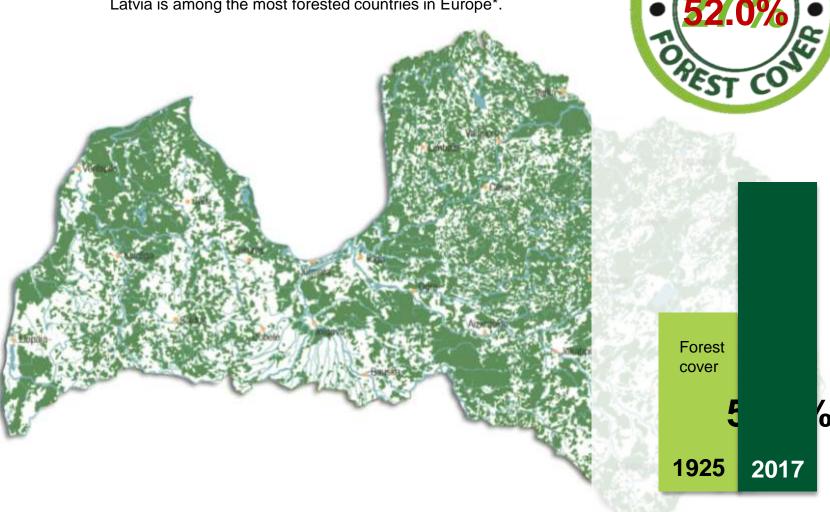
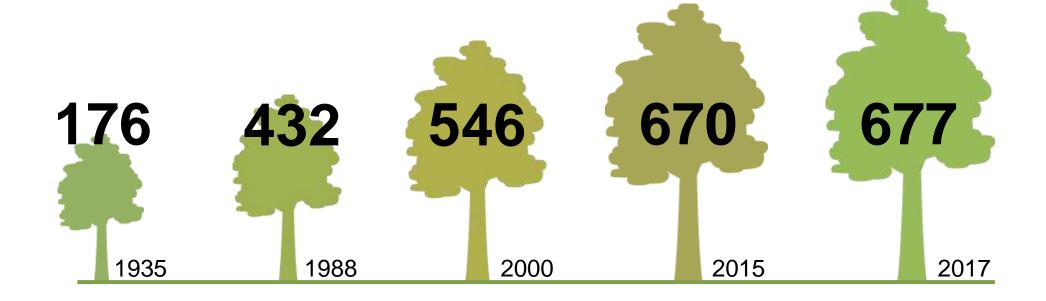


### Forests in Latvia 2017

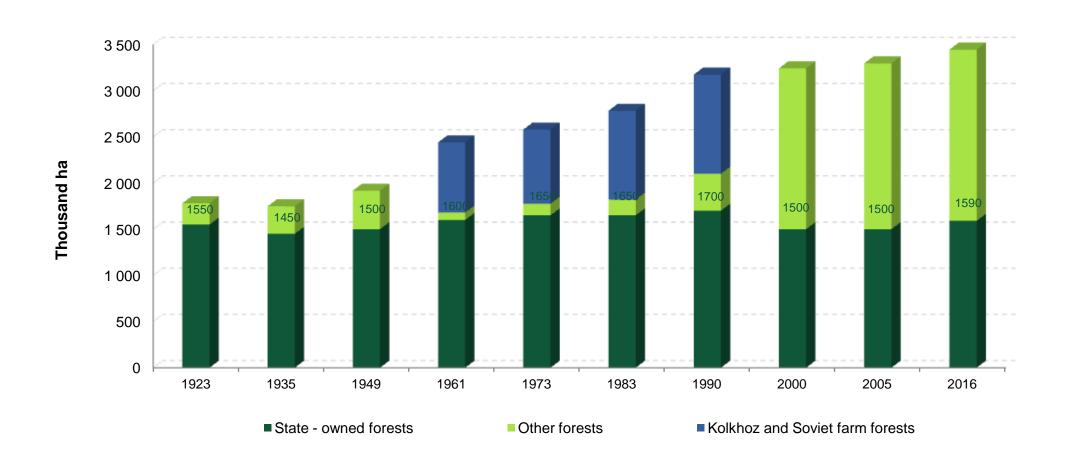
With 3.8 million ha of forests
Latvia is among the most forested countries in Europe\*.



# STANDING VOLUME mill. m³ IN LATVIA



### **Forest Area by Property Form**













# Actions of Latvia's State Forests (LVM) Decreasing CO<sub>2</sub> emissions in LVM production processes

# LVM emission calculations



# Continuous planning process



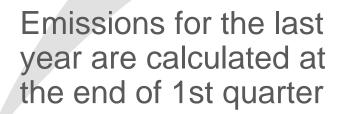


TARGETS IN THE MID-RANGE PLAN



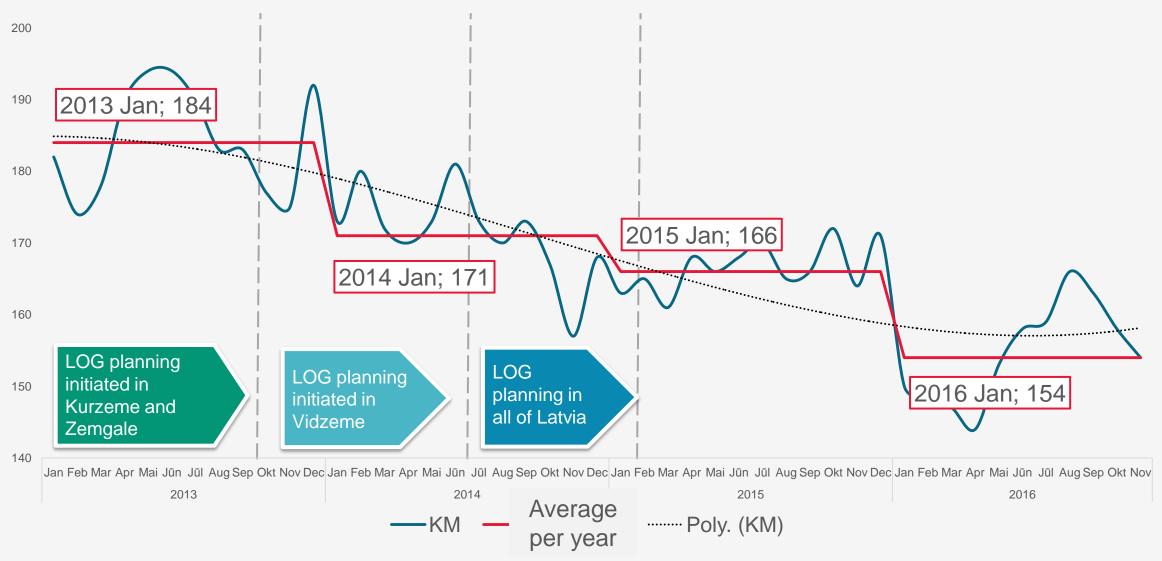
**COMPARE** 

Decreasing CO<sub>2</sub>





## Optimizing average length of a route, km



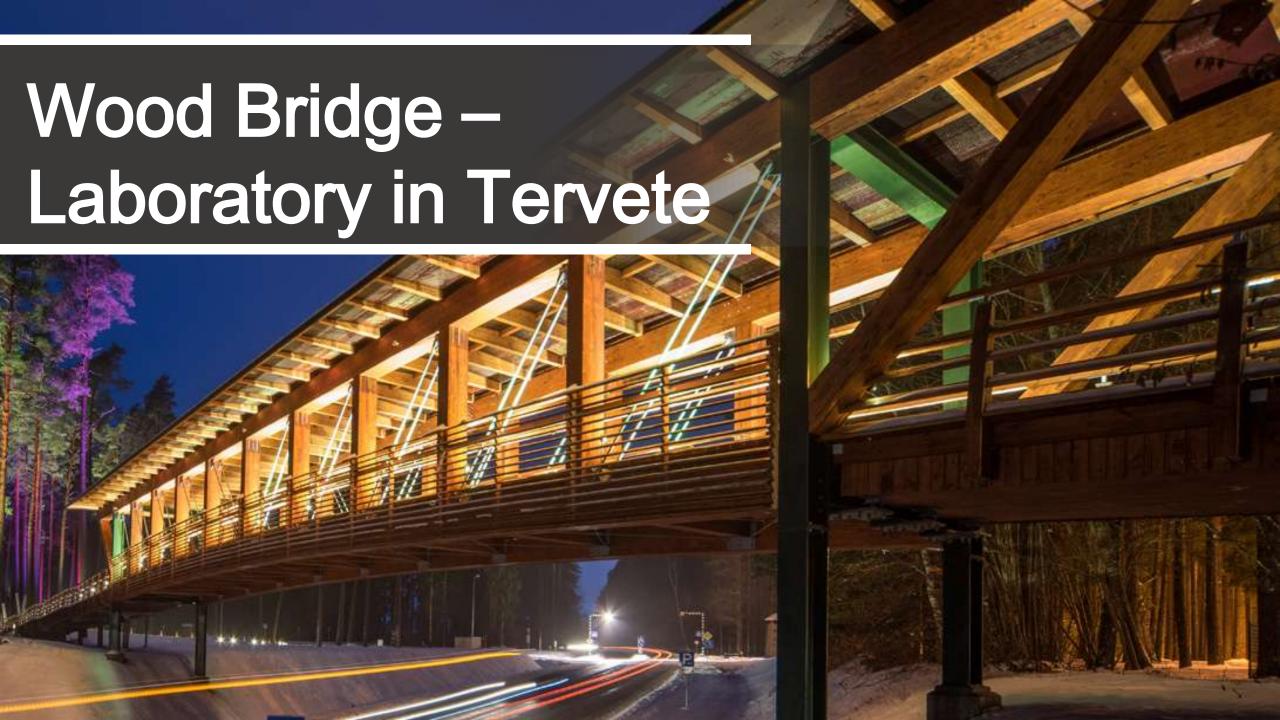
### IT - LOG





# Actions of Latvia's State Forests (LVM) Promoting wider usage of timber





### Actions of Latvia's State Forests (LVM)

# Adjusting forest management for global climate changes

(Research commissioned by LVM)

LVM started researching the impact of climate change on forest management in 2009



Environmental protection methods and impact asessment are key both in production and young forest management

# LVM research

Explore the most efficient forest management methods for the climate of the future



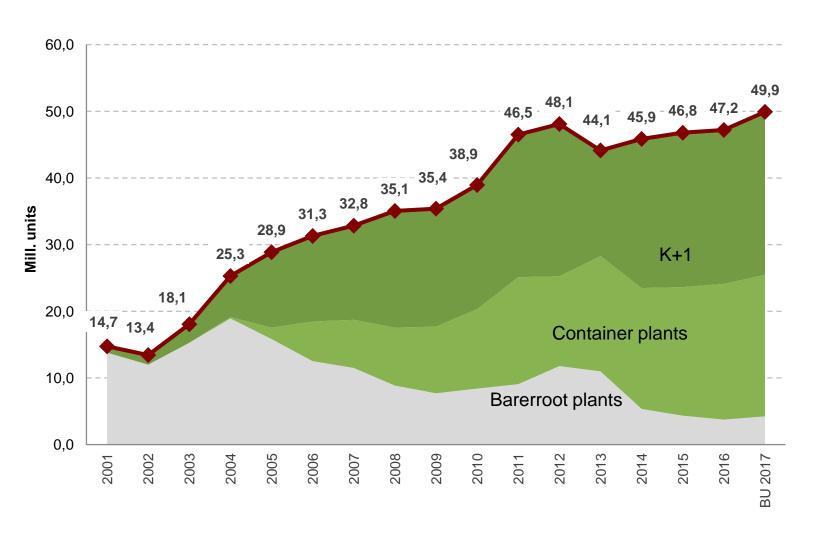
Forest pest monitoring and limiting the spread of root rot



### Forest tree selective breeding programme

**Forest Tree Plant Production** 









# Tehnology Transfer Gentle forest machines

#### **TOMORROW**







**BEFORE** 

# Forest Management Risk Research, Recommendations

# Territory division by wind damage hazard class



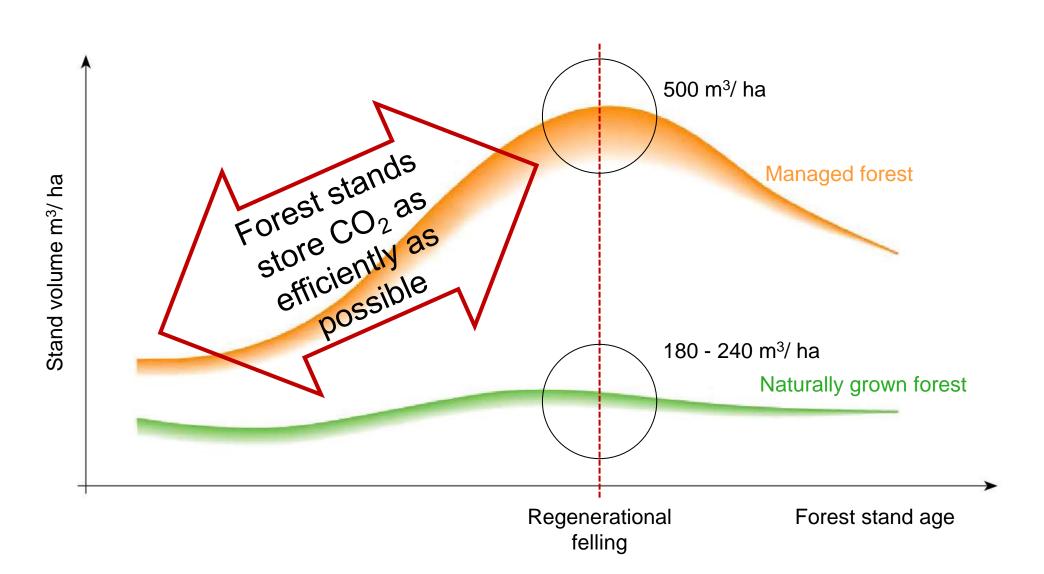
Research about impact of climate change on future forest management The future regional wind damage risk identified, which allows planning the economical activity by decreasing these risks



# Actions of Latvia's State Forests (LVM) Growing productive forest stands to increase the forest capabilities as carbon sinks

(also taking care for forest area and total standing volume)

# Forest Tending – for More Productivity and Vitality





#### Our actions:

- 1. Decreasing CO<sub>2</sub> emissions in LVM production processes
- 2. Promoting wider usage of timber
- 3. Adjusting forest management for global climate changes
- 4. Growing productive forest stands to increase the forest capabilities as carbon sinks



# Planning tools for sustainable forest management ensure biological diversity and integration of social interests



#### **Territory**

management:

- Eko-forests
- Capercaille nesting areas





### **Stand** management objectvies:

- Nature protection
- Wood production





### Environmental considerations **on-site**

- Protection of forest elements
- Seasonality restrictions



## Forest Stand Management Objectives

#### **Nature protection**

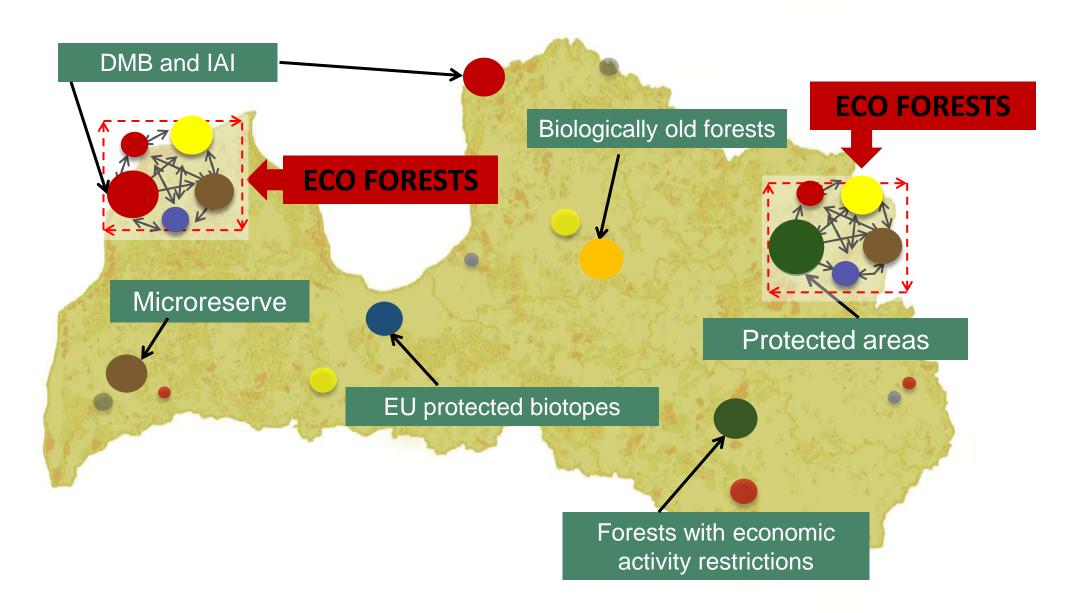
- Biological diversity, without commercial activity (1)
- Biological diversity, with insignificant biomass removal (2)

#### Wood production (growing the forest)

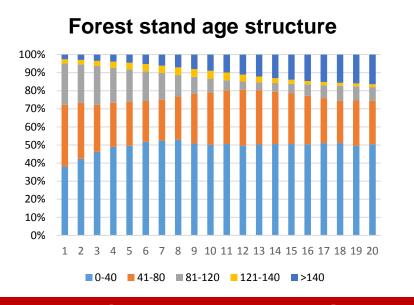
- Wood production with environmental and/or social considerations (3)
- Wood production (4)

#### **Undefined (5)**

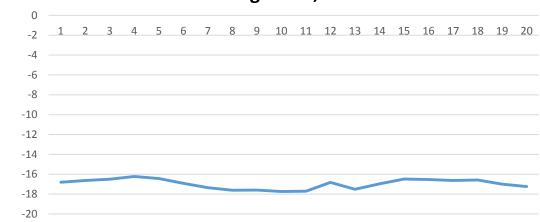
### Identifying Forest Territories with High Biological Value



#### LVM Approach. LVM Modeling Results for 100 years (20 periods)

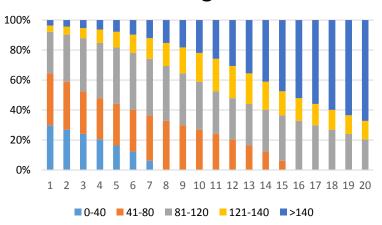


### CO<sub>2</sub> sequestration by forest stand annual growth, M t



#### IF ACTIVE FOREST MANAGEMENT IS HALTED

#### Forest stand age structure



### CO<sub>2</sub> sequestration by forest stand annual growth, M t

