



LATVIJAS VALSTS MEŽI

PLANTS • WOOD • RECREATION

FOREST SECTOR AND JSC «LATVIA'S STATE FORESTS» (LVM)

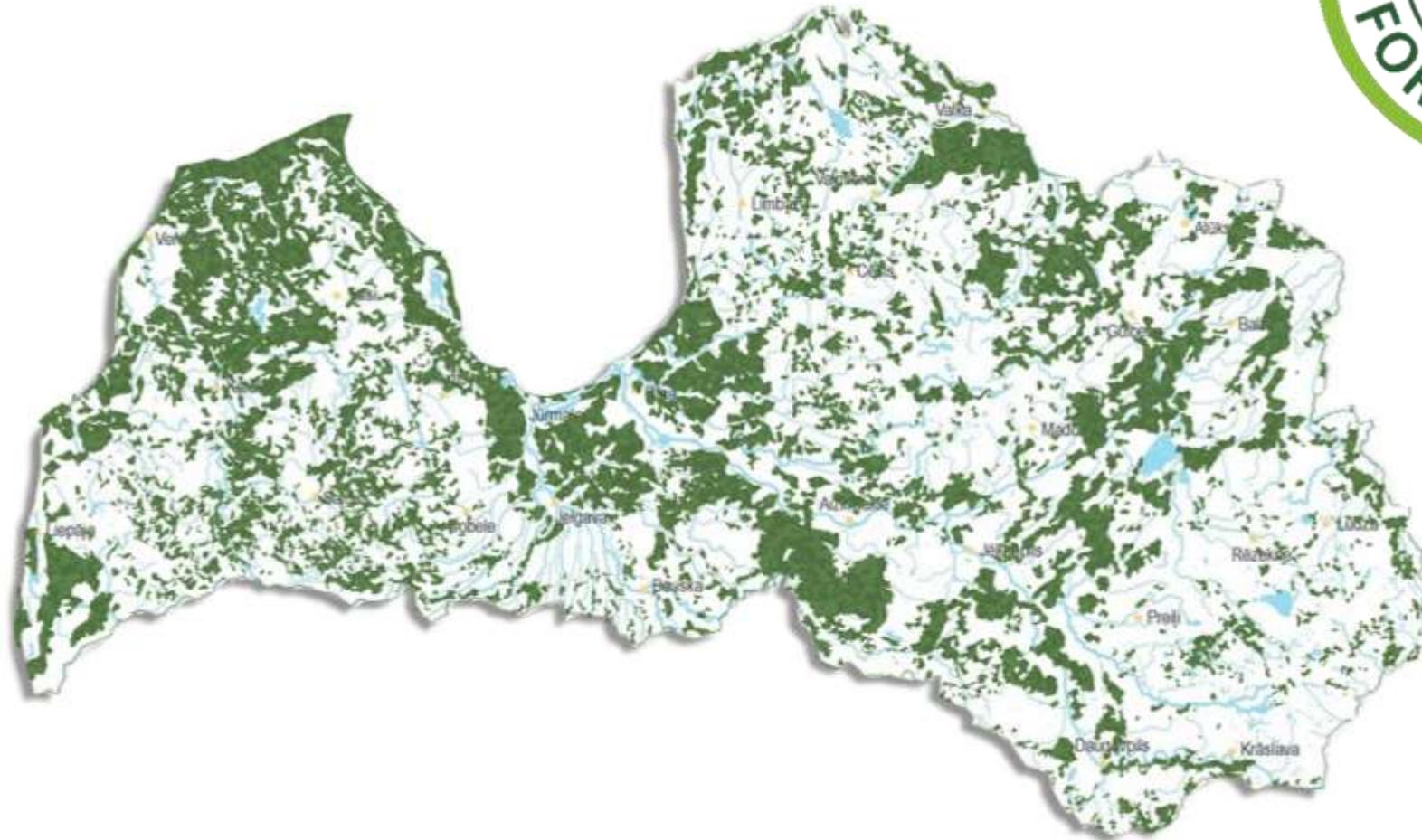
Līga Abizāre

JSC "Latvia's State Forests"

Head of Communication projects

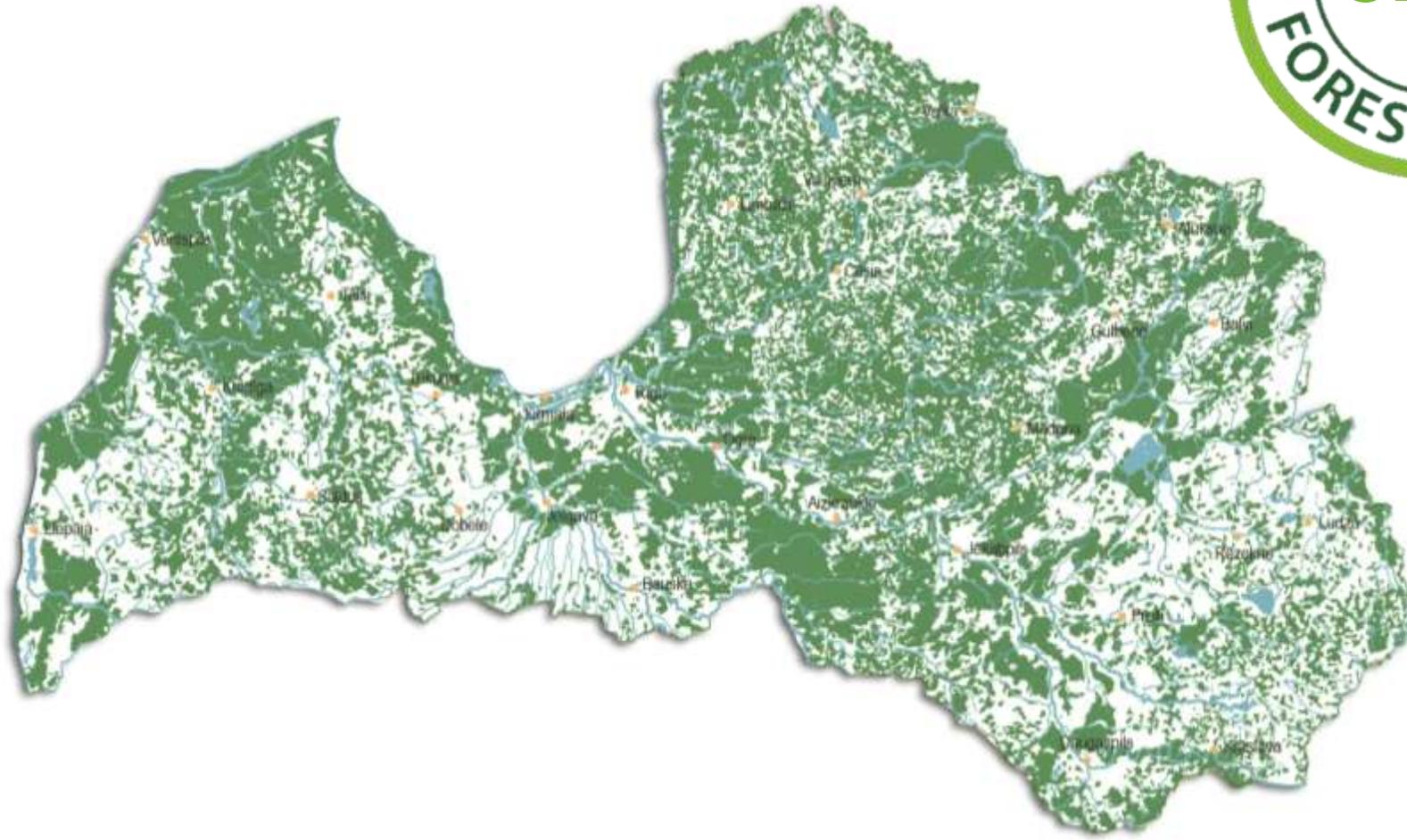
Forests in Latvia 1925

With 3.8 million ha Latvia is among the most forested countries in Europe



Forests in Latvia 2019

With 3.8 million ha Latvia is among the most forested countries in Europe

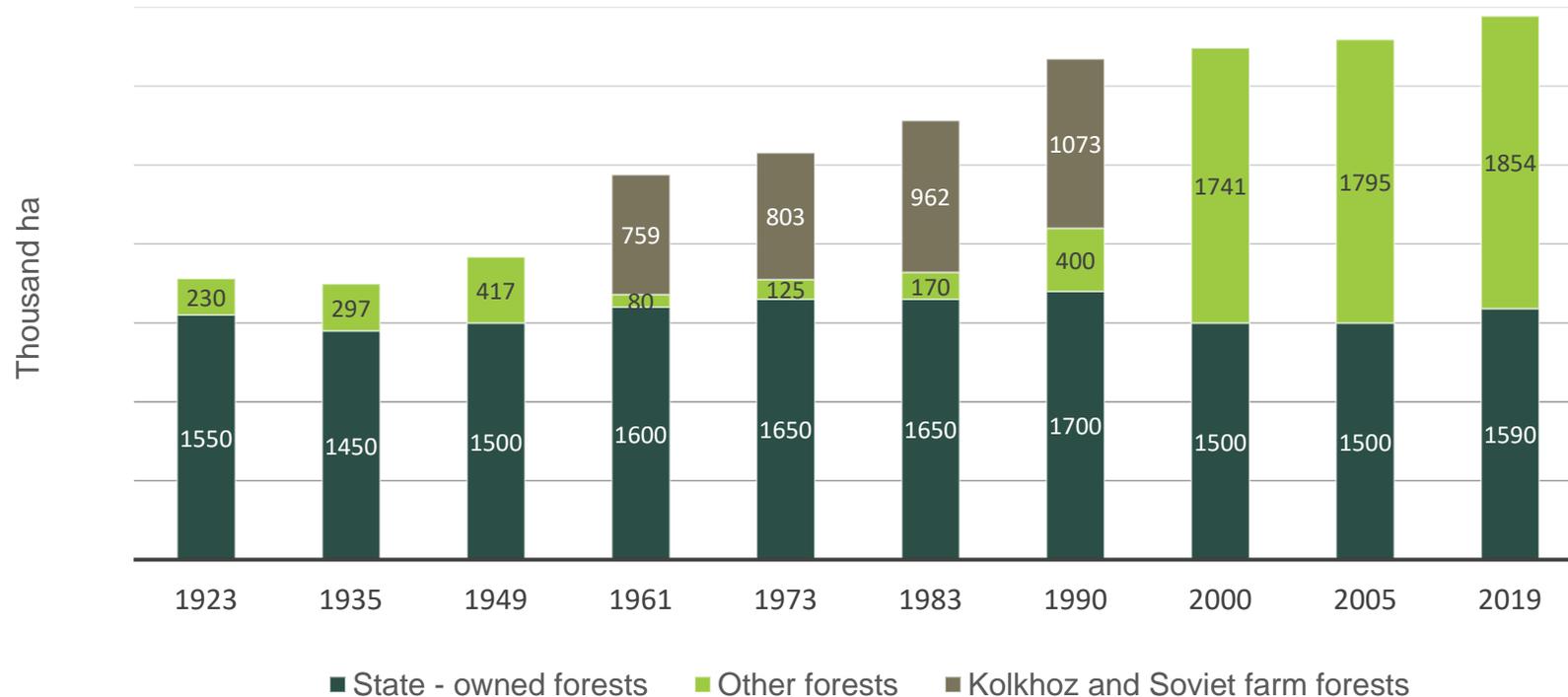


Forest Area by Property Form

The largest Top 5

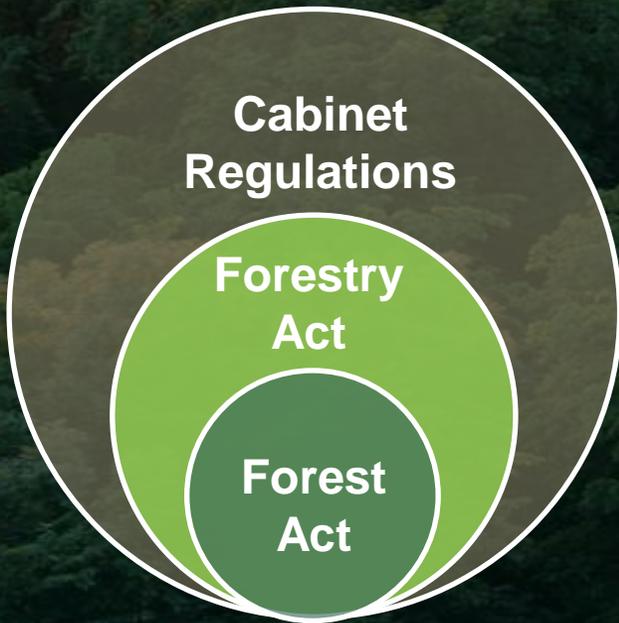
Forest land managers in Latvia / land acreage, ha /

1.	AS «Latvijas valsts meži»	1 600 000 ha
2.	Sodra grupa	125 600 ha
3.	IKEA GROUP	90 000 ha
4.	SIA «Rīgas meži»	60 400 ha
5.	SIA «Isnaudas mežs»	26 600 ha





IN LATVIA FOREST ACT IS BINDING TO EVERYONE



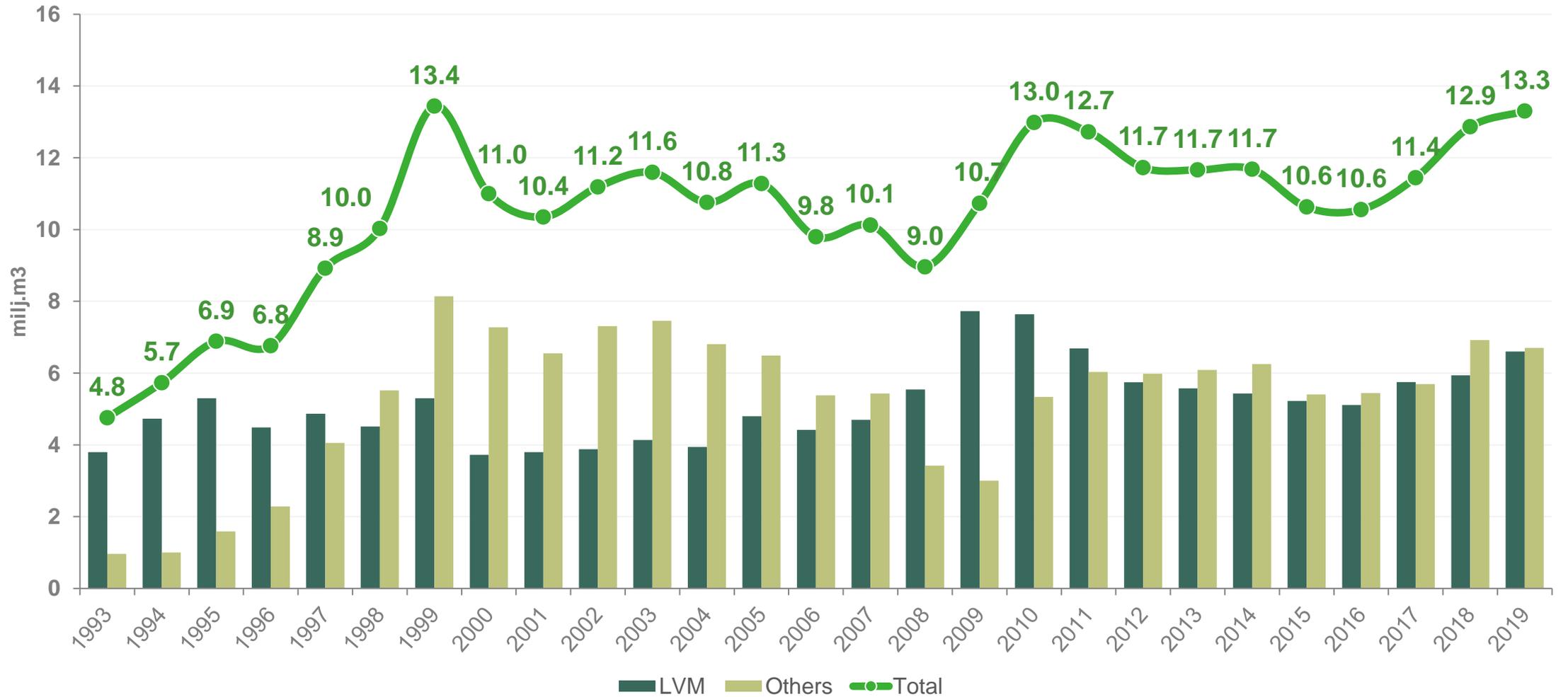
There are ~144 000 forest owners in Latvia



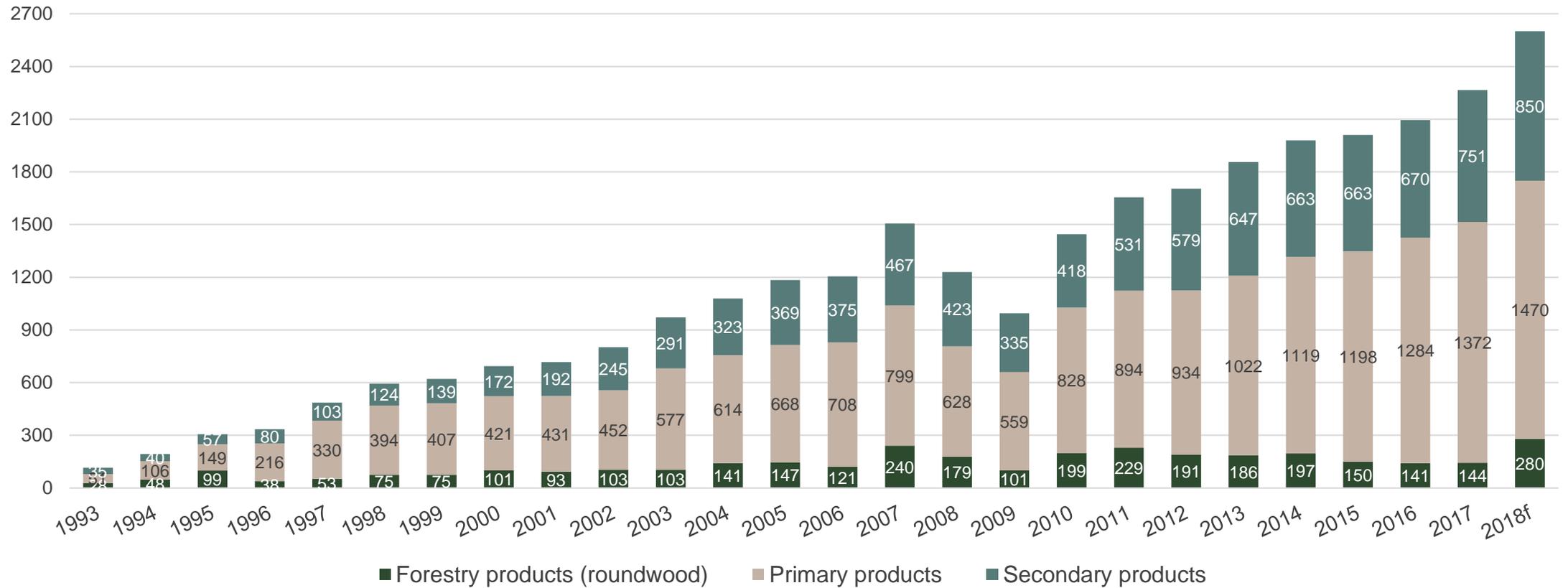
FOREST INDUSTRY



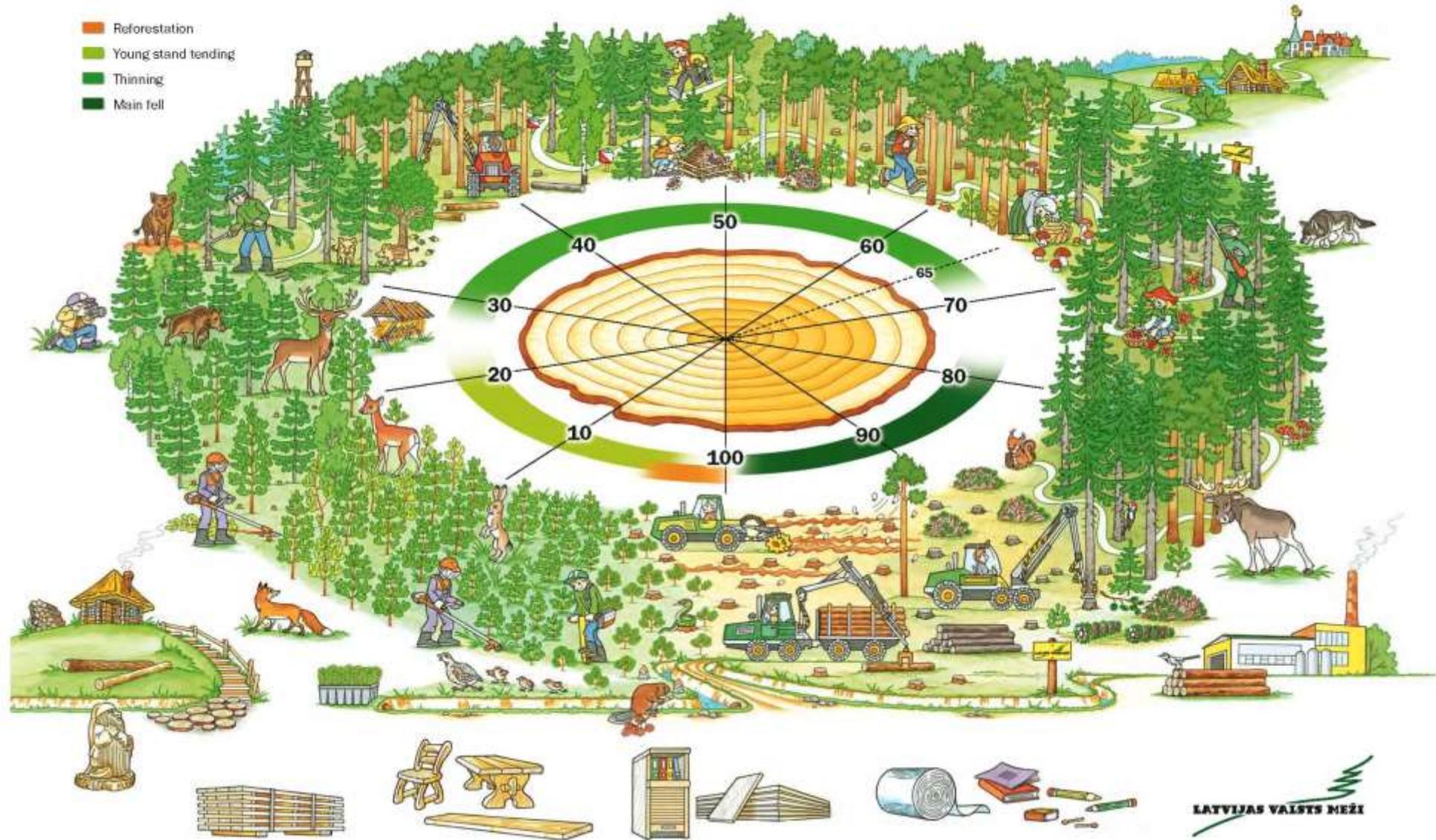
Felling Volumes of Latvia, million



Export Value of Forest Industry, mill. EUR



Forest management cycle



LVM Round Timber Flow 2019





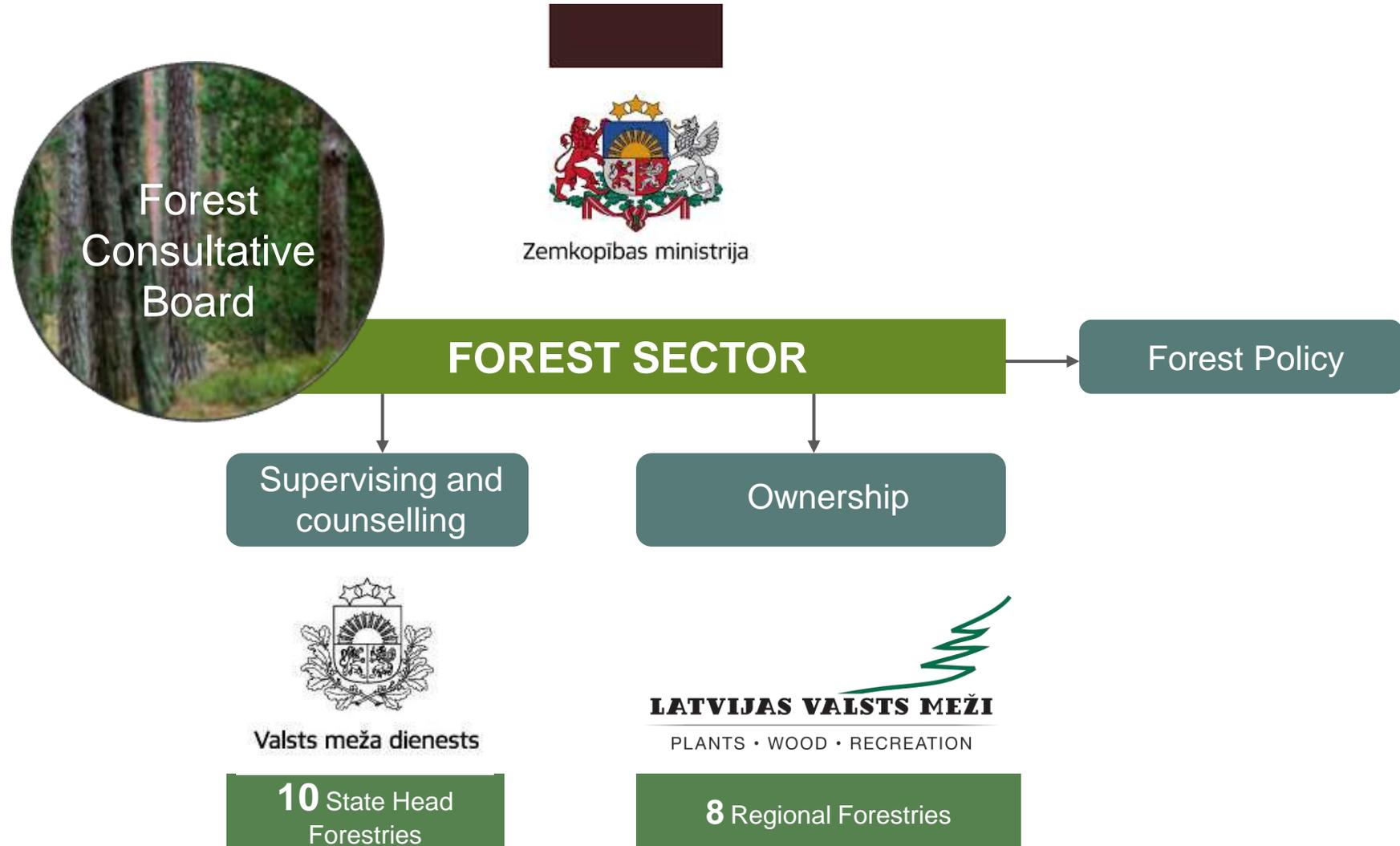
LATVIJAS VALSTS MEŽI

PLANTS • WOOD • RECREATION

Forest Management Principles



Forest Sector Administration





Founded in 1999



JSC «Latvia's State Forests» (LVM) pursue state interests in forestry by sustaining and increasing the forest value, while gaining maximum possible value from forest management



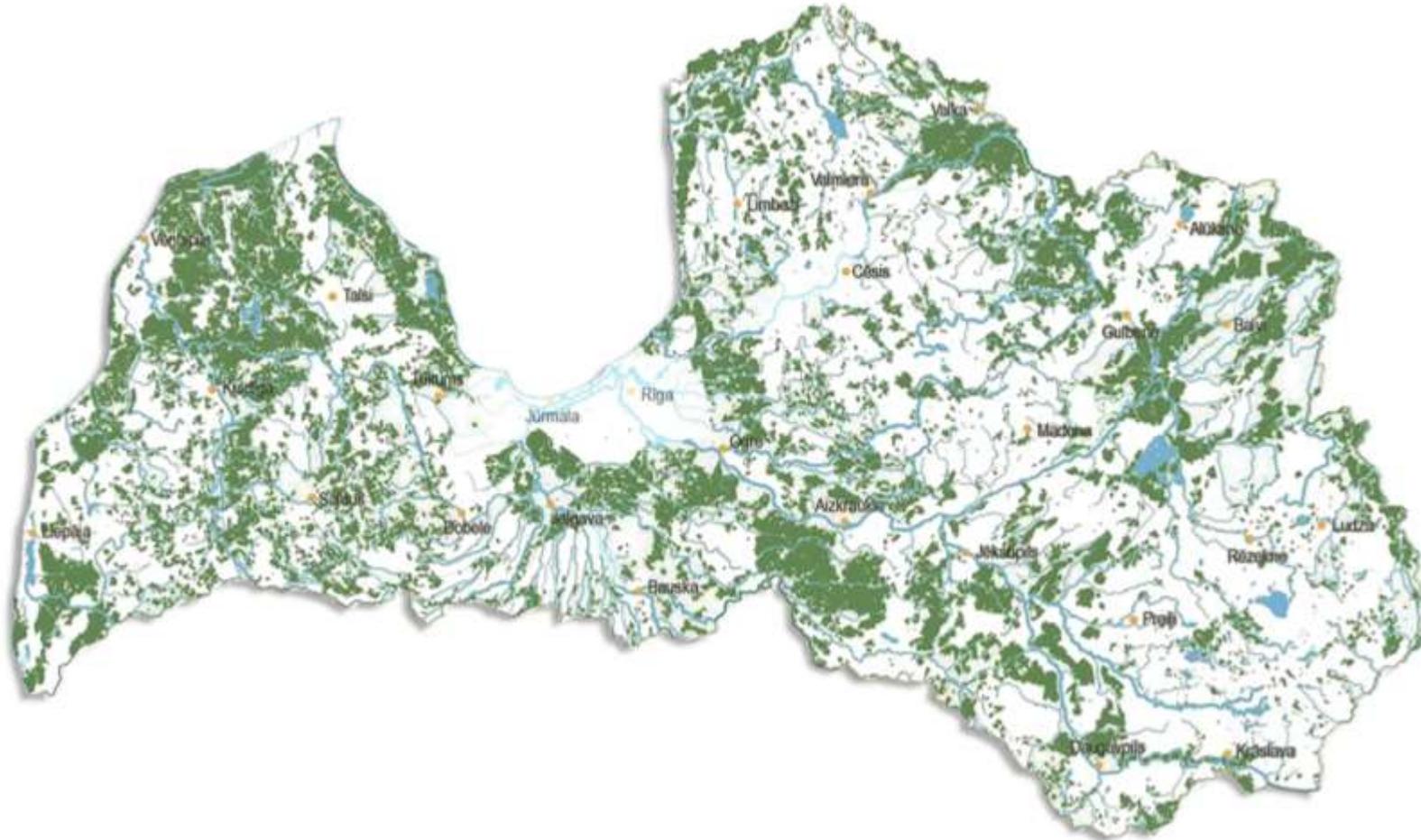
1021 employees



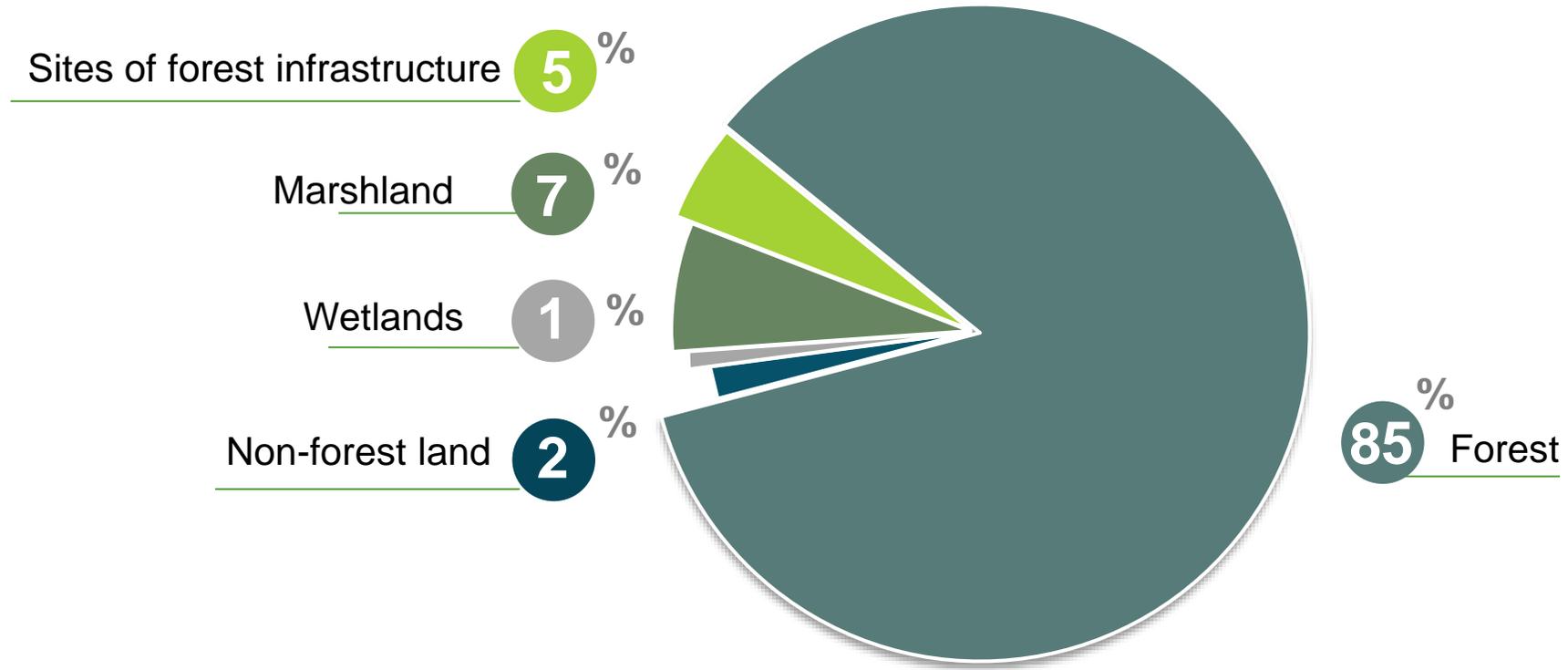
One of the Baltic's leader in efficient and innovative forestry



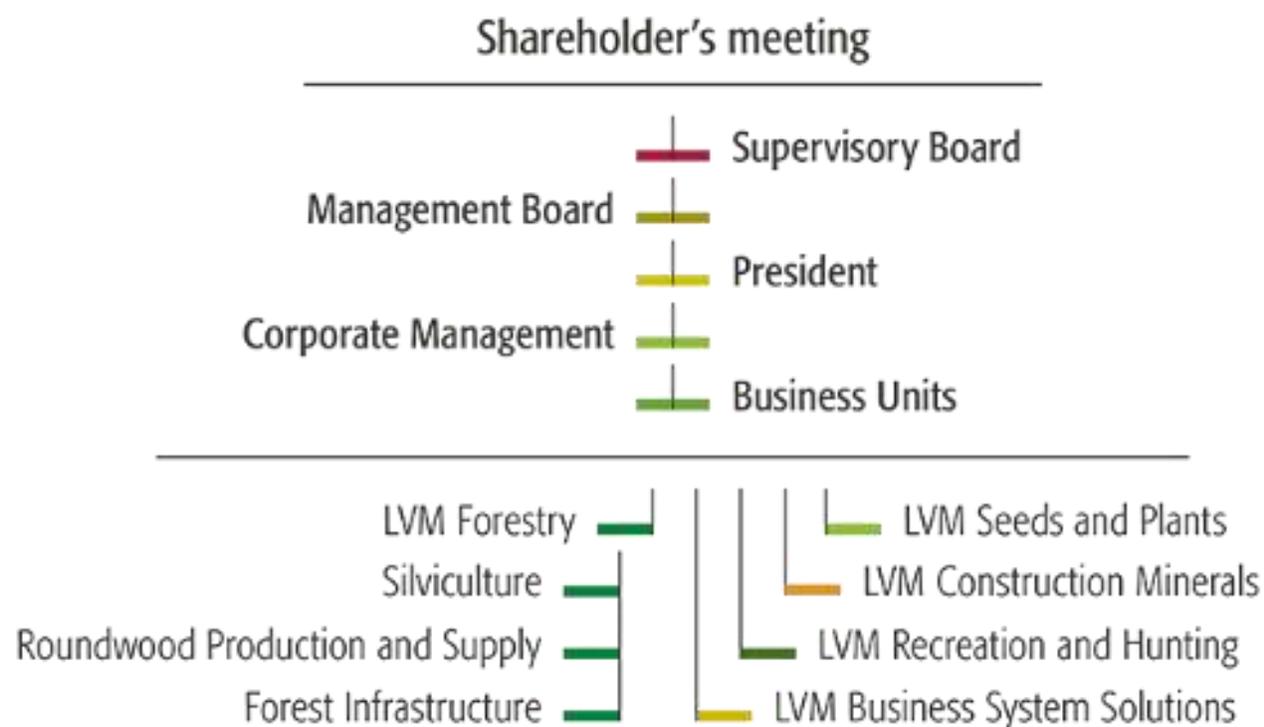
managed forests



LVM Area Under Management



Organizational Structure



Related companies

Jaunmokas Castle (100%)

Forest and Wood Products Research and Development Institute (40.22%)



**We create
flourishing Latvia**

We are considerate, careful, gentle and caring owner of Latvia's state forests, leader of the Baltic Sea Region in effective and innovative forest land management.

We are



CONSIDERATE

The choices we make today should not limit tomorrow's opportunities



CAREFUL

Quality, proficiency and innovation drive our efforts



GENTLE

We are mindful about the environment where we live



CARING

We care about the people around us strengthening our employee's skills, loyalty and ambitions.



Strategic Goals



To ensure sustainable management of LVM according to its mission and vision, the company has established strategic goals, dividing them in three equally essential blocks of issues – environmental, social and economic.

Economic Goals

Derive regular profit and positive cash flow from economic activities

Increase the company's asset and forest stand value

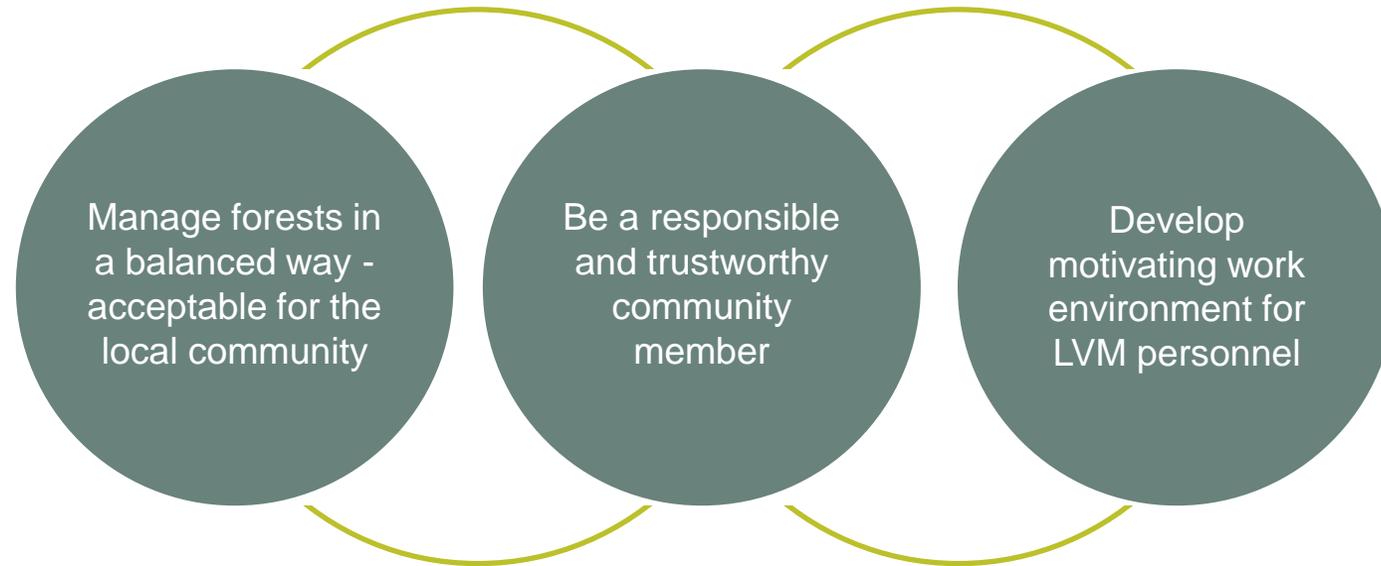
Improve the quality of services offered to customers

Become a stable and predictable partner to the customers, suppliers, and service providers

Increase the efficiency of business activities and strengthen the capacity of service providers

Develop wood products of high added value, promote the use of services and knowledge

Social Goals



Environmental Goals

Conserve biodiversity

Mitigate the global climate change

Contribute to a caring attitude towards forest environment

Decrease the impact of management activities on forest environment

LVM products and services

Supply of wood assortments

LVM delivers to its customers sawlogs, veneer logs, industrial wood, pulpwood and fuelwood. Sawlogs and veneer logs are supplied to woodworking enterprises in Latvia. Other assortments are sold following the FOB provisions.



Supply of fuel chips

LVM supplies fuel chips to produce green energy in Latvia and abroad.



Seeds and plants

LVM produces forest tree seeds and seedlings, as well as ornamental tree seedlings.



Services in recreation and hunting

LVM at its recreation sites offers recreation services – licensed angling, crayfish catching as well as hunting for locals as well as foreign customers in its managed forests.



Mineral resources

LVM offers sand, gravel, as well as peat extraction. The customers of sand and gravel are road construction companies, who carry out construction activities in forests and public highways.



Business System Solutions LVM GEO

Information system platform and derived tools work with any form of data and can be adjusted to the needs of different industries' companies – forest management, real estate, communication infrastructure, monitoring of natural process, providing services and other areas.



Business principle - outsourcing

Forest management

~ 675 companies
~ 2000 employees



Providers of LVM services
in total

**1060 companies and
~ 7000 employees**



Infrastructure building

> 200 companies
~ 3000 employees

Timber transportation

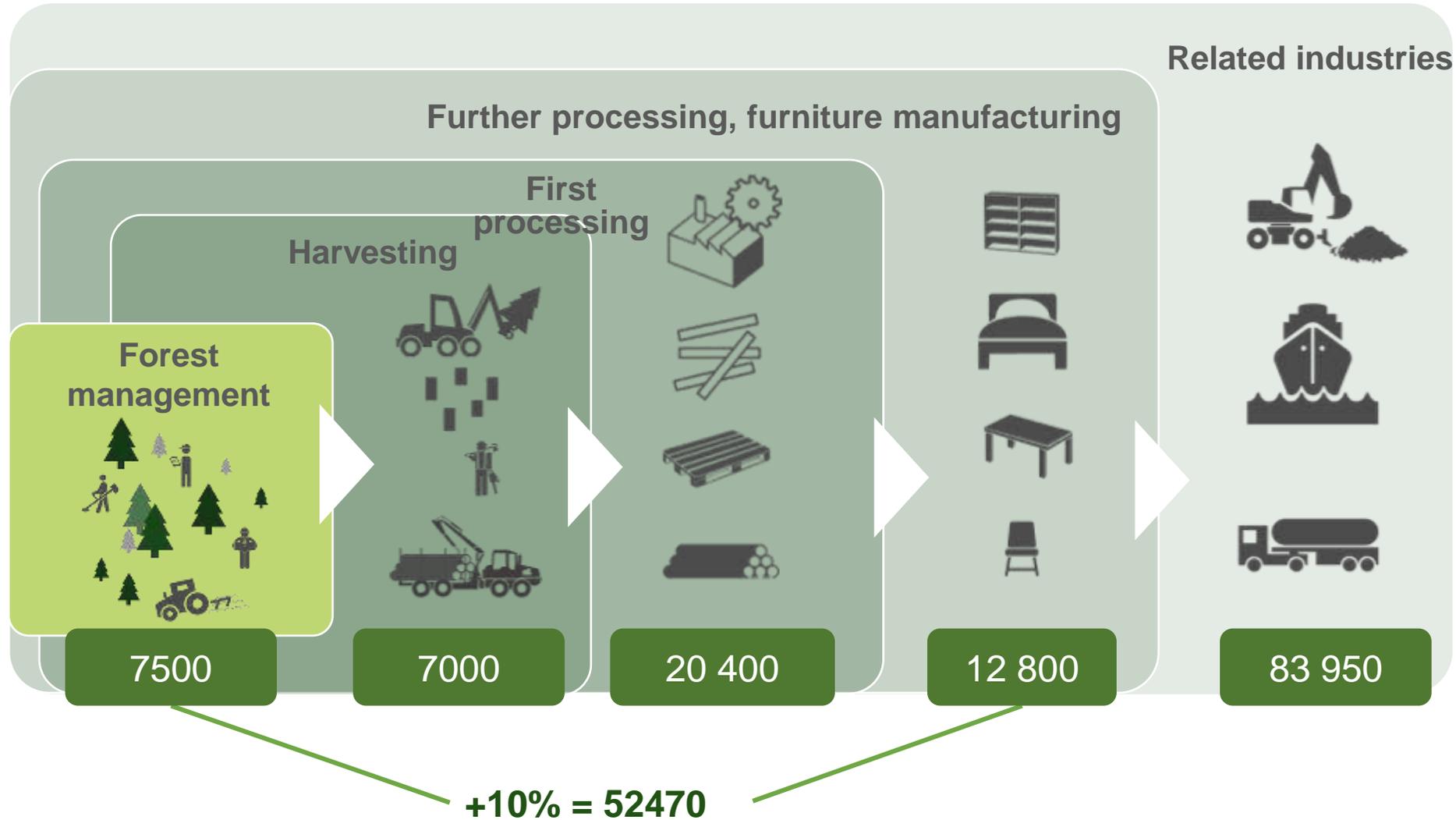
~ 45 companies
~ 160 forwarders
~ 440 forwarder drivers



Harvesting

~ 140 companies
~ 164 harvesters
~ 210 forwarders
~ 900 operators
~ 800 loggers

Jobs in the Forest and Related Industries



Our Business Areas

LVM Seeds and Plants



LVM Business System Solutions



LVM Forest Infrastructure



LVM Silviculture



LVM Roundwood Production and Supply



LVM Recreation and Hunting



LVM Construction Minerals



A dense field of young pine trees in a nursery, with a central text overlay. The trees are small and green, growing in rows. The background is a soft, out-of-focus green. A white rectangular border with a thin green inner line frames the text.

LVM Seeds and Plants >

LVM Seeds and Plants Fields of Activity



Produces seeds and plants for the maintenance of the forest area managed by LVM



Sells forest tree seeds and plants on the domestic and export markets



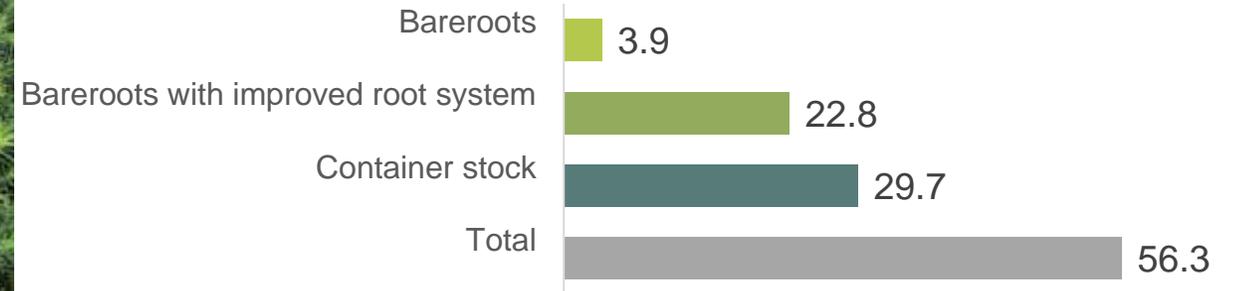
Operates 9 tree nurseries, produces and stores seeds at 3 cone drying facilities



Manages Kalsnava arboretum

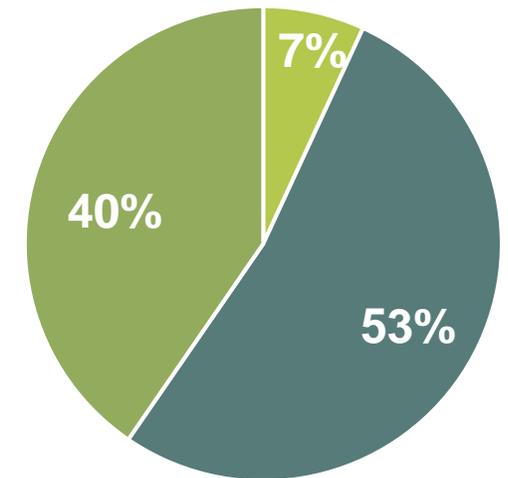


Forest Tree Plant Production in 2019, million



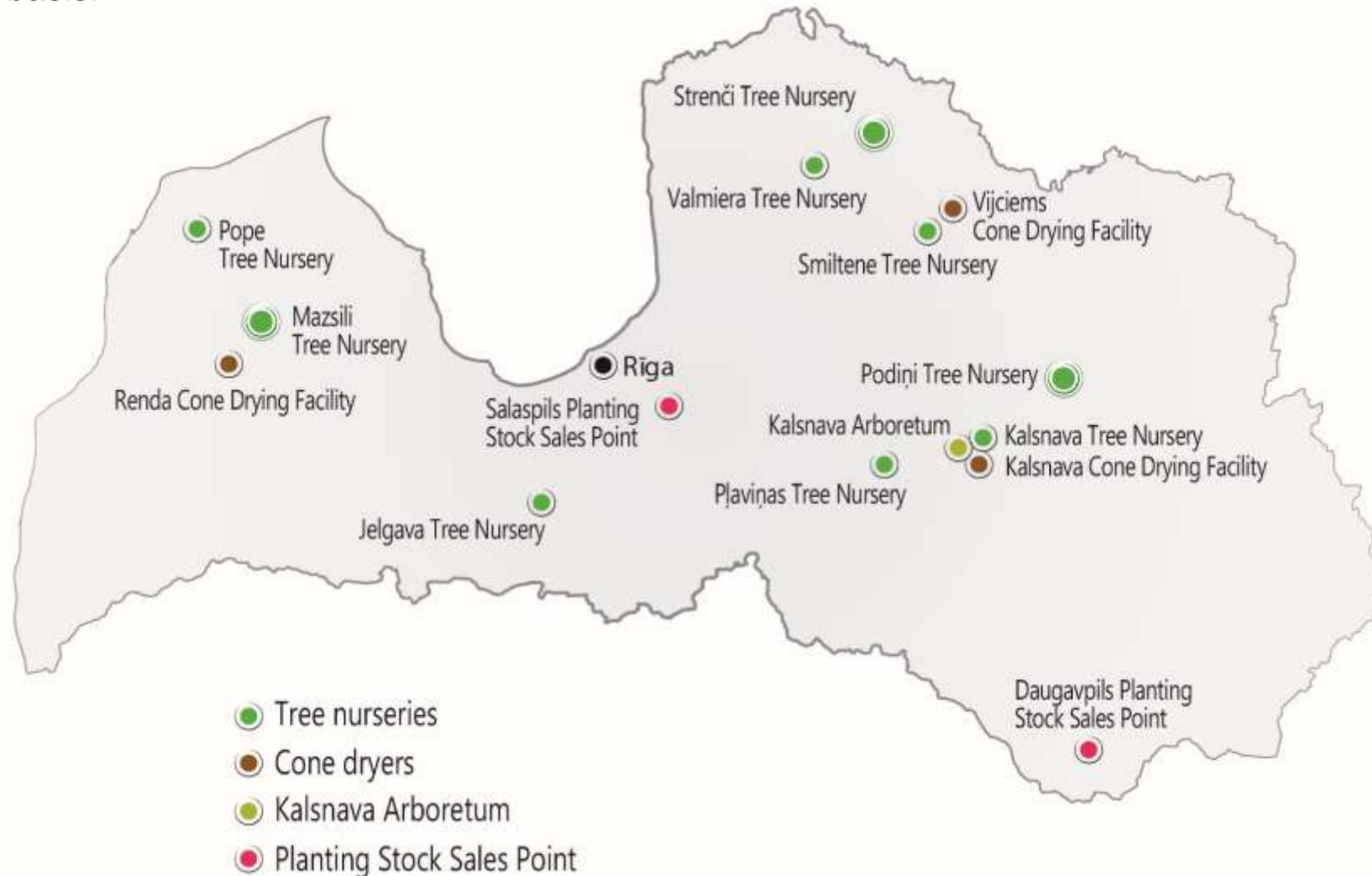
LVM Seeds and Plants

The production capacity of 9 nurseries allows LVM to put on the market more than 50 million forest tree plants per year with the target figure of 68 million for the upcoming years. In 2019, the sales volume was 56.3 million plants. LVM also manages Kalsnava arboretum also known as the garden of interesting trees. It also markets more than 800 denominations of ornamental trees and shrubs.





Tree seeds are acquired in cultivated forests, the total area of which is 513 ha for pine, 152 ha for spruce and 33 ha for other tree species. As the forest trees don't produce seeds every year, LVM keeps a strategic reserve of seeds to ensure the cultivation of forest planting stock on a regular basis.





Annual volume of
sold plants
56.3 million

Forest Tree Plant Cultivation

Annual volume of
sold plants

56.3 million



Forest Tree Plant Cultivation



Forest Tree Plant Cultivation



Forest Tree Plant Cultivation





**Forest Tree
Plant
Cultivation**

Automated Forest Tree Plant Wax Treatment



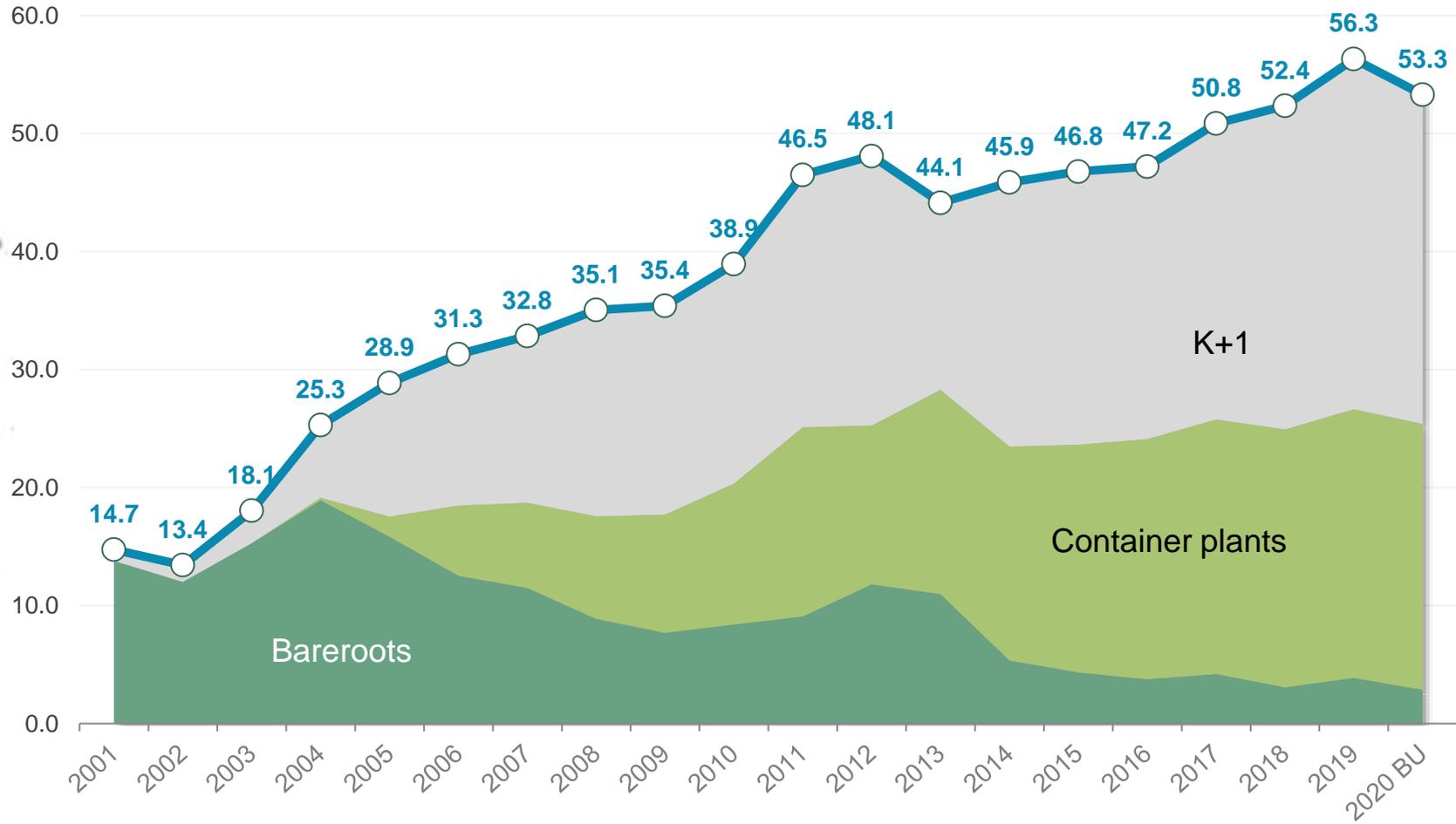
**Automated
Forest Tree
Plant Wax
Treatment**



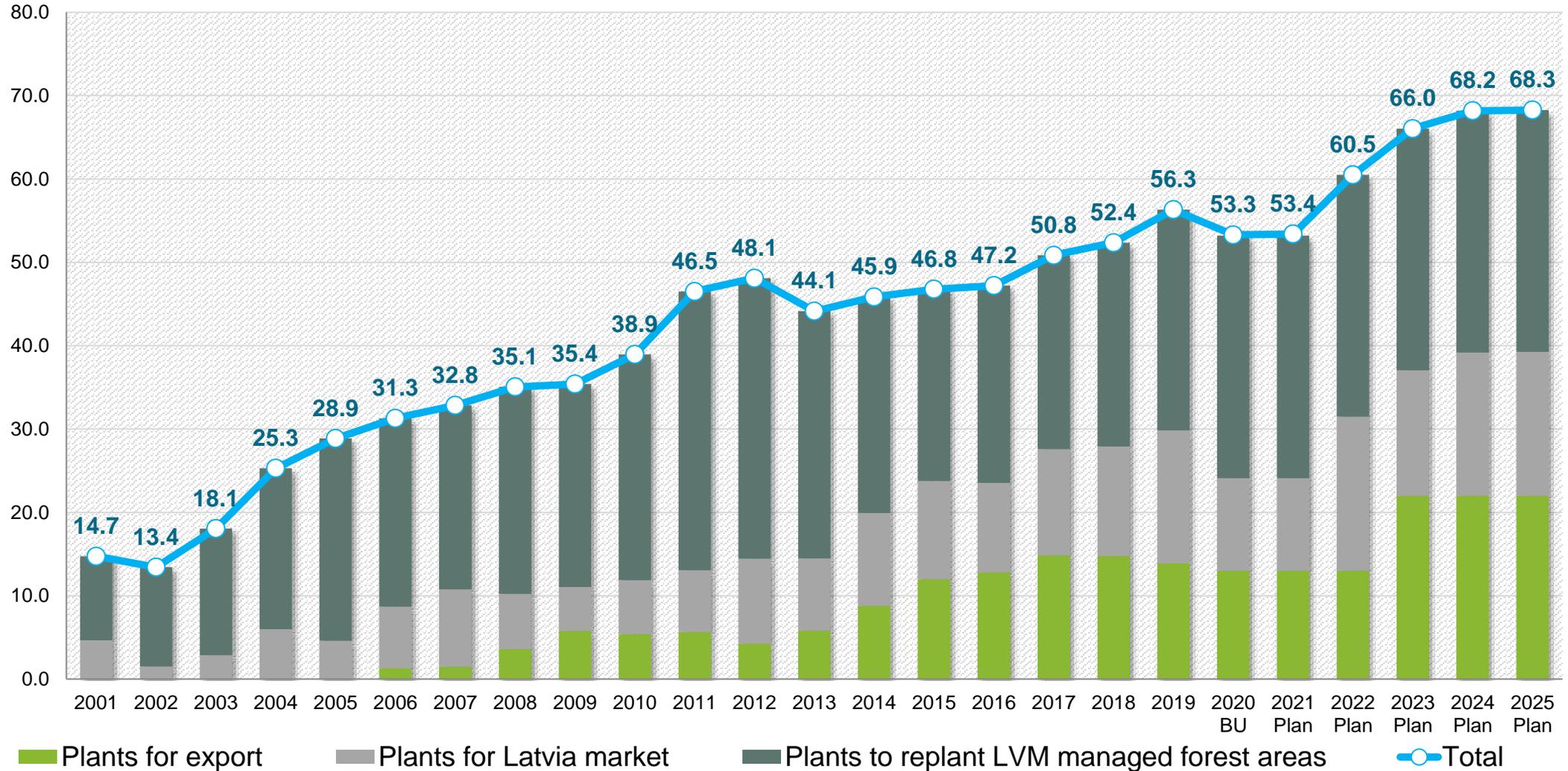
Forest Tree Plant Wax Treatment



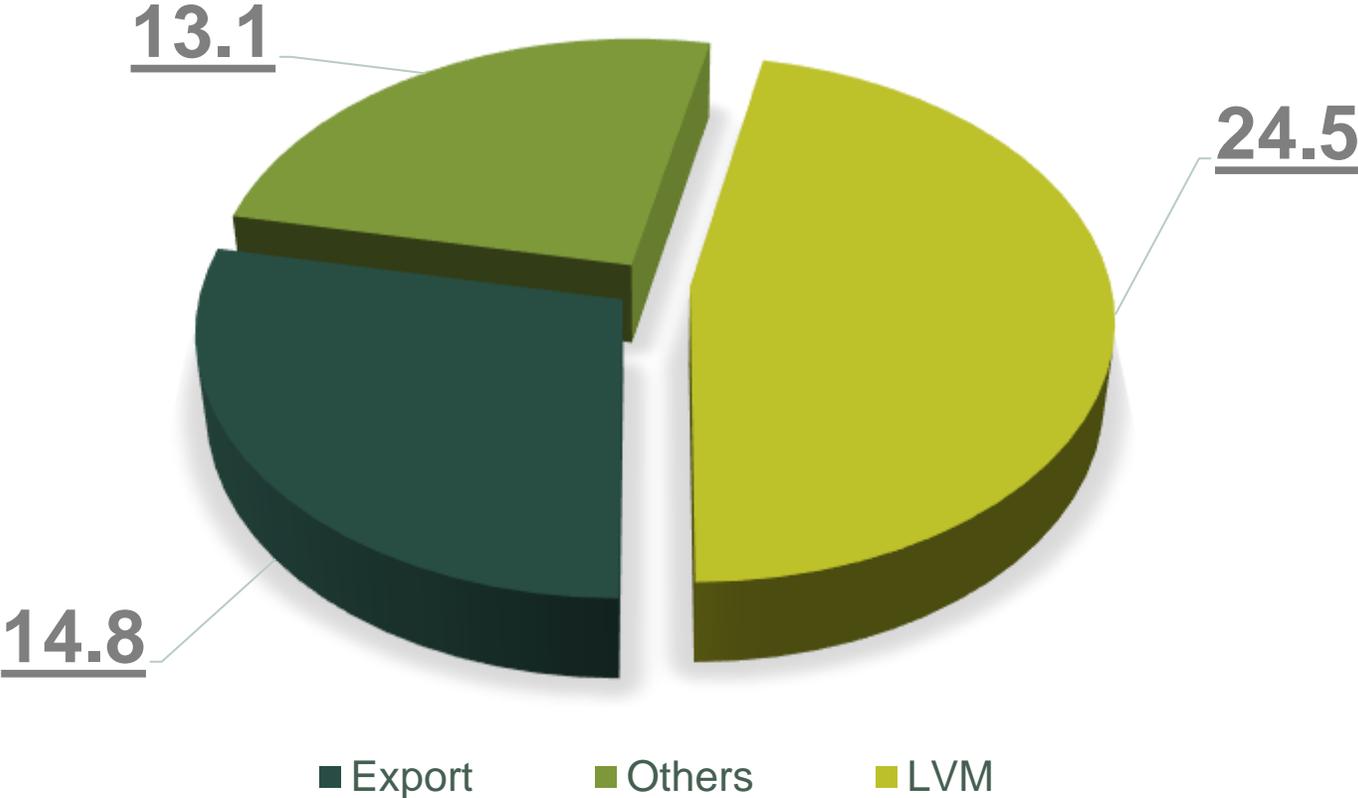
Plant Production



Sales of Forest Tree Plants, mill. Seedlings



Sales of Plants in 2019, mill. Units



A construction site in a forest. In the foreground, a large Komatsu bulldozer is parked on a dirt road. The bulldozer has "KOMATSU" and "D 41P" written on its side. In the background, a dump truck is dumping a load of sand or gravel. The scene is set in a wooded area with tall trees. A semi-transparent white box with a green border is overlaid on the image, containing the text "LVM Forest Infrastructure" and a right-pointing chevron symbol. The text is in a bold, white, sans-serif font. The chevron is a simple white outline pointing to the right.

LVM Forest Infrastructure



LVM Forest Infrastructure Fields of Activity



Forest roads - MAC



Bridges



Forest drainage
systems - MMS



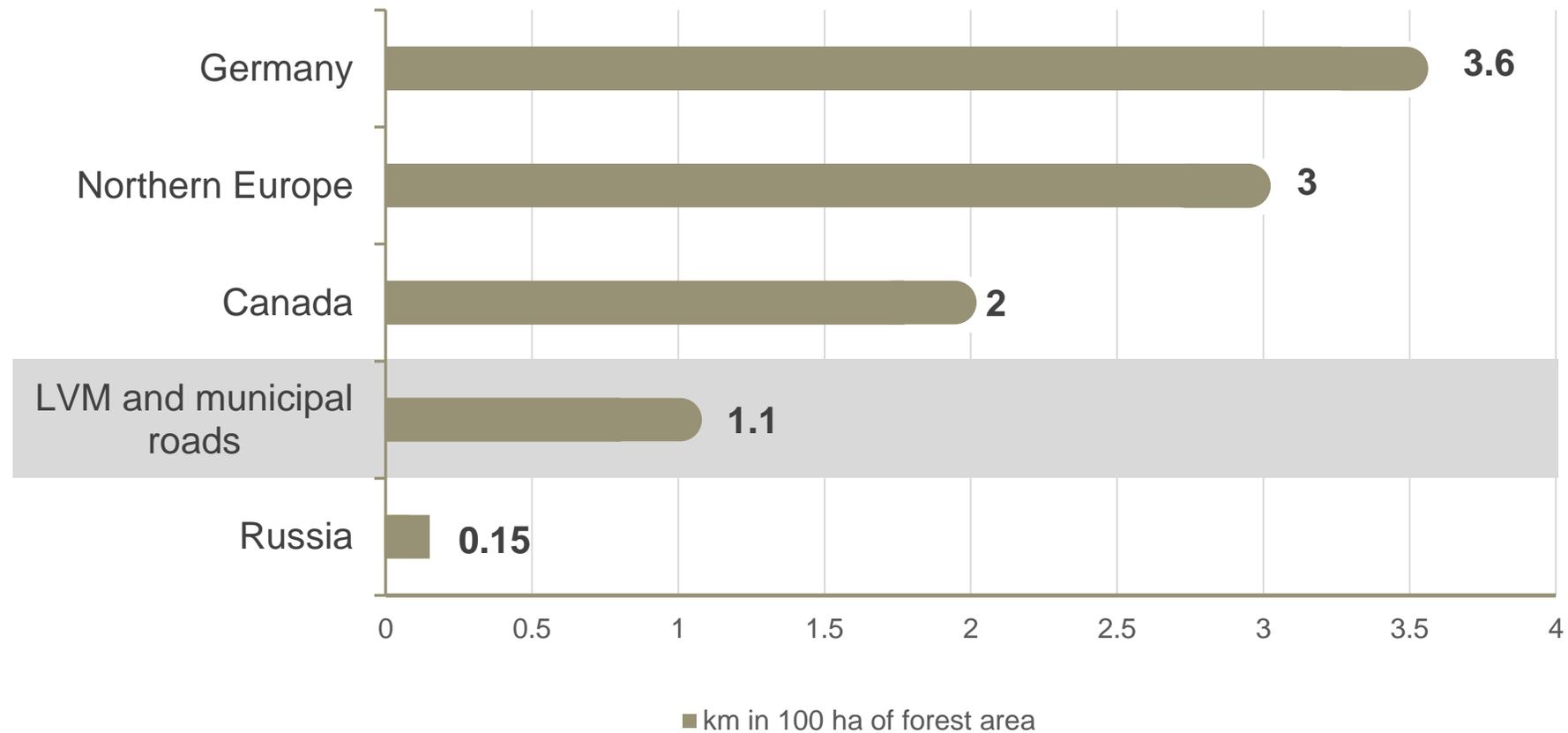
ROAD NETWORK DENSITY



10 km



The Density of Forest Roads on 100 ha of Forest Land



LVM Forest Infrastructure Road Building

Good quality roads and road maintenance assures to the clients
assortment delivery on time



Road Building



On average every
year we build
320 km

Forest Road Construction



Temporary Forest Road



Before a Temporary Forest Road



Laying of Temporary Forest Road



**After
Temporary
Forest Road**



A year later



LVM Forest Infrastructure Forest Drainage Systems



Restoration of land reclamation systems assures higher levels of wood increment and increases the competitiveness of the sector



345 000 ha

of moisture-regulating ditch network has been constructed



200`377 ha

In this area forest roads have been reconstructed (since 2005)

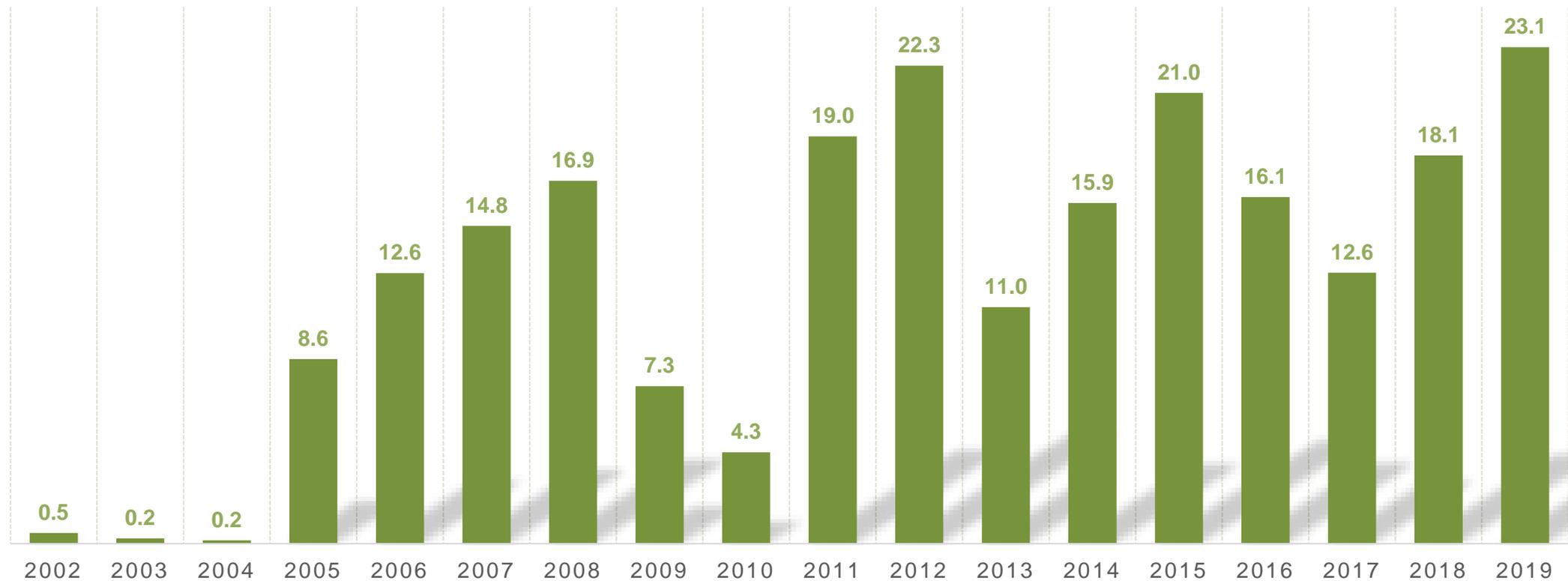


Reconstruction of Forest Drainage Systems



Annual average of restored forest drainage systems is **16.3** thous. ha

Reconstruction of Forest Drainage Systems, thousand ha



Silviculture



LVM Silviculture



Preparation
of soil



Forest
planting



Forest
tending



Forest
protection



Forest fire
safety and
fire-fighting



Maintenance
of forest
drainage
systems



Growing of seedlings



Forestry



The aim of silviculture

to grow productive, valuable and healthy forests for timber product manufacturing

Forestry



Manufacturing of timber products



8 Management Regions of LVM



Distribution of Tree Species in LVM Managed Forests



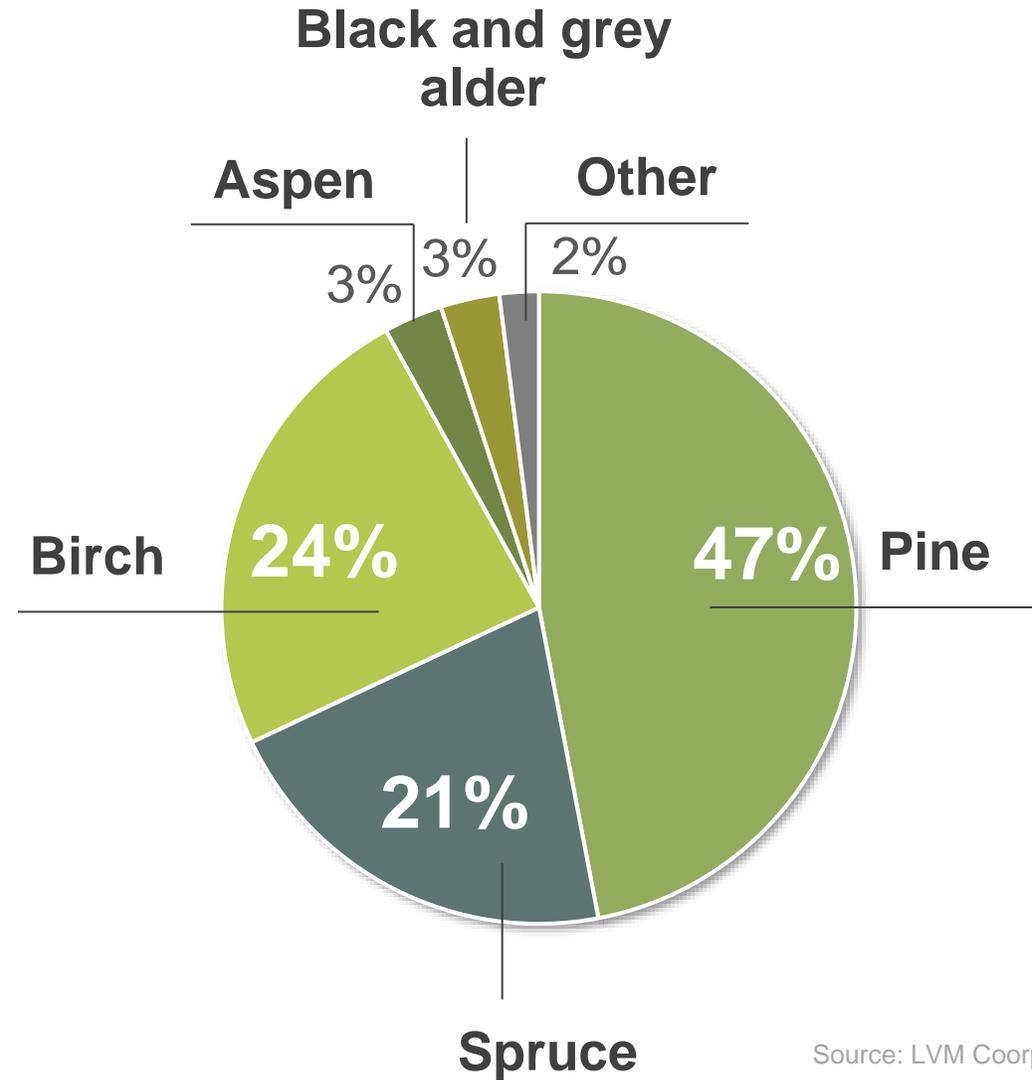
Pine 47%



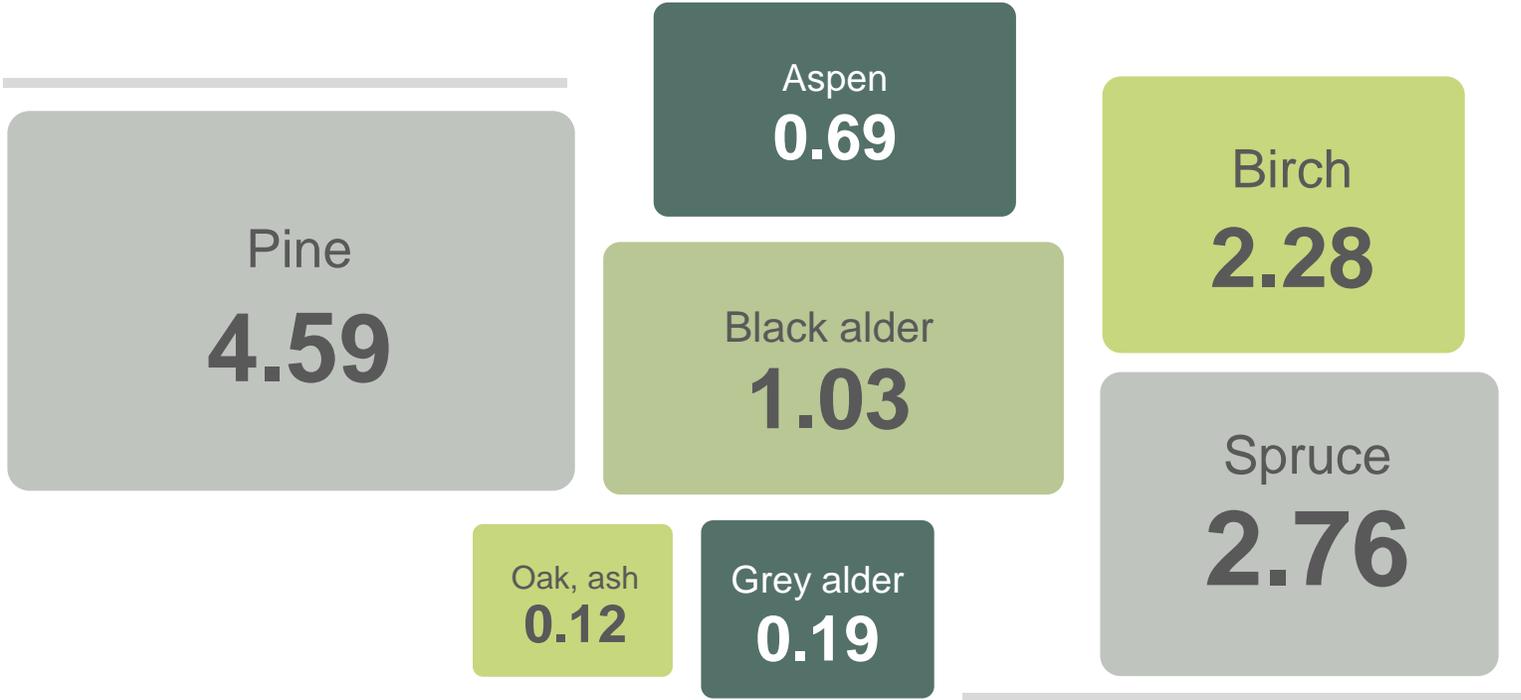
Birch 24%



Spruce 21%



Annual Stock Volume Growth (excluding deadwood) in LVM Forests is 12 million m³



A green forestry machine, likely a harrow or similar soil preparation equipment, is shown in a forest setting. The machine features large, heavy-duty metal discs and chains on its wheels, designed for rugged terrain. The background consists of tall, thin trees, suggesting a forest environment. The machine is positioned in the center-left of the frame, with its front end facing right.

Soil Preparation

Every year we
prepare around
9.4 thous. ha

Forest Regeneration

Average
annual natural
regeneration

7.2 thous. ha

Average
annual artificial
regeneration

8.4 thous. ha

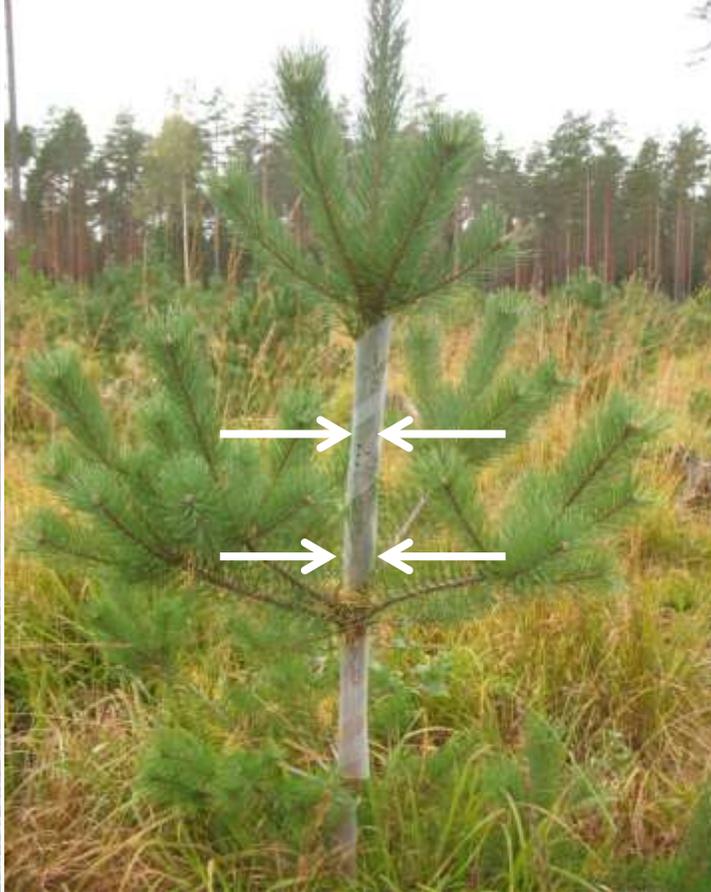
2018 planted
~26 500 000
forest tree plants



A worker wearing a dark cap, safety glasses, a high-visibility orange vest over a grey long-sleeved shirt, and blue pants is using a red and black brush cutter in a field of tall grass. The worker is positioned in the center-left of the frame, facing right. The background shows a dense forest of tall, thin trees under a bright sky.

Tending of Young Stands

Annually we take
care of around
33.1 thous. ha



Forest Protection

Wax to limit the damage done by *Hylobius abietis*

Bioplastic spirals for trunk protection against deer

Repellents for shoot protection against deer



Stands are protected using environment-friendly means of plant protection



Mature Forest



Manufacturing of Timber Products and Delivery



LVM Manufacturing of Timber Products and Delivery Fields of Activity



Planning of felling sites



Selling of timber products



Manufacturing of timber products



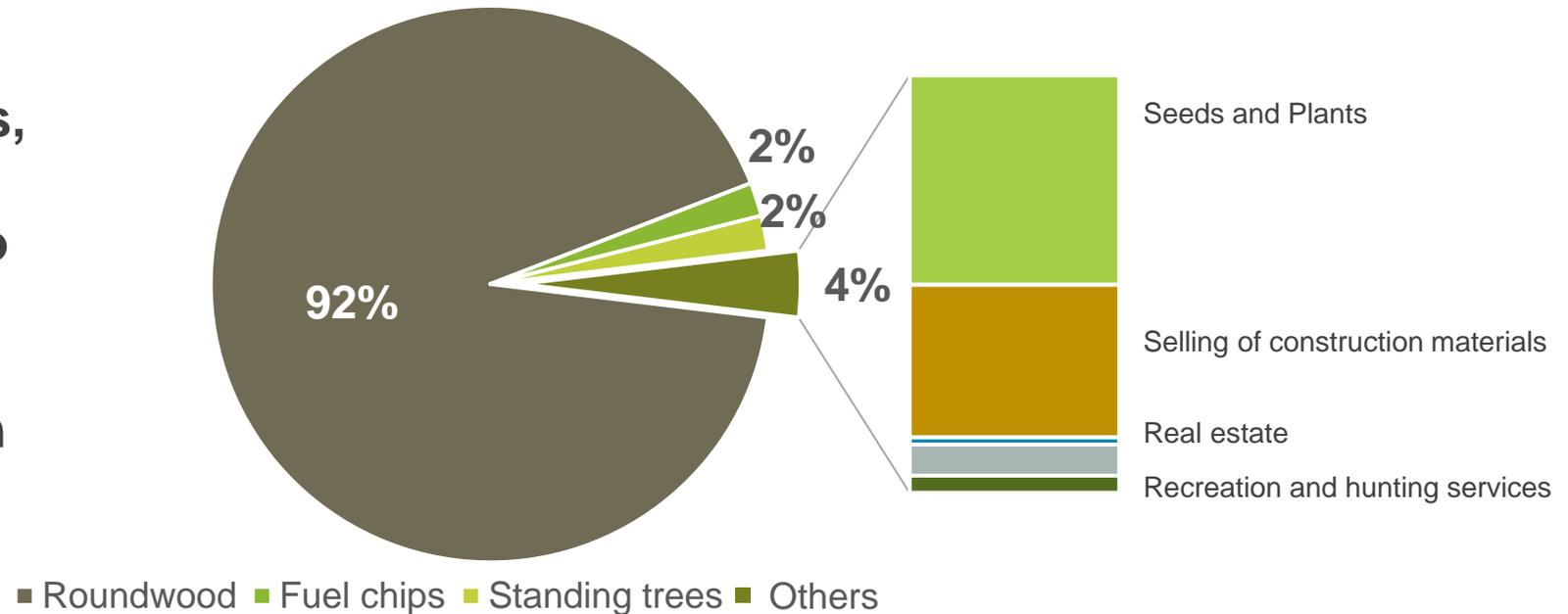
Delivery of timber products



LVM Manufacturing of Timber Products and Delivery

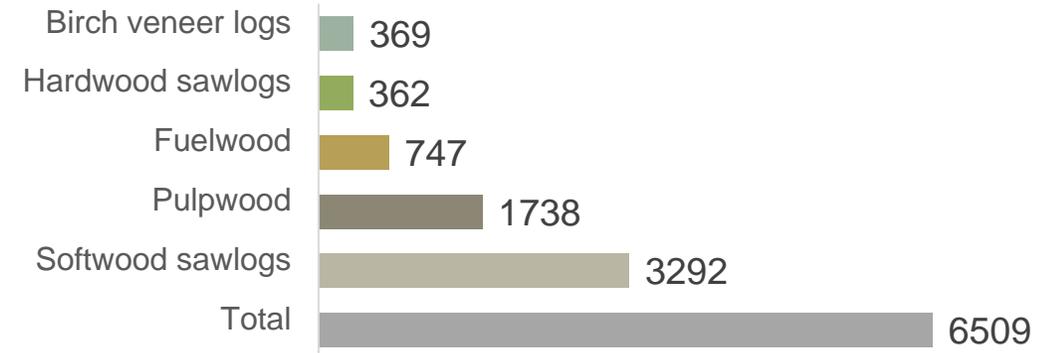


LVM manufactures, sells and delivers timber products to wood processing enterprises and energy production companies



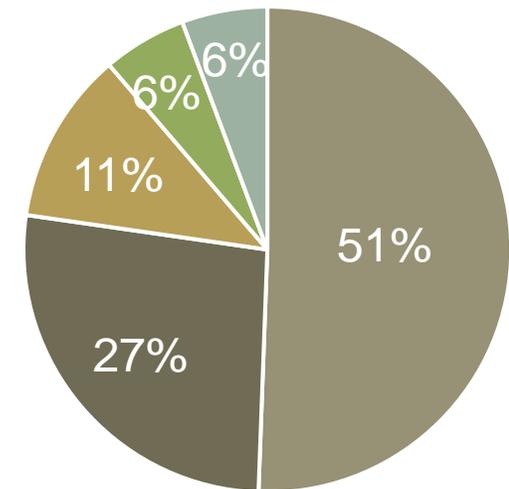


Roundwood deliveries in 2019, thousand m³

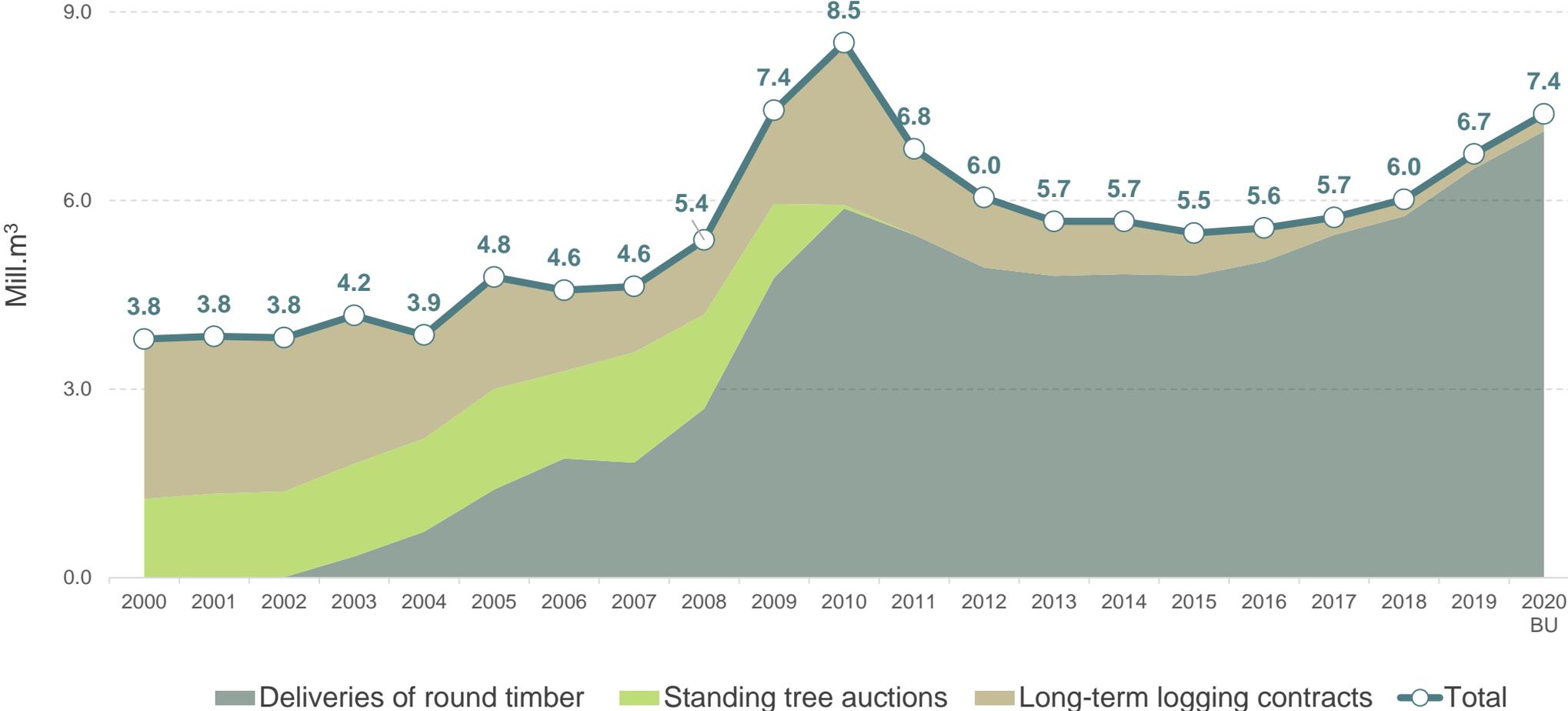


LVM Supply of Wood Assortment

With sales volume of 6.51 million m³ in 2019, LVM is one of the major suppliers of roundwood in Latvia. By timely deliveries of customized assortment, LVM helps creating a predictable business environment and strengthening the competitiveness of its business partners.



LVM Timber Sales



Source: LVM Corporate Management

Use of IT



Transportation

The annual average
volume
transported is
5.5 mill. m³



Transportation





SUBSURFACE UNIT >

Subsurface unit

Mineral resources from subsurface layers – production of products



Sand



**Mixture of
gravel**

Accredited laboratory of LVM Subsurface unit

Acquires mineral material samples,
does physical, mechanical and
chemical testing

Acquired status of an accredited
conformity assesment body by
the end of 2018



GEOSPATIAL INFORMATION TECHNOLOGIES




LATVIJAS VALSTS MEŽI
PLANTS • WOOD • RECREATION


LVM GEO

GEOSPATIAL INFORMATION TECHNOLOGIES



GEOGRAPHIC
INFORMATION
SYSTEMS



REMOTE SENSING



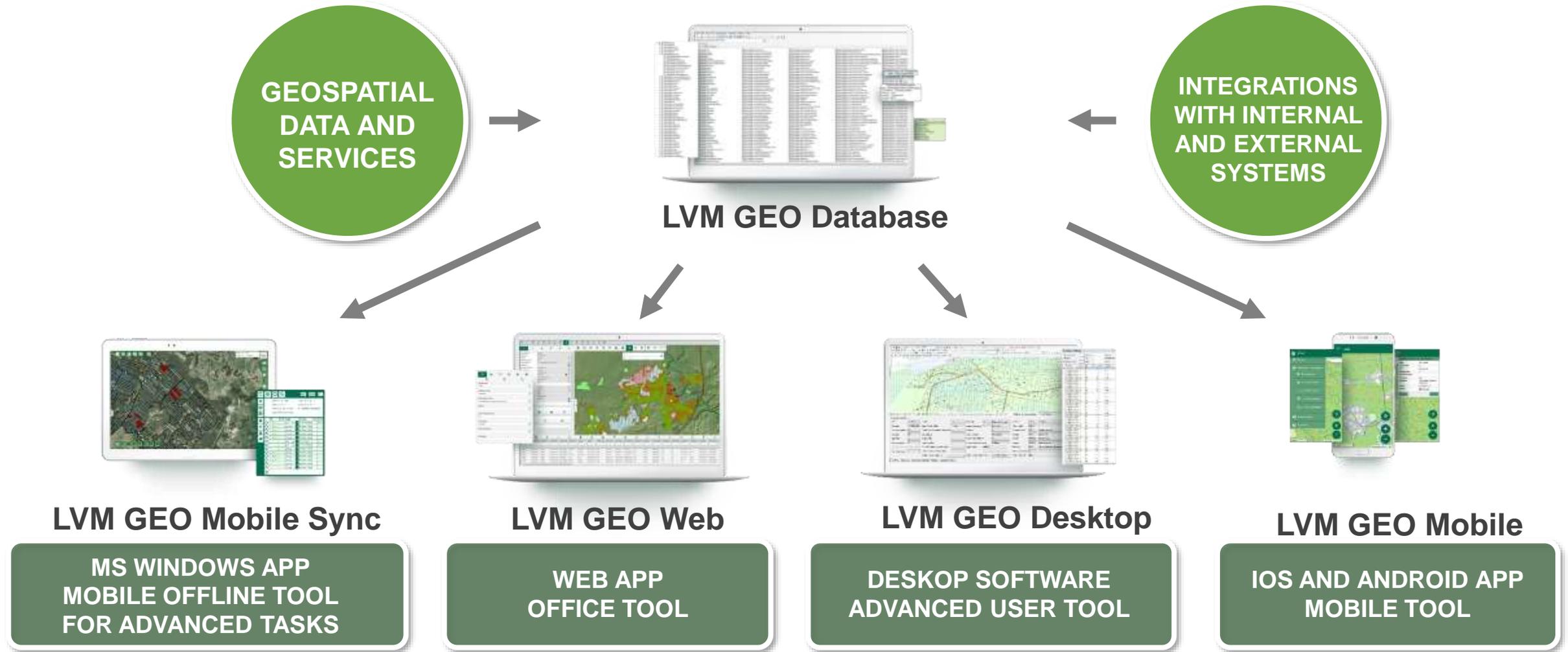
SPATIAL
OPTIMIZATION
PLANNING



SPATIAL DATA
ANALYSIS
AND
PROCESSING

LVM GEO PLATFORM

FOR FOREST MANAGEMENT



LVM GEO PLATFORM

FORESTRY PROCESSES SUPPORTED

SILVICULTURE
MANAGEMENT

FELL PLANNING
AND EVALUATION

PRODUCTION
TASK
MANAGEMENT

CONTRACTOR
AND FOREMAN
MANAGEMENT

NATURE
CONSERVATION
MANAGEMENT



LVM GEO Web



LVM GEO Desktop



LVM GEO Mobile Sync



LVM GEO Mobile

LVM GEO PLATFORM

ADVANTAGES AND SPECIAL FEATURES

LVM GEO PLATFORM IS CONTINUOUSLY BEING IMPROVED ACCORDING TO FOREST MANAGEMENT BEST PRACTICES AND INNOVATIONS IN THE FIELD



ready-made solution

largest geospatial data and service database in the country

highly customizable and adaptable

built on latest technologies

online and offline mobile applications

geospatial and tabular data editing

integrations with other IT solutions

LATVIJAS VALSTS MEŽI

LVM Recreation and Hunting



LVM Recreation and Hunting fields of activity



Hunting services

(in hunting sections)



Park management

(Nature park of Tervete un Pokaini)



Licensed fishing services

(Kanieris, Lielaucē, Zebrus, Gulbju lakes un Tervetes reservoir)



Lodging services, conferences, seminars

(TRC Ezernieki un Spāre)



Wood - carving workshop services



It means Mother Nature.
And it's true.



LVM Recreation and Hunting Services

Currently, there are
more than

360

LVM recreation sites

500 000
visitors per
year

The recreation opportunities are improved in the state-owned forests every year by making the existing places of recreation better and opening new ones.

LATVIJAS VALSTS MEŽU DABAS PARKS TĒRVETĒ



LVM NATURE PARK IN TERVETE





LVM NATURE PARK IN TERVETE

WOOD BRIDGE IN LVM NATURE PARK TERVETE



LVM Nature Park in Tervete visitors per year, K

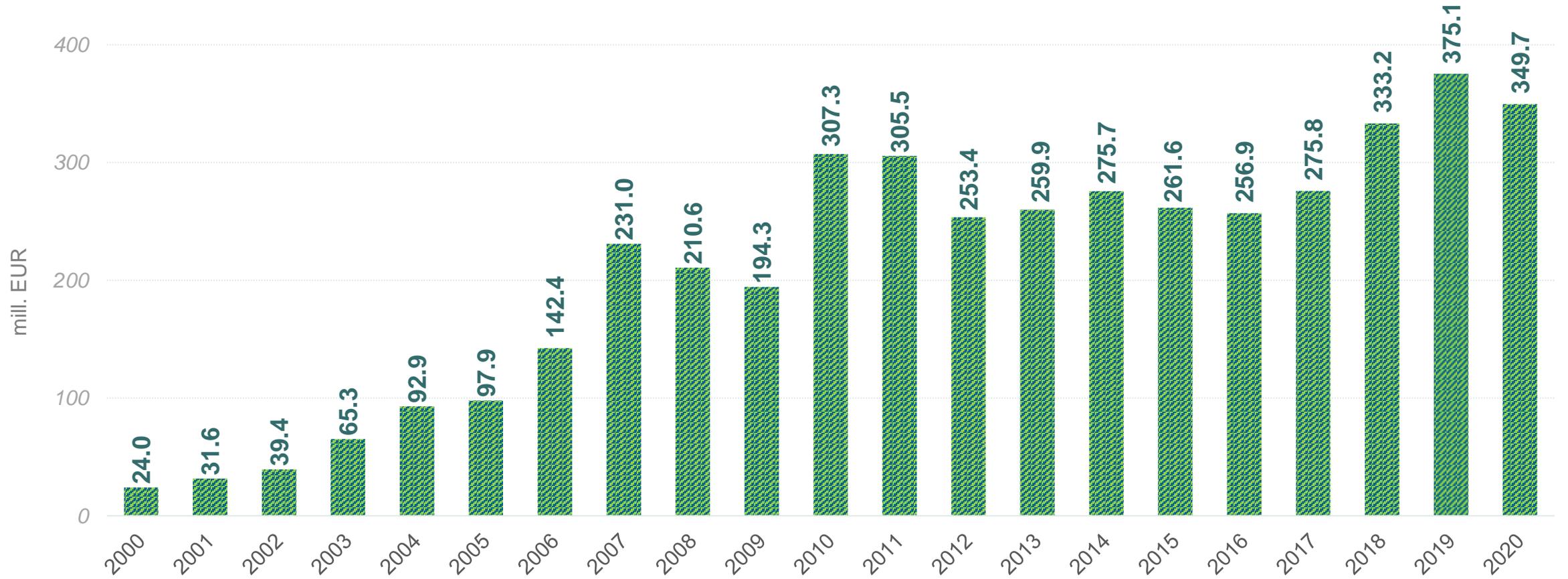
**159
thousand**



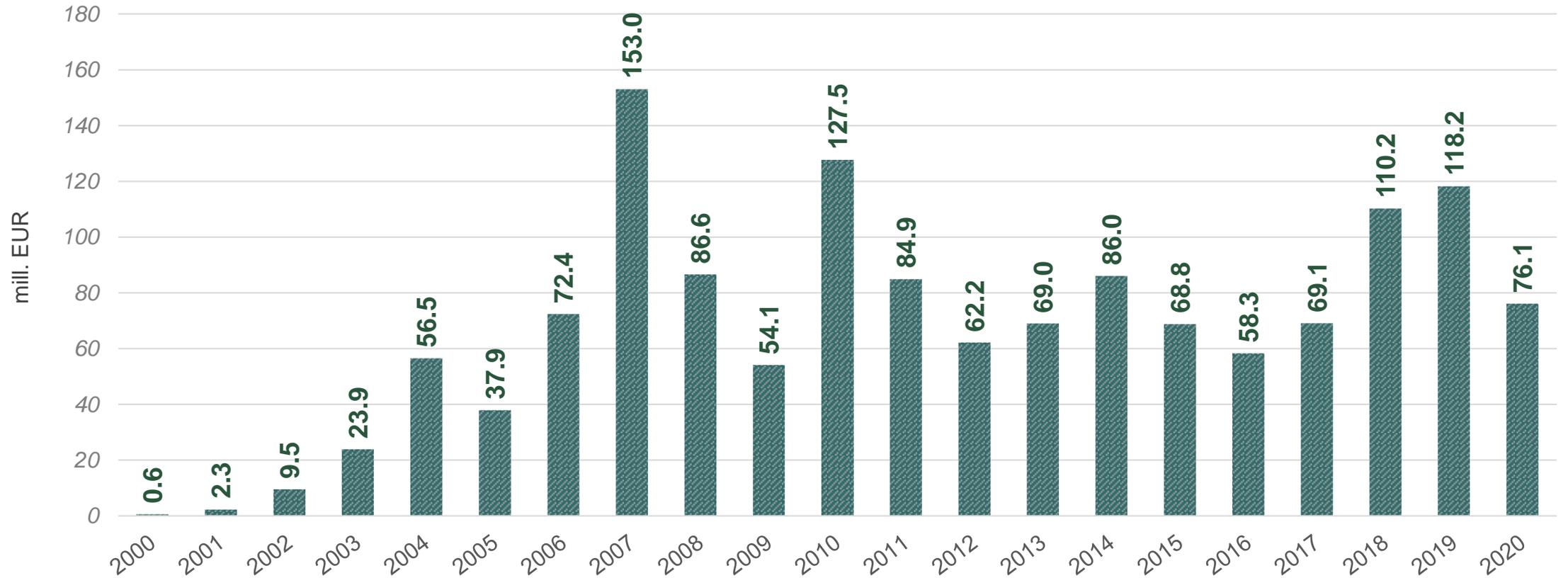


ECONOMY

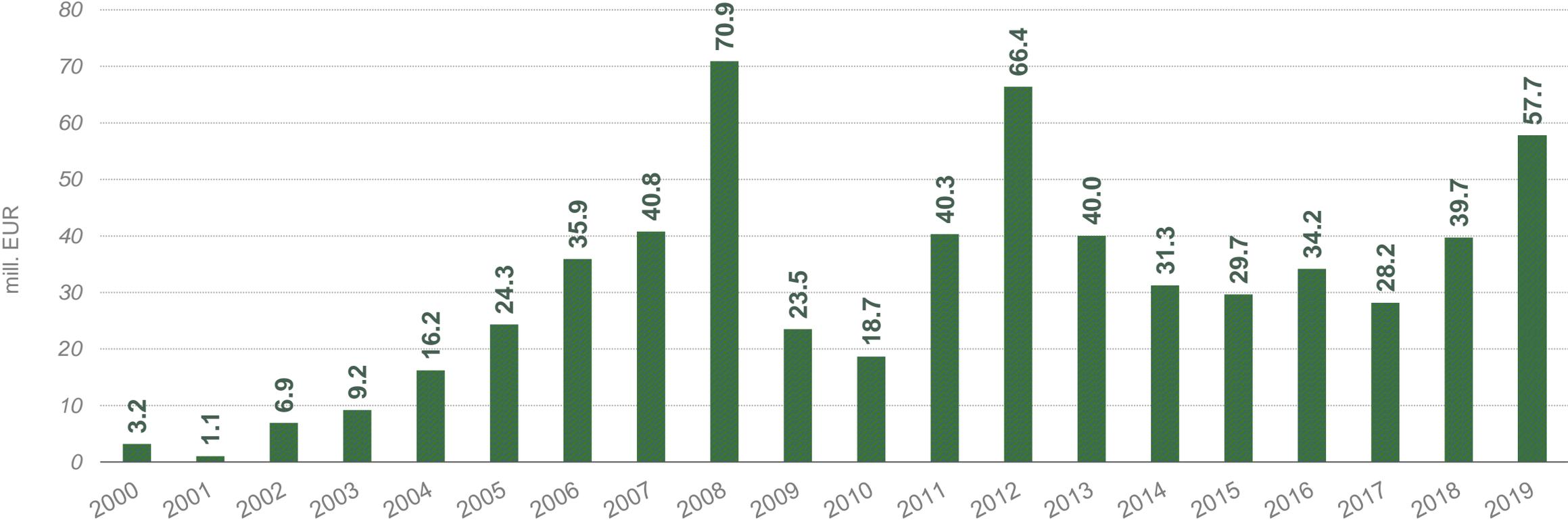
LVM Turnover



LVM Profit before Taxes

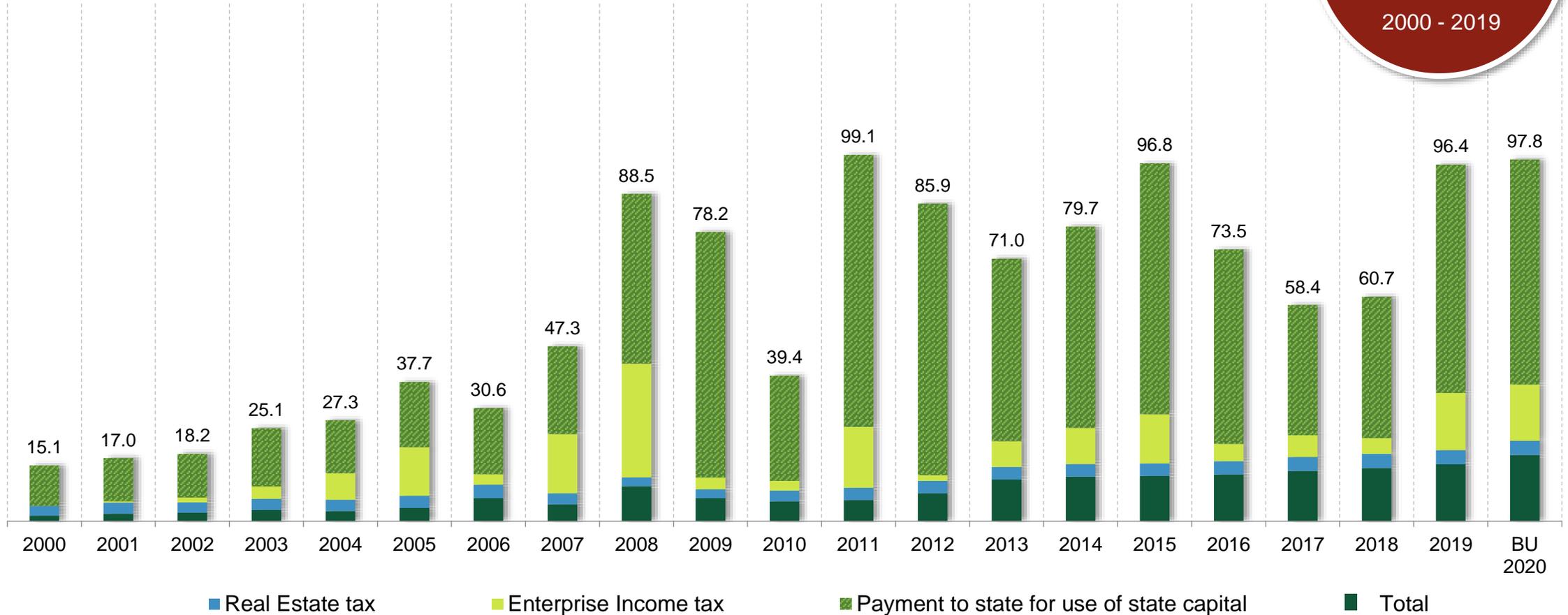


Investment



LVM Contribution to Government and Municipal Budgets

>1.1 billion EUR
2000 - 2019



Forests in Latvia 1930



Today

