



State Environmental
Service
Republic of Latvia

Supervision of mineral and peat extraction in Latvia

14.09.2017.

Kristīne Gāga
Subsoil Resources Management Division
Department of Environmental Resources Management
e-mail: kristine.gaga@vvd.gov.lv



State Environmental
Service
Republic of Latvia

Table of Contents



1

Statistics



3

Supervision of
subsoil use



2

Towards
improved
control



State Environmental
Service
Republic of Latvia

Supervision of subsoil use

**National
legislation**

Institutions

Documentation

On site control



State Environmental
Service
Republic of Latvia

National legislation

Law "On subterranean depths" (1996)

Cabinet Regulations

Documentation

Self control

Provisions for mineral/peat
extraction operations

On site inspections



State Environmental
Service
Republic of Latvia

Institutions

Regulatory control of mineral/peat extraction mainly resides with the State Environmental Service of the Republic of Latvia:

- **documentation for mineral/peat extraction,**
- **on site inspections.**

**Local
Municipalities
(spatial planning)**

**Latvian
Environment,
Geology and
Meteorology
Centre
(geological
information)**

**Ministry of
Environmental
Protection and
Regional
Development
(policy planning)**



State Environmental
Service
Republic of Latvia

The By-law of State Environmental Service

(Cabinet Regulation No. 962)

The State Environmental Service of the Republic of Latvia

is a state institution under supervision of the Ministry of Environmental Protection and Regional Development of the Republic of Latvia.

The goal of State Environmental Service:

to ensure the compliance and implementation of legal framework for environmental and natural resources protection, control of radiation and nuclear safety.



State Environmental
Service
Republic of Latvia

Documentation

In Latvia, mineral/peat extraction activities can be carried out after receiving documentation for subsoil use.

A permit shall be received:

- **If widespread mineral resources are extracted**
 - Clay,
 - Sand and gravel,
 - Loose freshwater rocks,
 - Peat deposits up to the area of 5 hectares within the borders of the property owned by one owner
 - Loam, aleirite.

Issued by Local Municipality

A licence shall be received:

- **If other types of mineral resources are extracted**
 - Peat, dolomite, gypsum, quartz sand etc.
- **In other cases defined in the law**

**Issued by State Environmental
Service**



State Environmental
Service
Republic of Latvia

Documentation

Other relevant documentation for mineral/peat extraction:

- Passport of deposit of mineral resources;
- Limit of extraction (if permit shall be received);
- Technical regulations (if permit shall be received);
- Approved project for extraction of mineral/peat resources.

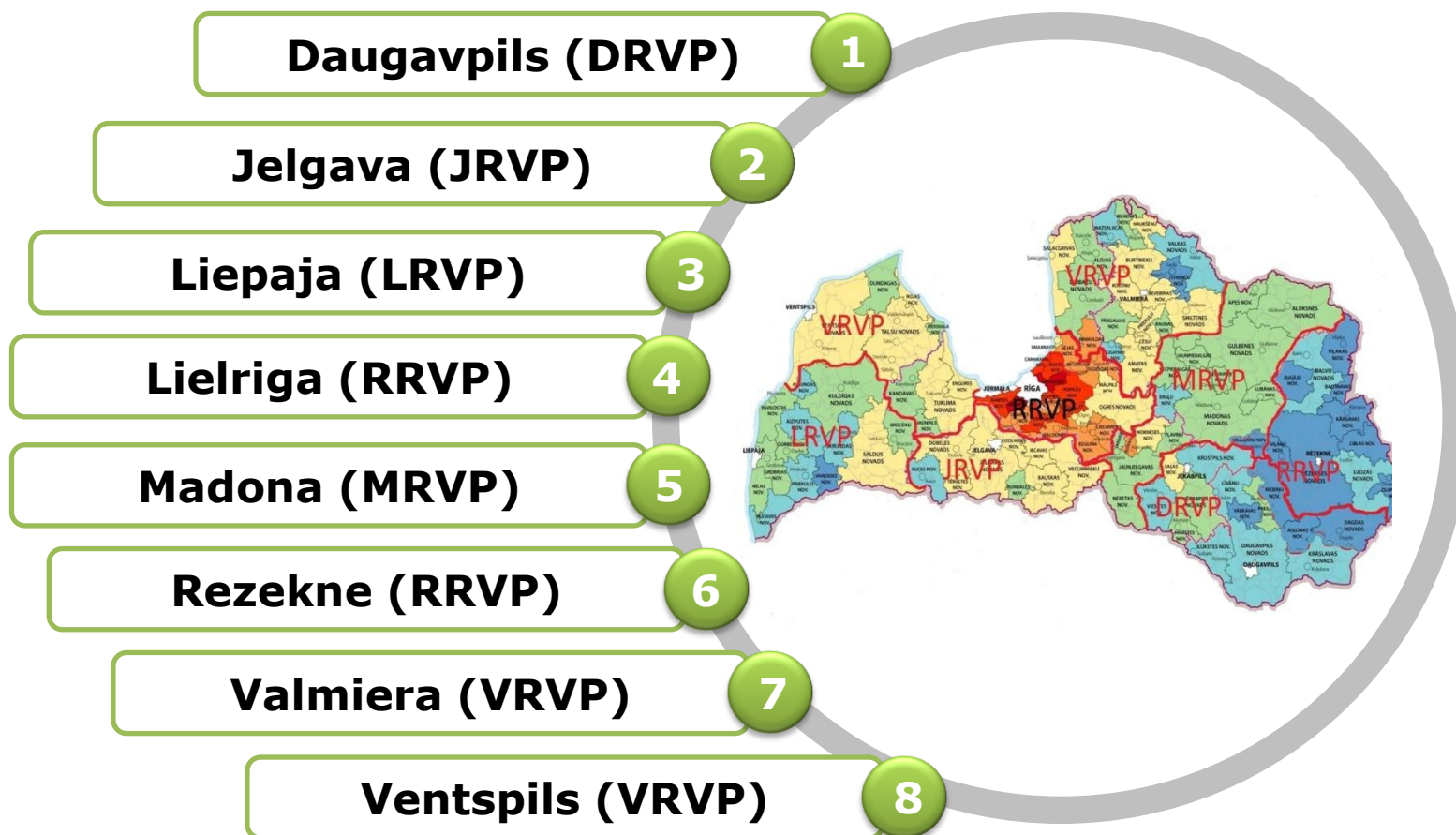
**Issued by State
Environmental
Service**

**Environmental impact assessment:
for peat 25 ha/150 ha
for other mineral resources 5 ha/25 ha**



State Environmental
Service
Republic of Latvia

Environmental regional boards





State Environmental
Service
Republic of Latvia

Environmental regional boards

Both office-based and on sites inspections of subsoil use are conducted by 10 environmental inspectors.



To ensure that the operations at mineral/peat extraction site conform to the conditions of licence/permit/project and legislative provisions.



Number of inspections

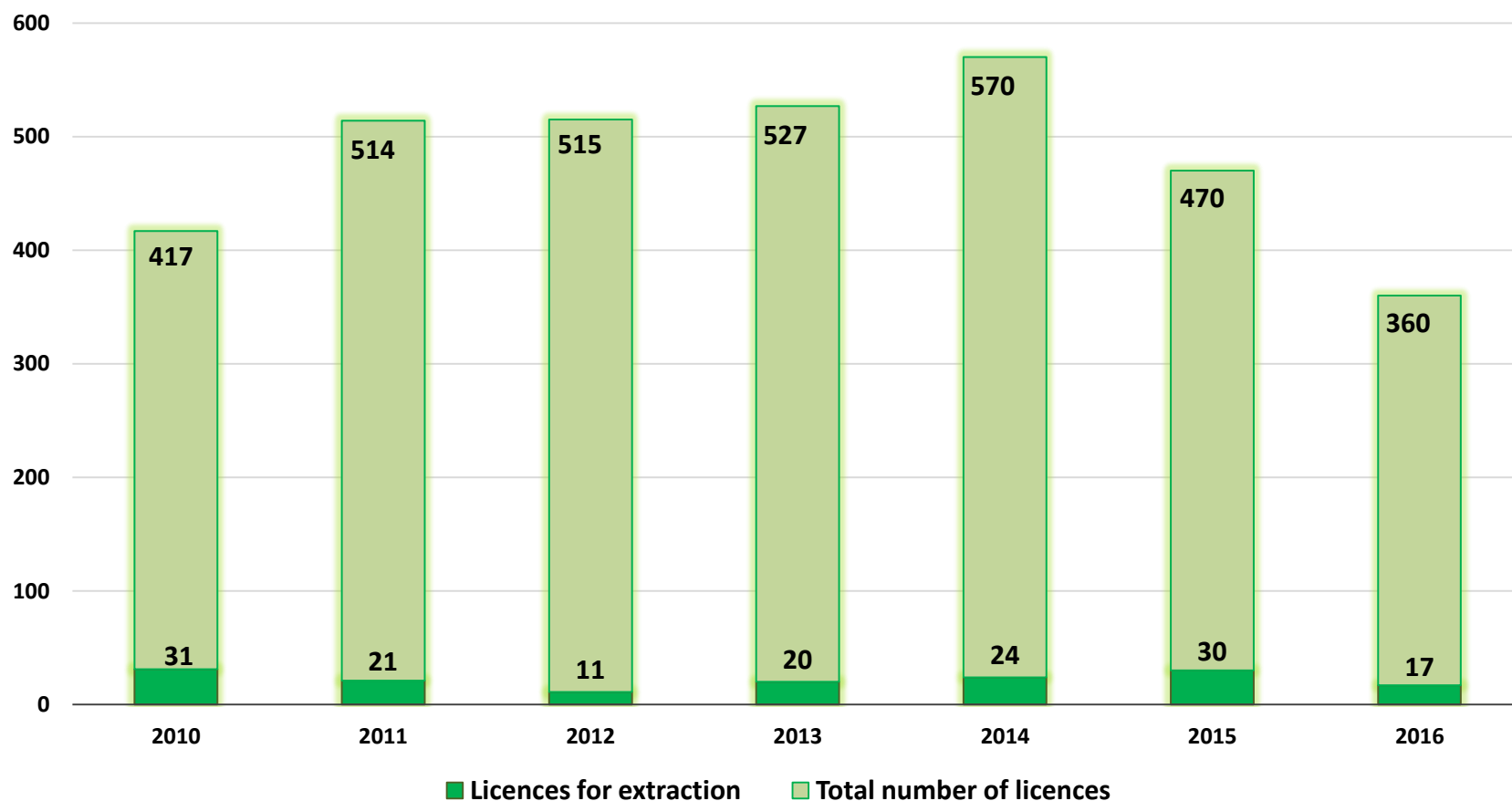
2014	2015	2016	2017
584	675	534	321



State Environmental
Service
Republic of Latvia

Statistics

Number of licences for subsoil use issued by State Environmental Service

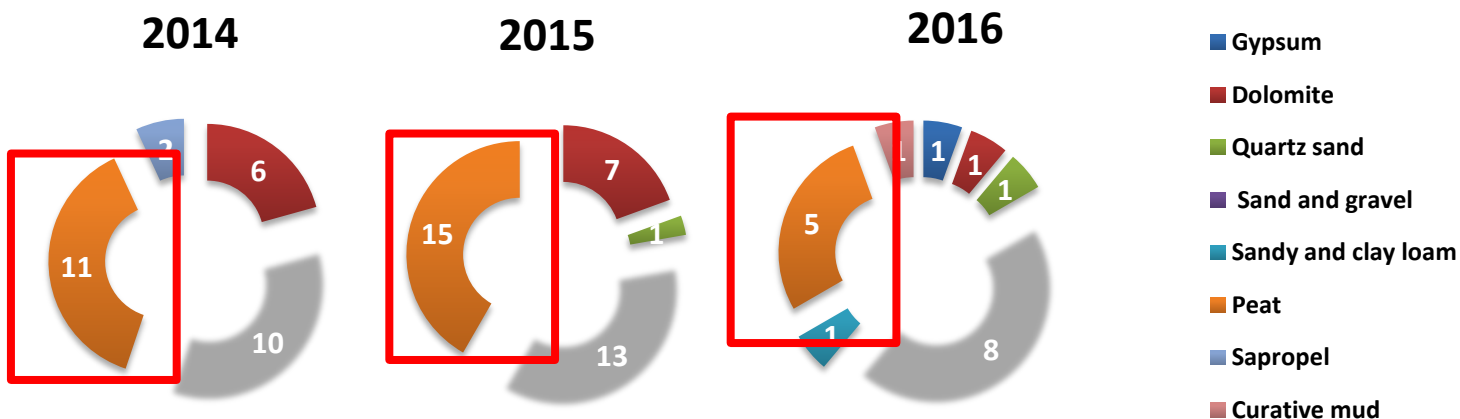
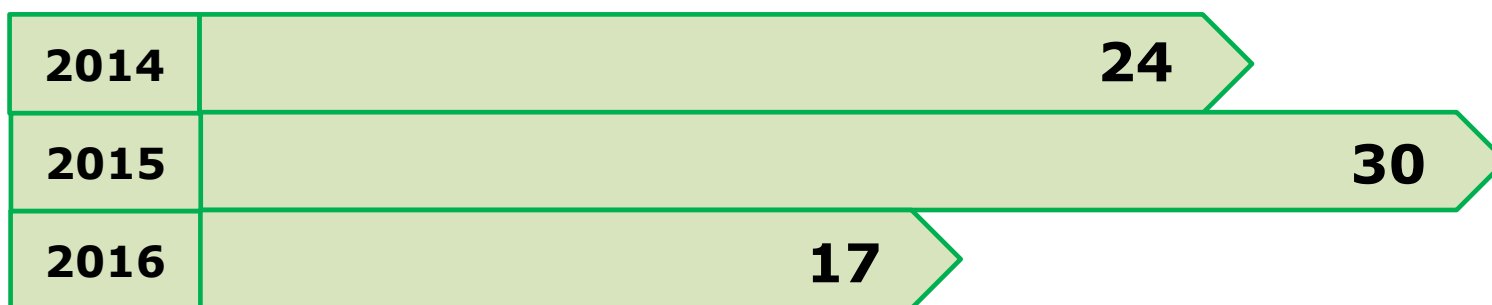




State Environmental
Service
Republic of Latvia

Statistics

Number of licences for mineral/peat extraction

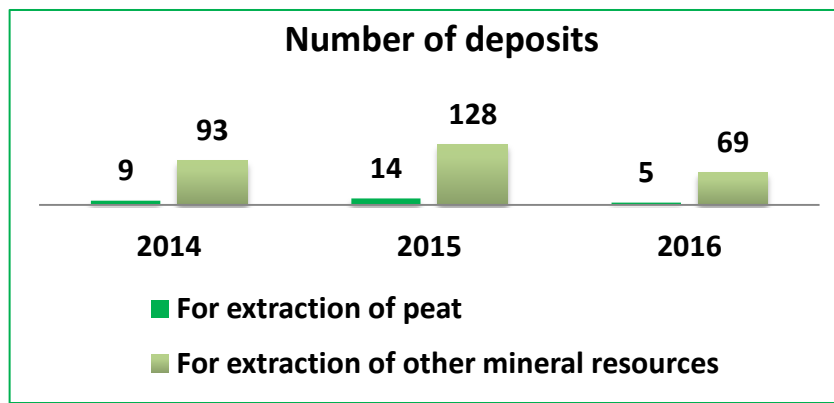
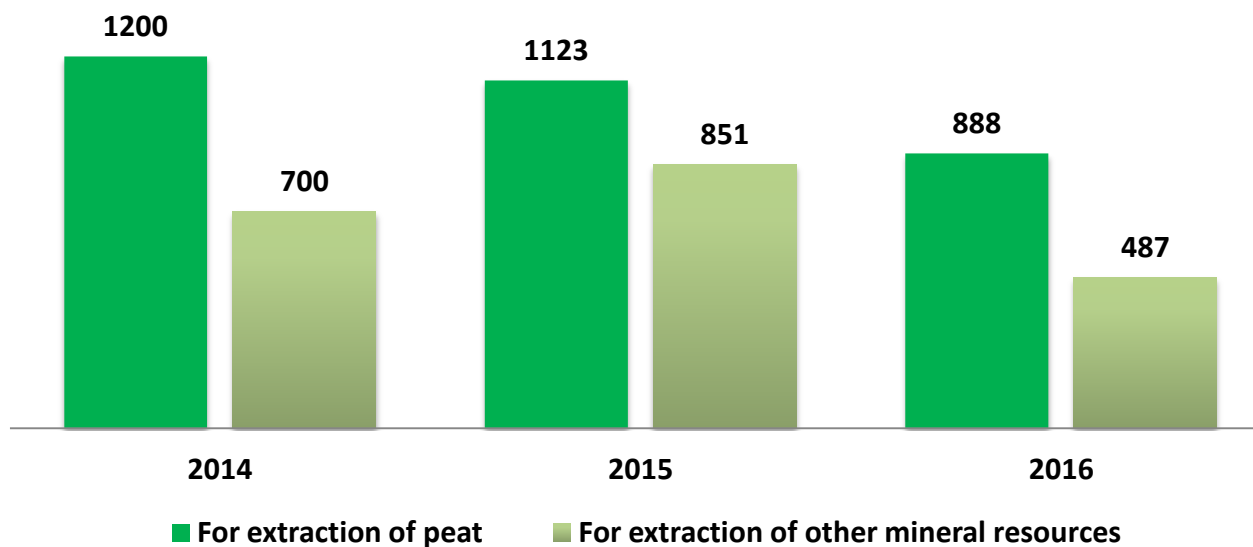




State Environmental
Service
Republic of Latvia

Statistics

Licensed areas, ha

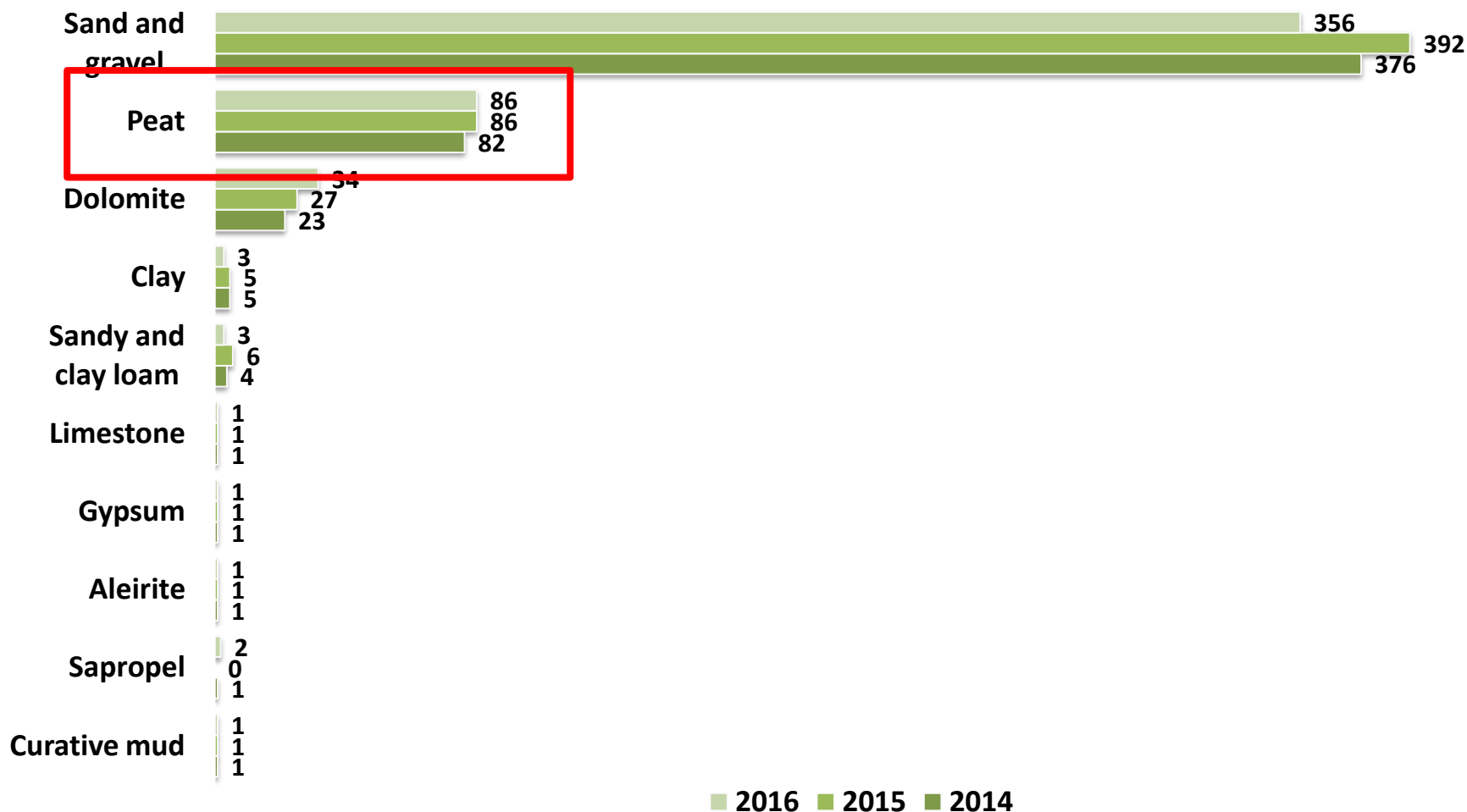




State Environmental
Service
Republic of Latvia

Statistics

Number of active deposits of mineral resources



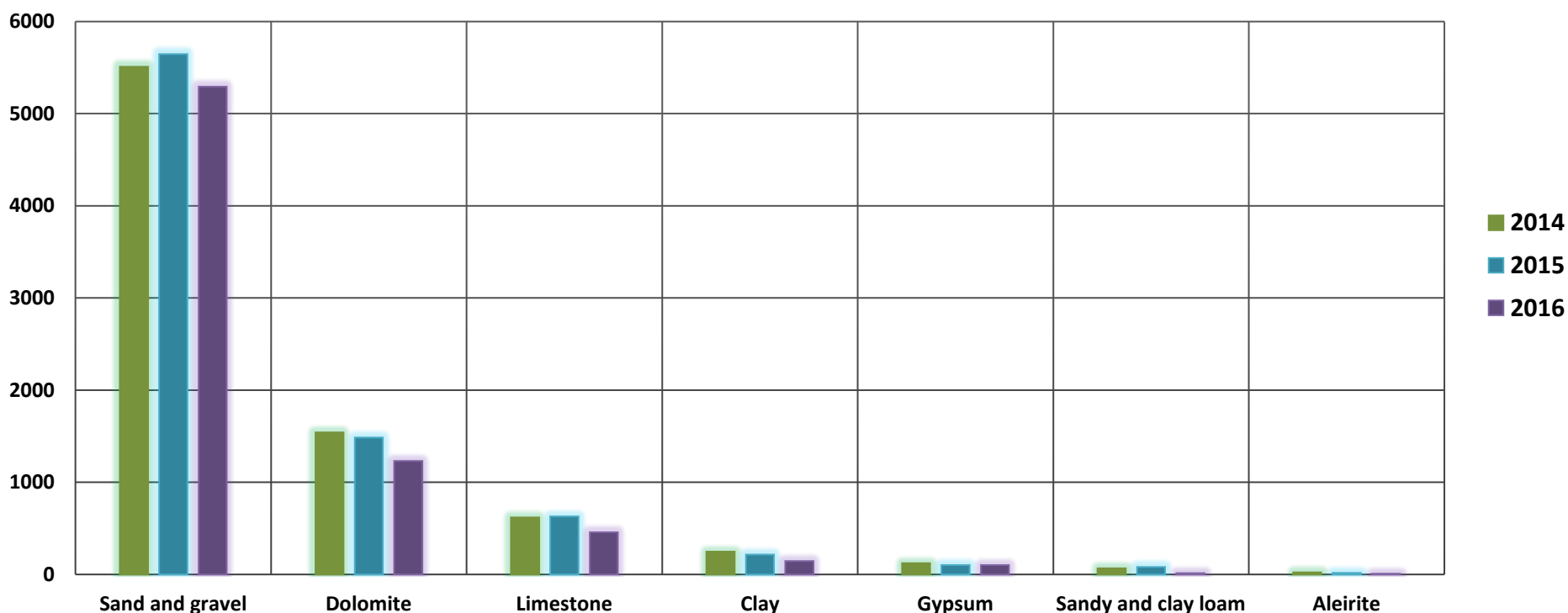


State Environmental
Service
Republic of Latvia

Statistics

Construction materials

Quantity extracted, tcm



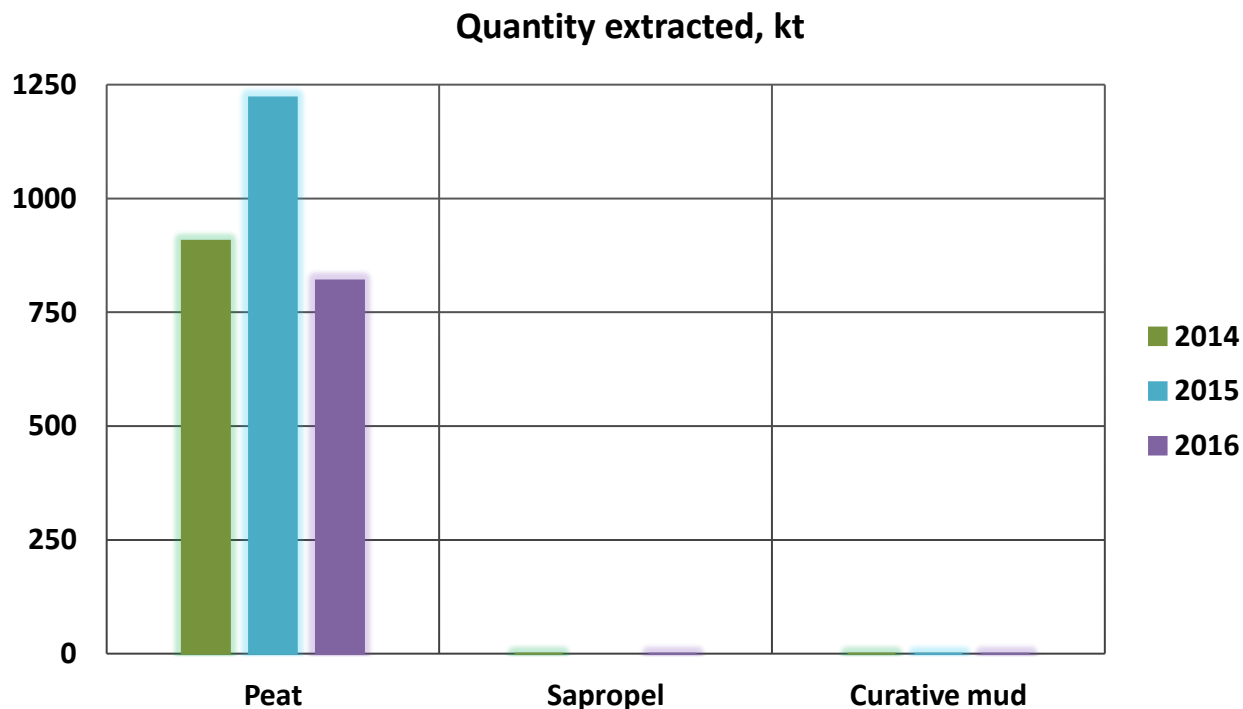
	Sand and gravel	Dolomite	Limestone	Clay	Gypsum	Sandy and clay loam	Aleirite
2014	5191.50	1541.27	618.87	247.08	122.78	65.61	22.50
2015	5645.61	1486.87	631.10	215.80	102.44	82.54	17.52
2016	5291.10	1230.68	457.35	144.73	101.82	14.88	7.22



State Environmental
Service
Republic of Latvia

Statistics

Peat, sapropel and curative mud



	Peat	Sapropel	Curative mud
2014	907.26	0.01	0.46
2015	1222.28	0.00	0.45
2016	820.07	0.30	0.36



State Environmental
Service
Republic of Latvia

Towards improved control

Improved control of subsoil use:

Since 2016 State Environmental Service implements innovative solutions in supervision of mineral/peat extraction: **laser-scanning of problematic deposits of mineral resources.**

The visual models of objects which are created in the process are later used for monitoring the extraction operations.

To ensure more effectively that:

- extraction is carried out within borders of licence area,
- there is a close correlation between the quantity extracted and the quantity left in mineral/peat deposit (relevant for payment of natural resources tax),
- extraction conforms to the conditions of project.

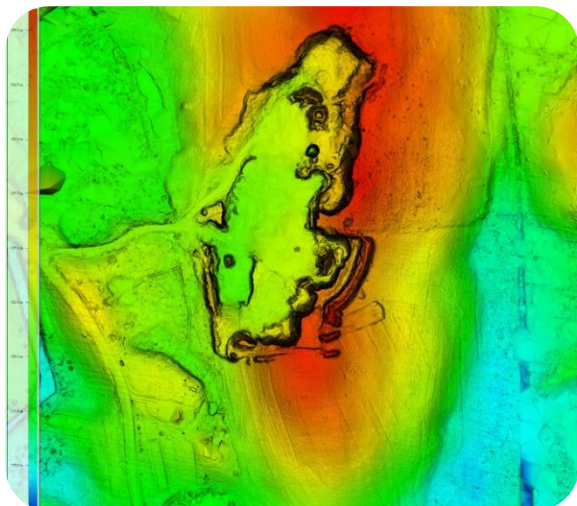


State Environmental
Service
Republic of Latvia

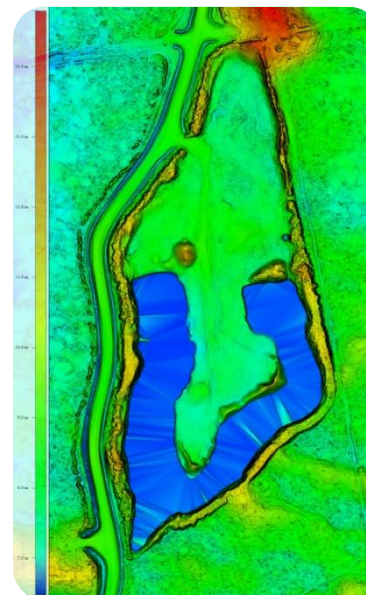
Towards improved control

Improved control of subsoil use:

20 deposits of mineral resources were monitored by using laser-scanning in 2016.



20 deposits of mineral resources will be monitored by using laser-scanning in 2017 as well.





State Environmental
Service
Republic of Latvia

Towards improved control

Improved control of subsoil use:

Planned and performed activities:

Purchase of drones, GPS navigation devices, laser distance measuring tools, GIS programs:

Expected outcomes:

- ascertaining that extraction conforms to the conditions of project,
- ensuring that the extraction is carried out within borders of licence area,
- etc.



State Environmental
Service
Republic of Latvia

Towards improved control

Improved control of subsoil use:

Topographic surveys ordered by State Environmental Service:

- objective control of the quantity of mineral resources extracted, as well as obtaining data which might serve as legal evidence,
- precise calculation of natural resources tax.

BENEFITS

More effective use of available technologies leads to improved and successful control of subsoil use.



State Environmental
Service
Republic of Latvia

Thank you for your attention!

“Lets develop our resources responsibly.”