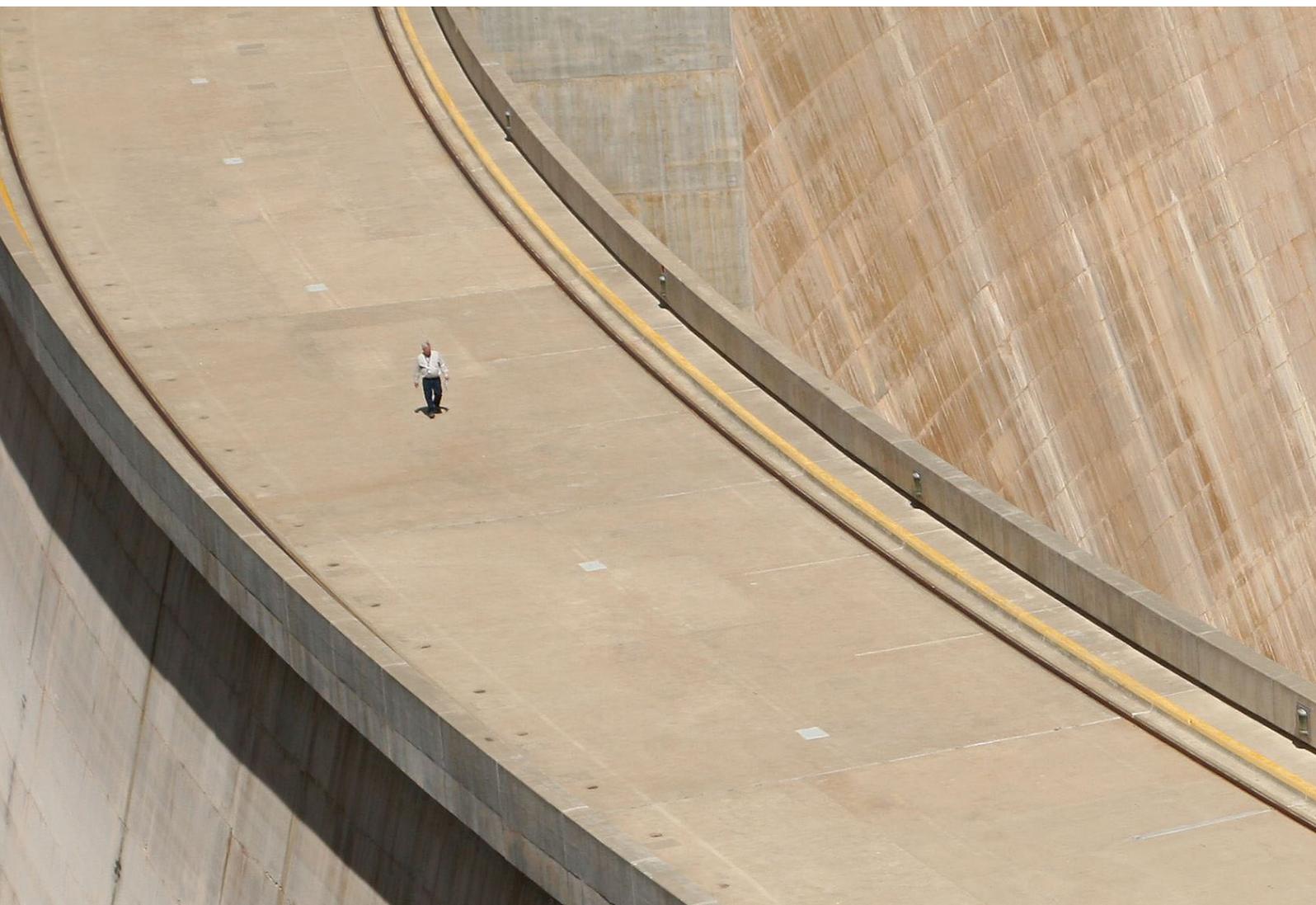


More from less — material resource efficiency in Europe  
2015 overview of policies, instruments and targets in 32 countries



# Liechtenstein

May 2016

This country profile is based on information collected by the Eionet network in Liechtenstein. 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>

## Liechtenstein, facts and figures

Source: The World Bank, The World Factbook

 	<p><b>GDP:</b> USD 5.5 billion</p> <p><b>Per person GDP:</b> USD 89,400 (in purchasing power standard, 2009 est)</p> <p><b>Use of materials:</b> Data not available</p> <p><b>Structure of the economy:</b> agriculture: 8 % industry: 37 % services: 55 % (2012 est.)</p> <p><b>Surface area:</b> 160 square kilometres</p> <p><b>Population:</b> 37 thousand (2015 est)</p>
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## Introduction

There is no general national resource efficiency strategy or action plan in Liechtenstein.

In September 2010 a working group adopted an action plan to be implemented – *Einsatz von Recyclingbaustoffen bei öffentlichen Bauten* (Use of recycled construction material for public construction) which is available in German at

([http://www.llv.li/files/au/pf-llv-au-umsetzungskonzept\\_recyclingbaustoffe\\_juni2010\\_endversion.pdf](http://www.llv.li/files/au/pf-llv-au-umsetzungskonzept_recyclingbaustoffe_juni2010_endversion.pdf)).

It is a specific Action Plan for recycled construction materials. The following answers are related to this specific Action Plan.

## Scope of material resource efficiency

The term *resource efficiency* is not mentioned or defined. However, the scope is explicitly defined, since the Action Plan encompasses recycled construction materials.

Additionally, it can be said that Liechtenstein has two only natural resources, gravel and water. A small amount of other resources such as energy and food are produced in Liechtenstein. However most are imported.

### Driving forces of material resource efficiency

- close material loops;
- sparing use of land and landfill areas;
- conservation of natural resources – gravel and water.

### Priority material resources, sectors, and consumption categories

#### Priority materials

Liechtenstein has only two natural resources – gravel and water. However, the **recycling of construction and demolition waste** has been identified as a priority for national or sector-specific resource efficiency policies.

#### Priority industries and economic sectors

Since there is no national resource plan in Liechtenstein, the use of recycled material has the highest priority in the country. The main drivers of the recycling of building and demolition waste are the national and local authorities, architects and engineers, recycling companies, the construction industry and building owners.

#### Priority consumption categories

Regarding construction and demolition waste, housing, national government, communities and mobility are obviously the main consumers of concrete and asphalt and, therefore, also of recycled materials.

### Policy framework

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

In September 2010, a working group adopted an action plan *Einsatz von Recyclingbaustoffen bei öffentlichen Bauten* (**Use of recycled construction material for public constructions**). It is available for download in German at

([http://www.llv.li/files/au/pf-llv-au-umsetzungskonzept\\_recyclingbaustoffe\\_juni2010\\_endversion.pdf](http://www.llv.li/files/au/pf-llv-au-umsetzungskonzept_recyclingbaustoffe_juni2010_endversion.pdf)).

According to the plan, the use of recycled concrete in public buildings and plants should be increased. Five main measures have been formulated and their implementation is in progress. First measures have already been taken.

In 2010 the University of Applied Science, Northwestern Switzerland in Muttenz published a study about the **reutilization of excavated material (excavated soil)** in Liechtenstein on behalf of the Office of Environmental Protection (*Verwertungsmöglichkeiten von unverschmutztem Aushub* in Liechtenstein). The study shows different possibilities for reusing excavated material in Liechtenstein and provides the basis for further studies and the planned national waste management plan.

Liechtenstein has begun work on its first **national waste management plan** that covers all types of wastes. In the plan the waste management situation in Liechtenstein is being analysed to compare suitable options and formulate different methods of resolution. Furthermore, it includes the implementation of the EU Waste Framework Directive and waste prevention programmes.

The final report is expected by the end of 2015.

### The circular economy and closing material loops

As mentioned above, there is no dedicated national resource efficiency strategy or action plan. The country's main focus is to close the material loop of construction waste, especially concrete and asphalt, and the use of recycled construction materials.

### General policy objectives for material resource efficiency

The five formulated measures are as follows:

1. use of recycled building materials from construction waste in public buildings and plants;
2. information, education and training on the topic;
3. evaluation of a gradual increase in dumping fees;
4. increase of the use of recycled materials in road surfaces;
5. enhancement of the fields of application for recycled materials.

## Institutional setup and stakeholder involvement

### Institutional set up for material resource efficiency policies

The Office of Environment was the project manager of the working group. The formulated measures will be implemented by the primarily responsible authorities and involved parties.

In general, there is the Ministry for Infrastructure, Environment and Sport, which is part of the government, and the Office of Environment, which more of a technical implementation agency.

### Process to ensure stakeholder participation

Cooperation with all involved authorities is ensured as the government set up a working group through which communities, the construction industry, recycling companies, engineers, architects and national authorities are involved. Several discussions have been held.

The main stakeholders involved in the recycling of building and demolition waste are the national and local authorities, architects and engineers, recycling companies and buildings' owners. All parties have been intensively involved in the development of an action plan for the use of recycled concrete. The topics of resource management and supply of resources have gained more and more significance in this area.

### Suggestions for international support mechanisms to exchange experience

n/a

## Policy instruments

### Policy instruments commonly used for material resource efficiency

- **economic/financial instruments** (including taxes, charges): evaluation of a gradual increase in dumping fees, equal across the country;
- **information-based instruments** (education): training and education on recycled materials, information sheets, statistics;
- **regulatory instruments**: legislation, specific requirements for recycled materials in public invitations to tender.

## Examples of good practice

n/a

## Targets and indicators

### Targets for material resource efficiency

No targets have been set for material resource efficiency.

Annual data is collected to calculate the amount of production and use of recycled material. The data is published in an annual environment statistical report (<http://www.llv.li/#/12176>).

No quantitative targets have been defined in this action plan.

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

Every year the Office for Statistics publishes a report with indicators of sustainable development (*Indikatoren Nachhaltige Entwicklung*, <http://www.llv.li/#/11744>).

Different natural resources are observed, including: settlement area (including buildings/houses), ecological quality of forests, drinking water consumption, ecological compensation areas, concentrations of nitrite in ground water, a variety of air pollutants, and others.

The waste recycling rate is one of its indicators.