Latvia University
of Life Sciences
and Technologies

BIOECONOMY DEVELOPMENT CHALLENGES IN LATVIA

BALTIC WORKSHOP ON SCAR AND BIOECONOMY STRATEGIES, 4 - 5 April 2019, Riga.

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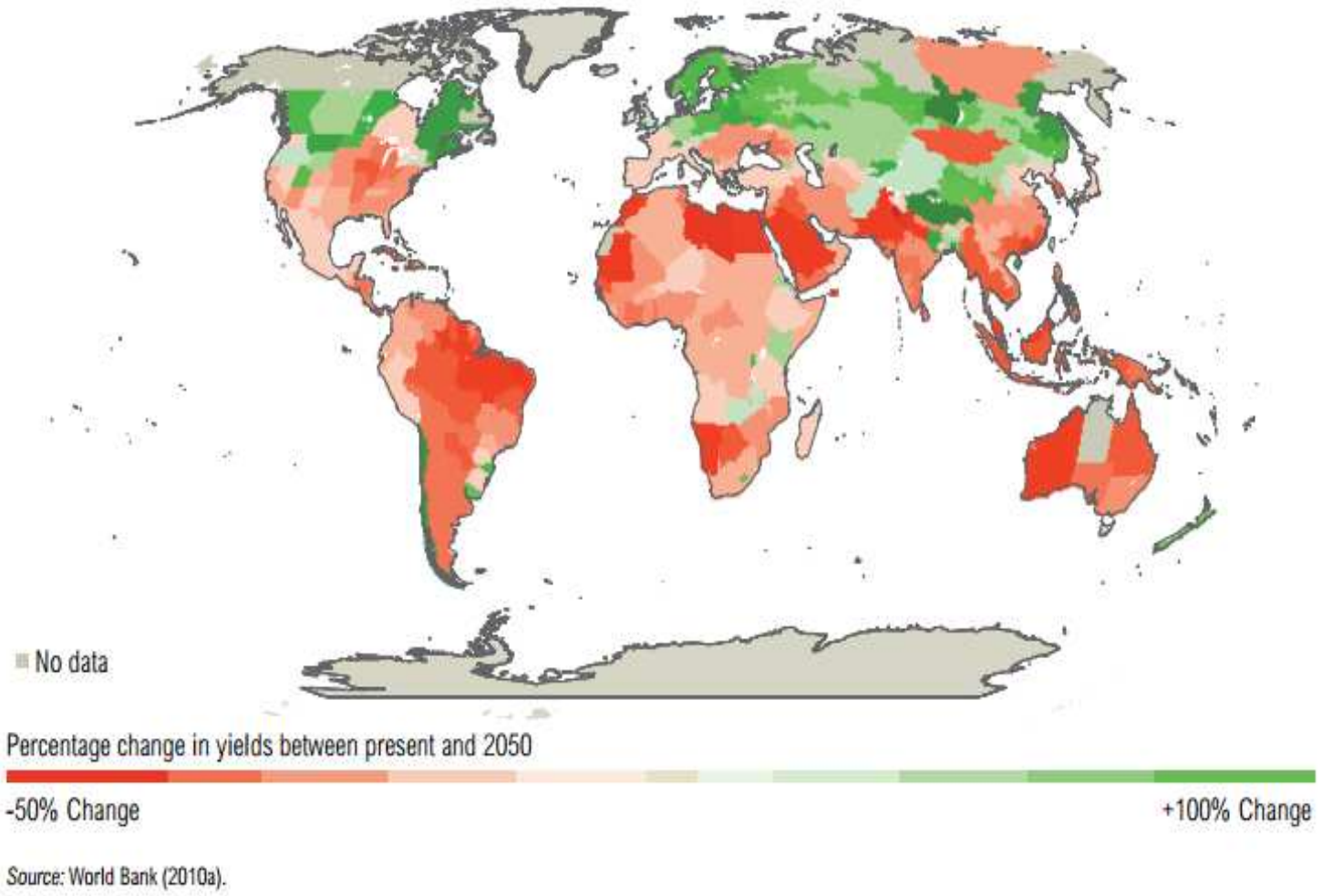
Professor, Rector

Why Bioeconomy development?

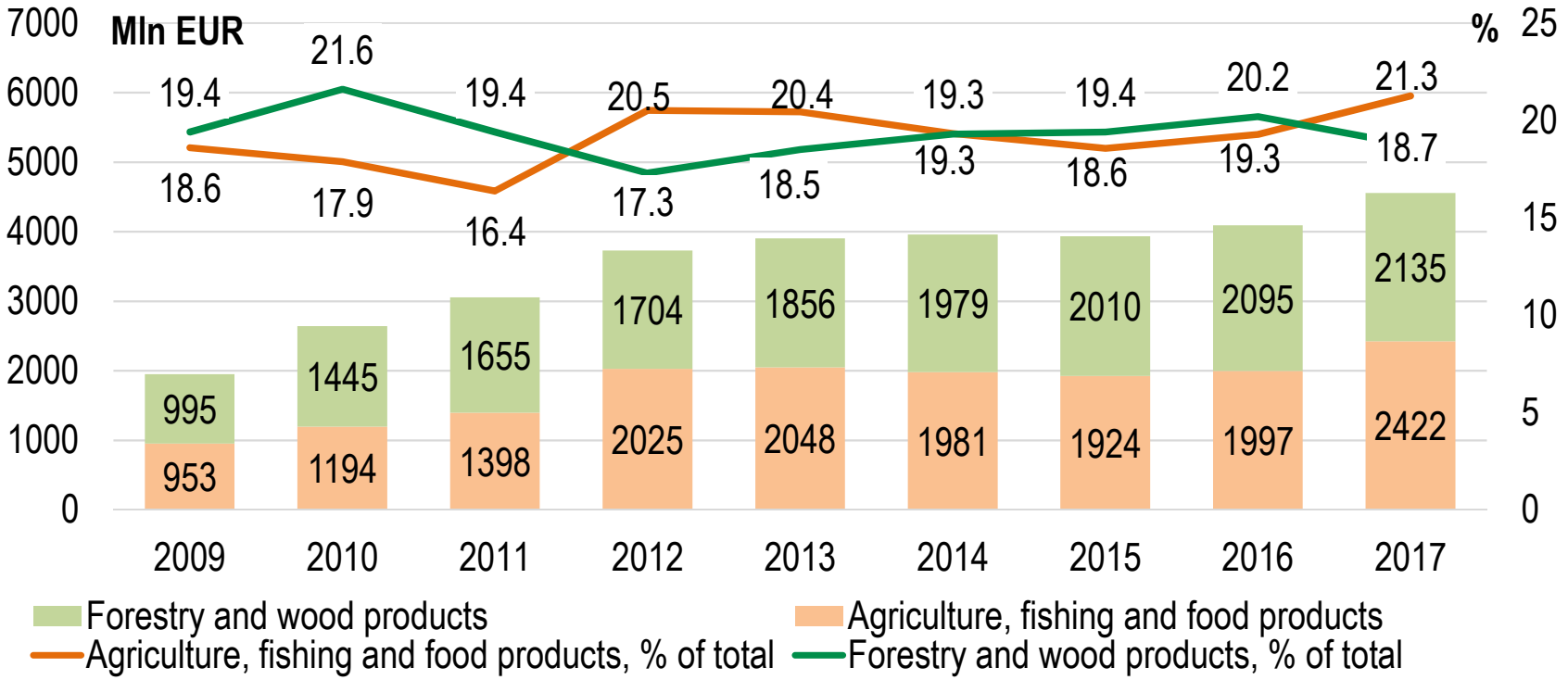
- ✓ **New global economic tendencies** require to bring different policies together
- ✓ **Review** of the 2012 EU Bioeconomy Strategy
- ✓ **Bioeconomy is very important sector** in Latvia
- ✓ Latvia has the **Bioeconomy strategy 2030**
- ✓ **Bioeconomy challenges** in Latvia

New global economic tendencies



Latvia has increasing potential of resources (from agriculture, forestry, biodegradable waste) for promoting Bioeconomy

Exports of goods bioeconomy in Latvia



The conventional bioeconomy industries:

- ✓ accounted for 57% of the value added of the goods sector
- ✓ employed 15% of the total labour force in Latvia

Latvia Bioeconomy strategy 2030

Adopted by the Government in December 19, 2017

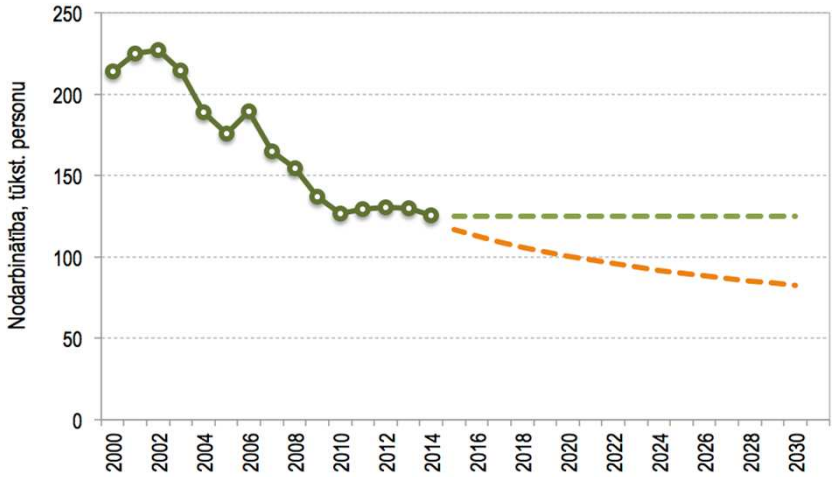
Developed by the Ministry of Agriculture and Latvia University of Life Sciences and Technologies

The bioeconomy includes:

1) primary production of bioresources
2) processing of bioresources
3) bioresource-based services

Vison - bioeconomy sectors of Latvia are **innovation leaders in the Baltic States** in preserving natural capital, increasing its value and in efficiently and sustainably exploiting it.

Latvia Bioeconomy strategy 2030

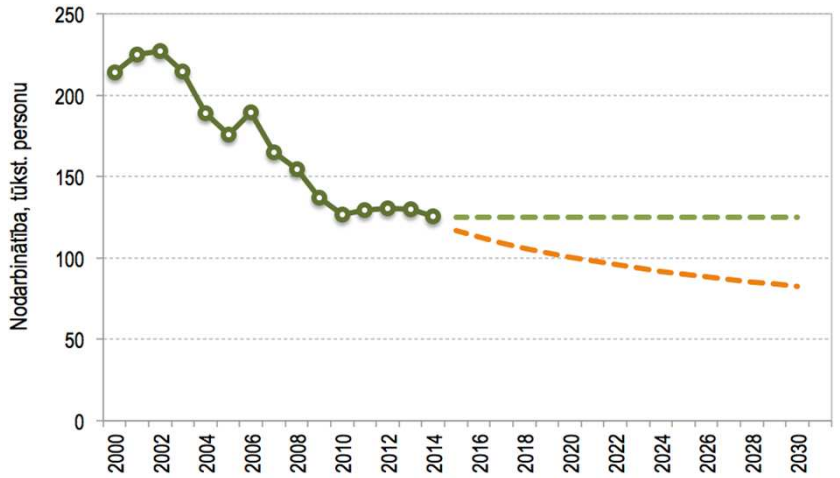


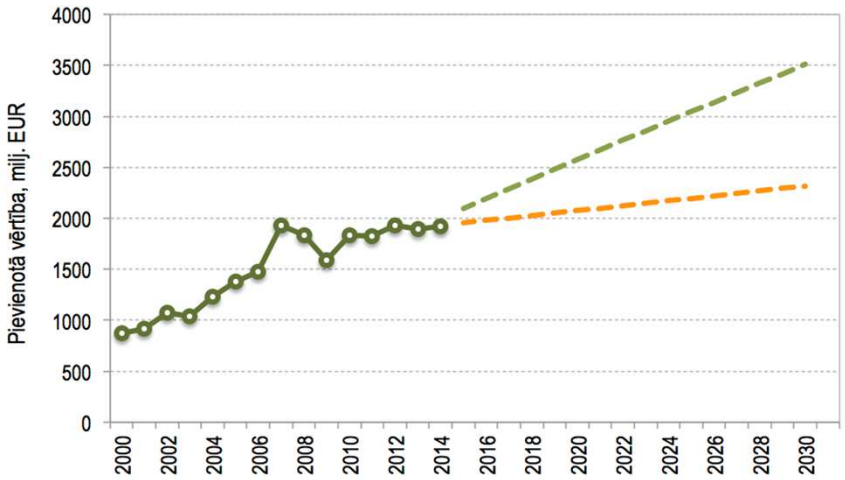
4 targets:

1) Advancement and retention of **employment** in the bioeconomy sectors of 128 thousand people;

- - - - optimal scenarios - - - - base scenarios

Latvia Bioeconomy strategy 2030





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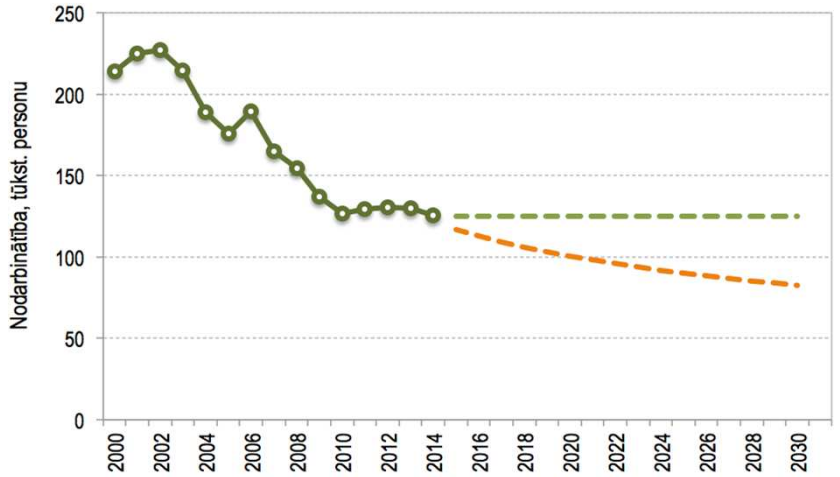

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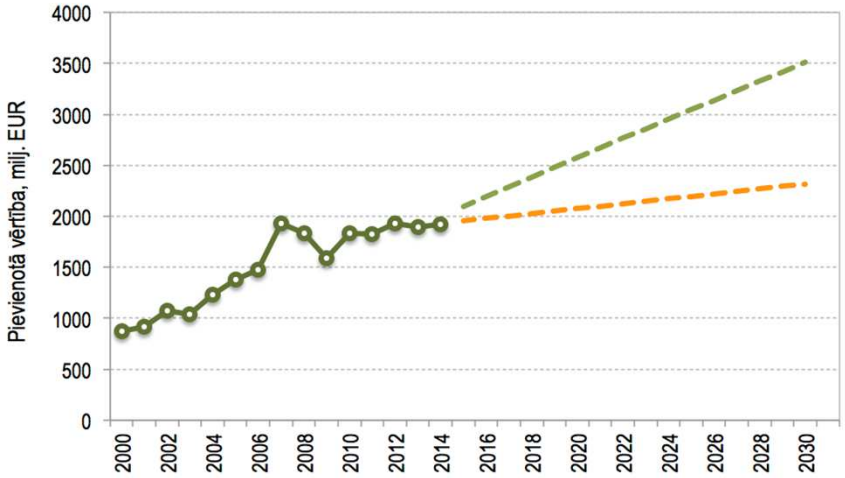

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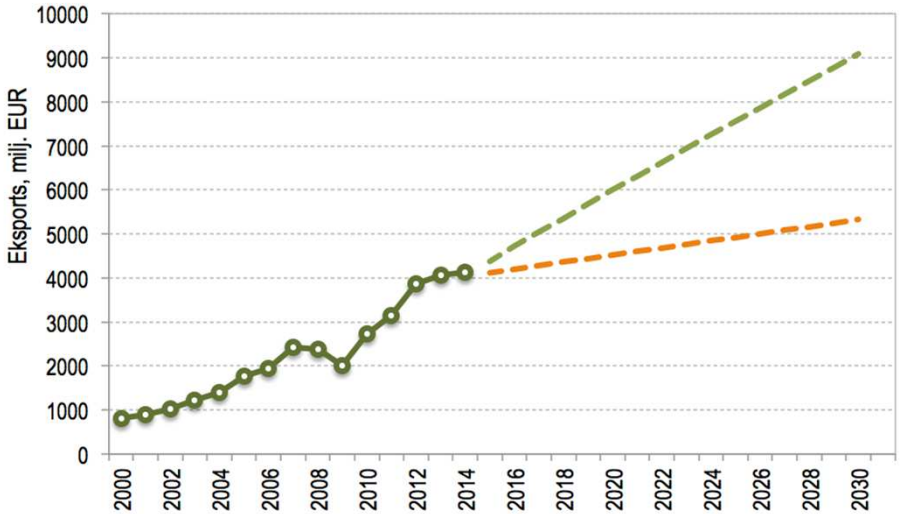

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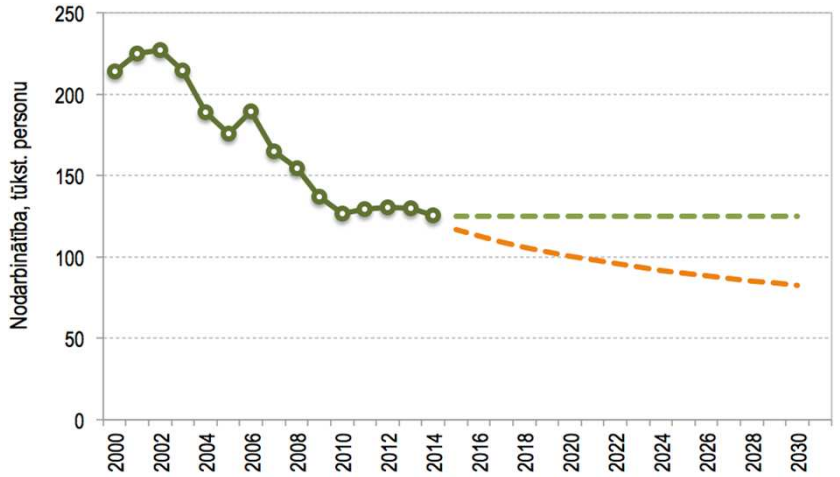

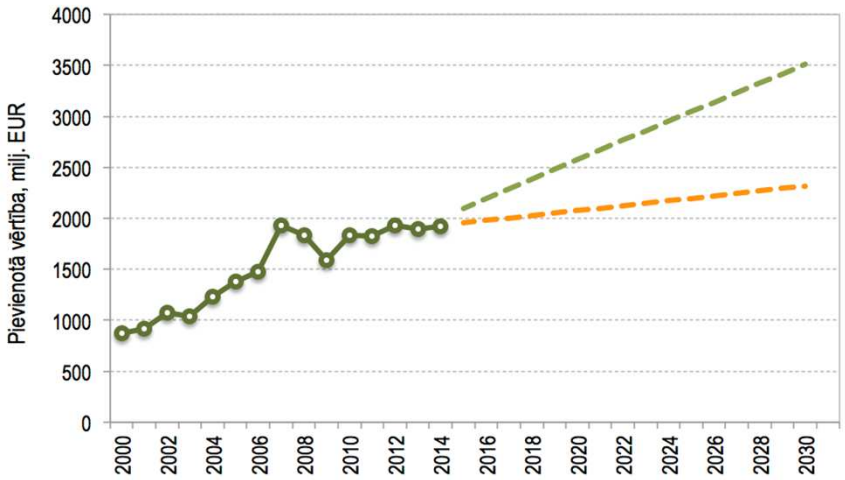

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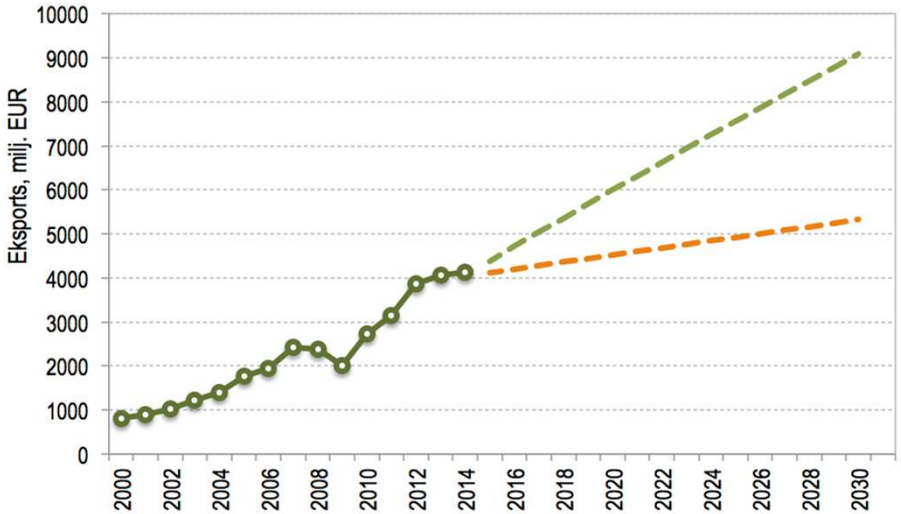
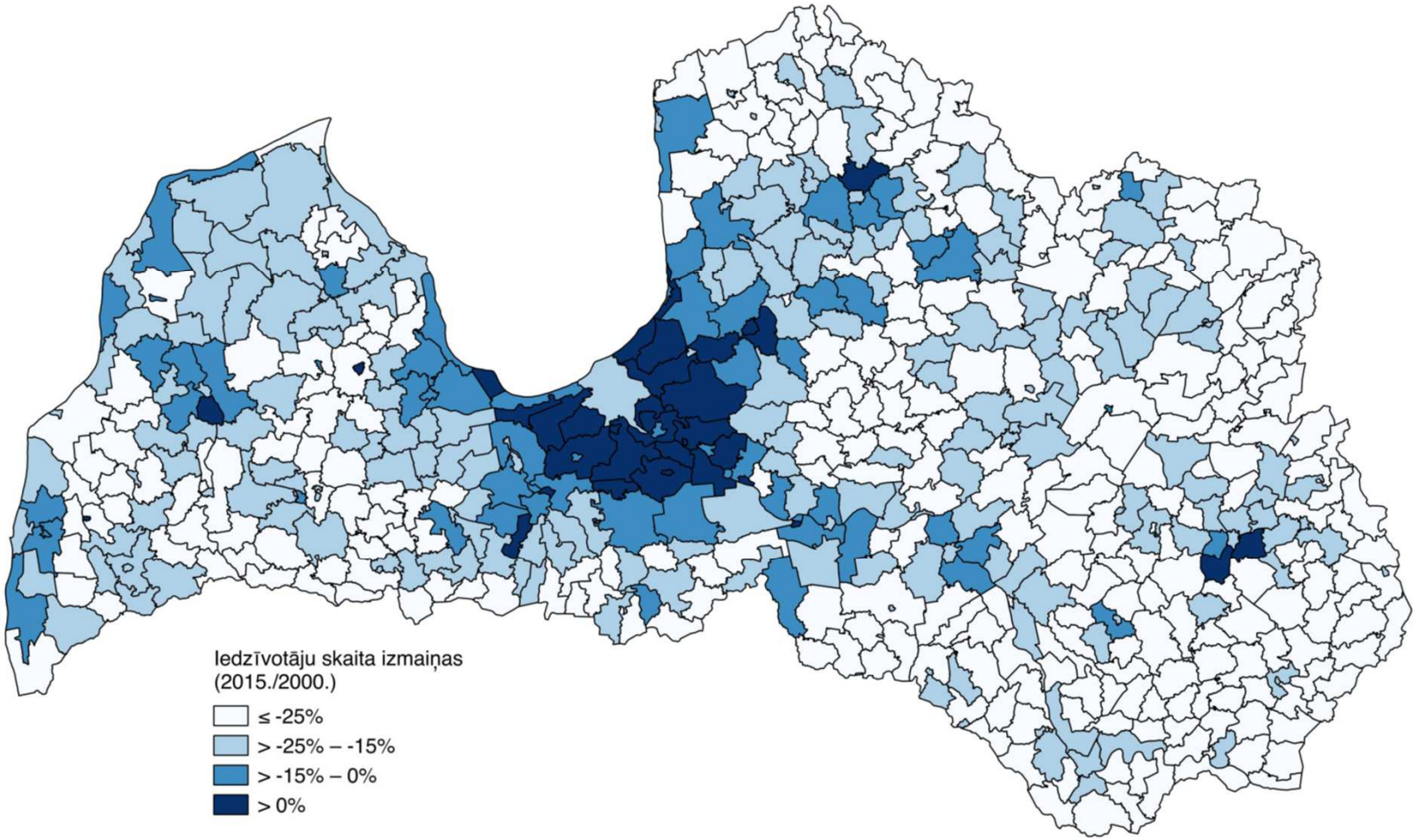
4) **Horizontal** - excellence in research and effective transfer of knowledge.



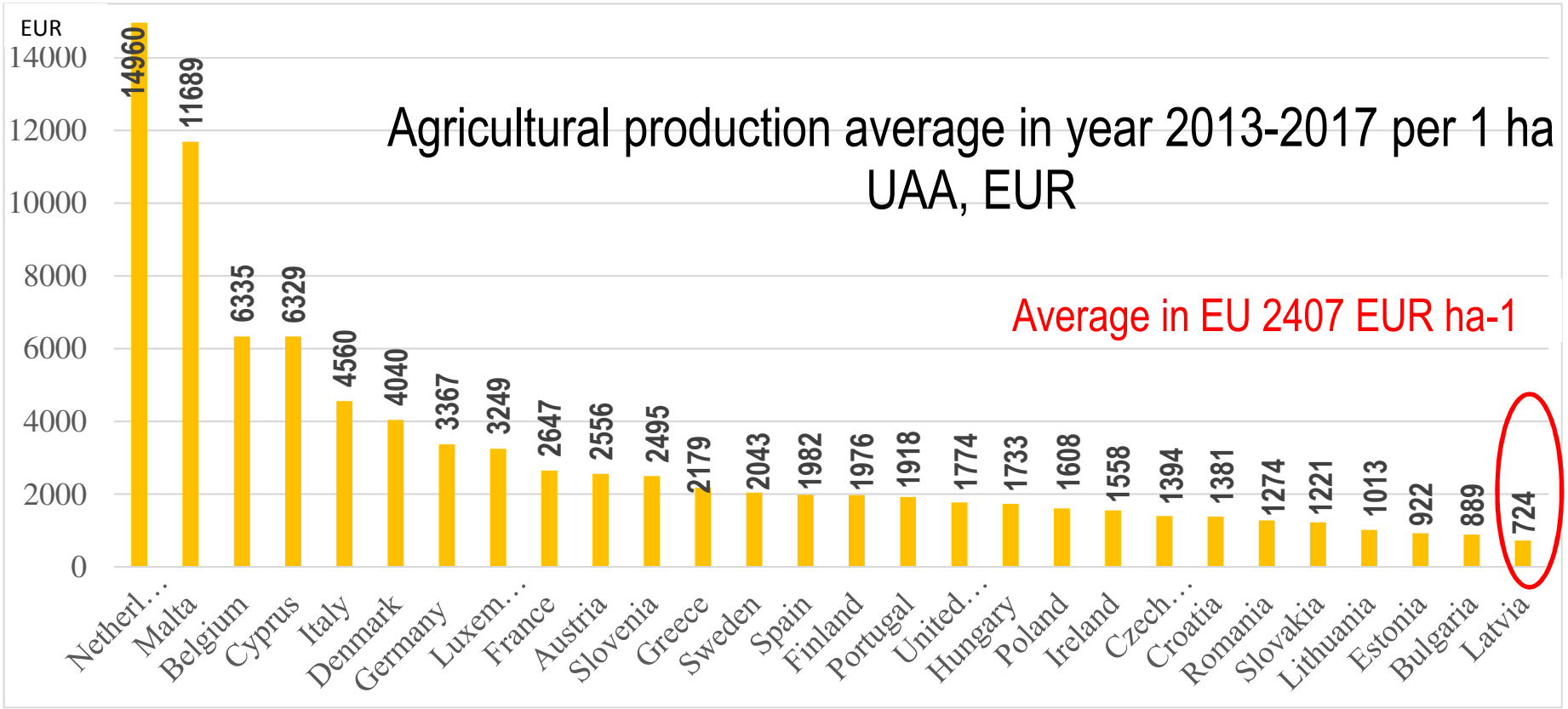
Bioeconomy challenges in Latvia - Depopulation of rural area in Latvia



Bioeconomy challenges in Latvia – agriculture case

In Latvia in 2017:

- ✓ 279 thou.ha (or 12,4%) are uncultivated agricultural area
- ✓ The lowest production volume level in EU countries



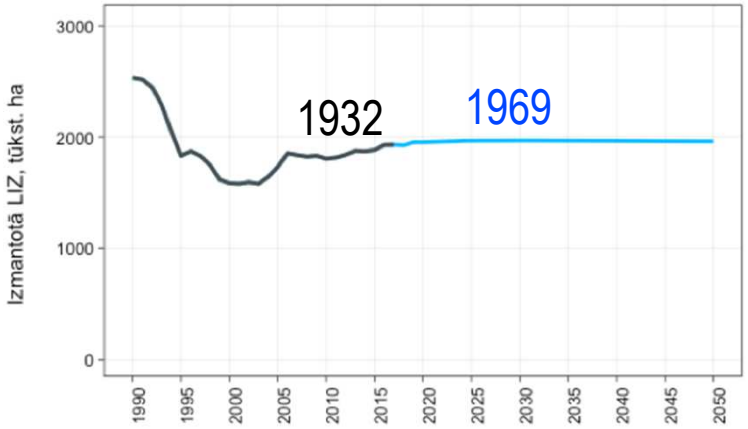
Projections for the agriculture in Latvia

In Latvia University of Life Sciences and Technologies in 2016-2018 we developed the **Latvian Agricultural Sector Analysis Model (LASAM):**

- ✓ Econometric
- ✓ Recursive-dynamic
- ✓ Scenario based
- ✓ All main agriculture sectors
- ✓ Includes GHG emission module

Agricultural modelling allows making projections for agriculture and its individual sectors for the purpose of applying different agricultural policy instruments.

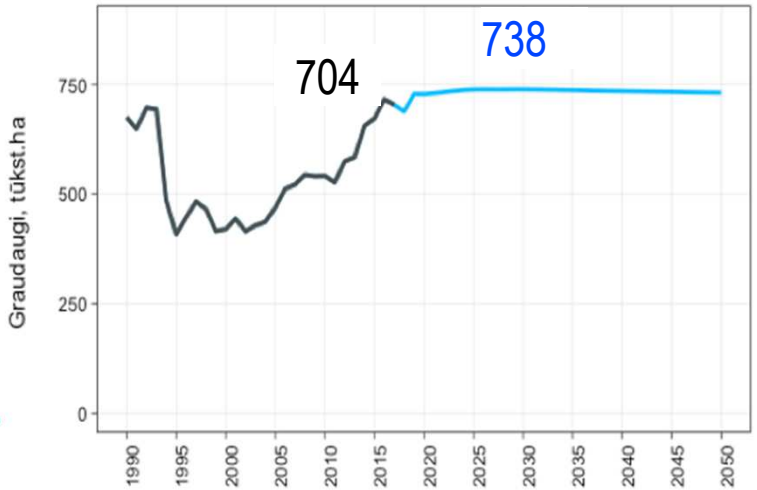
Bioeconomy challenges in Latvia – agriculture case

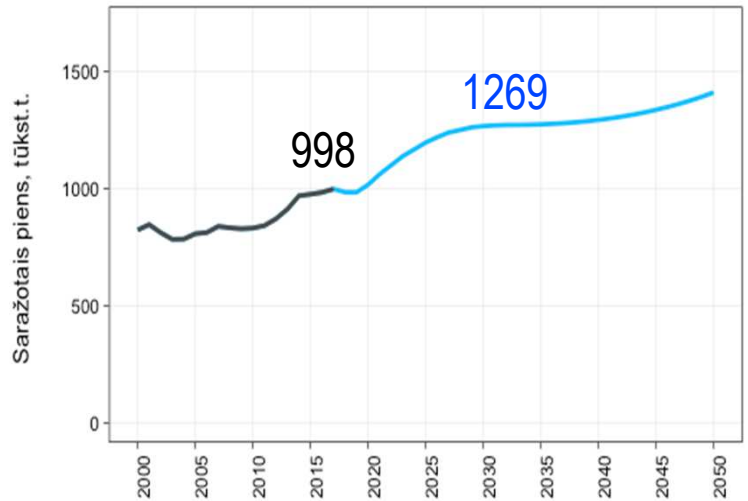


A projection in Latvia for 2016-2050, thou.ha

UAA

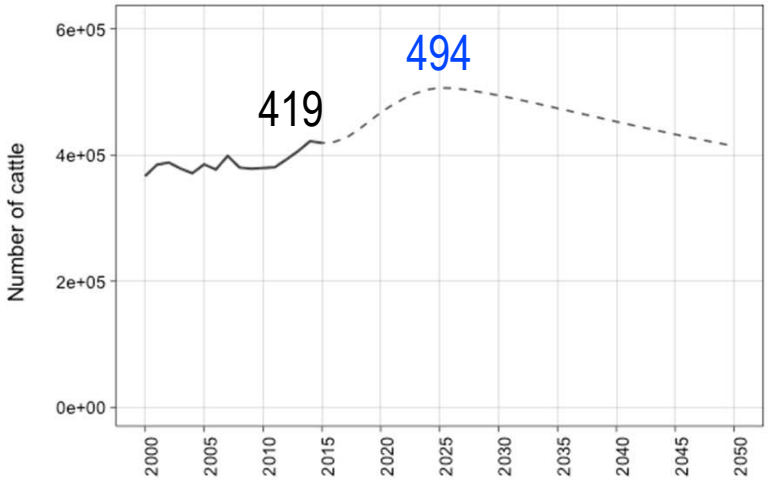
cereal area



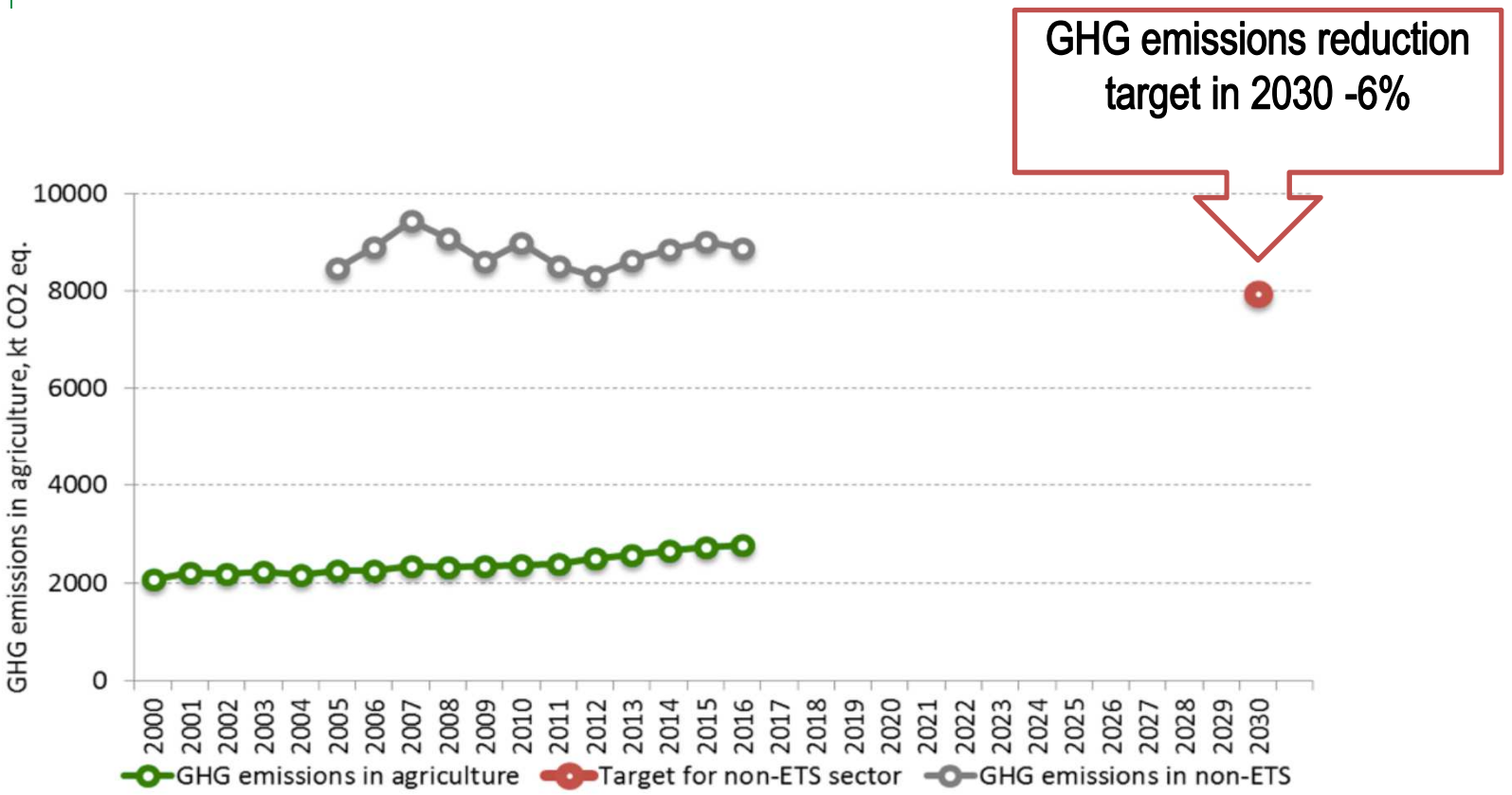


Milk output projection thou.t

Number of cattle thou.



GHG emissions in Latvia non-ETS sectors



The main challenges is - how to use the opportunities to increase agricultural production with GHG emissions reduction?

Bioeconomy Strategic Resaerch alliance in Latvia

Founded: 24/09/ 2014. **Objectives:**

- ✓ To enhance the competitiveness of Bioeconomy sectors through research and innovation
- ✓ To contribute the implementation of overall EU 2020 thematic objectives

Research and innovation capacity:

- ✓ > 400 doctors of science in:
- ✓ Latvia University of Life Sciences and Technologies together with their scientific Institutes (Institute of Agricultural Resources and Economics; Institute of Horticulture), BIOR and 3 Forest sector Research institutes (SILAVA, KĶI, MeKA).

The scientists have the opportunities to find solutions for solving all challenges!

BioMonitor project

- ✓ **EU Horizon 2020** Biotech programme
- ✓ Agreement nr. 773297
- ✓ The project started in June 2018
- ✓ Duration of the project from 2018 to 2020
- ✓ The project involves 18 partners from 10 EU countries
- ✓ The leading partner is Wageningen University (The Netherlands)
- ✓ Latvia is represented by the Latvia University of Life Sciences and Technologies
- ✓ The BioMonitor **project wants to resolve** the lack of indicators needed to quantify the bioeconomy's economic, environmental and social impacts in the EU and its Member States.

+ will be BIOEAST – Central and Eastern European Initiative for Knowledge-based Agriculture in the Bioeconomy (EU Horizon 2020)!

More projects....

SAMS Smart Apiculture Management Services

- ✓ Smart Apiculture Management services
- ✓ «Futuristic Beehives for a Smart Metropolis»
- ✓ «Disseminating Innovative Solutions for Antibiotic Resistance Management»
- ✓ „Data Driven Dairy Decisions for Farmers” (4D4F)
- ✓ Science night...


Thank you!
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