Latvia University
of Life Sciences
and Technologies

# BIOECONOMY DEVELOPMENT CHALLENGES IN LATVIA

## ECONOMIC SCIENCE FOR AGRIBUSINESS AND RURAL ECONOMY

**07-08 June 2018, Warsaw**

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WYDZIAŁU NAUK
EKONOMICZNYCH

**Irina Pilvere**
**Professor, Rector**

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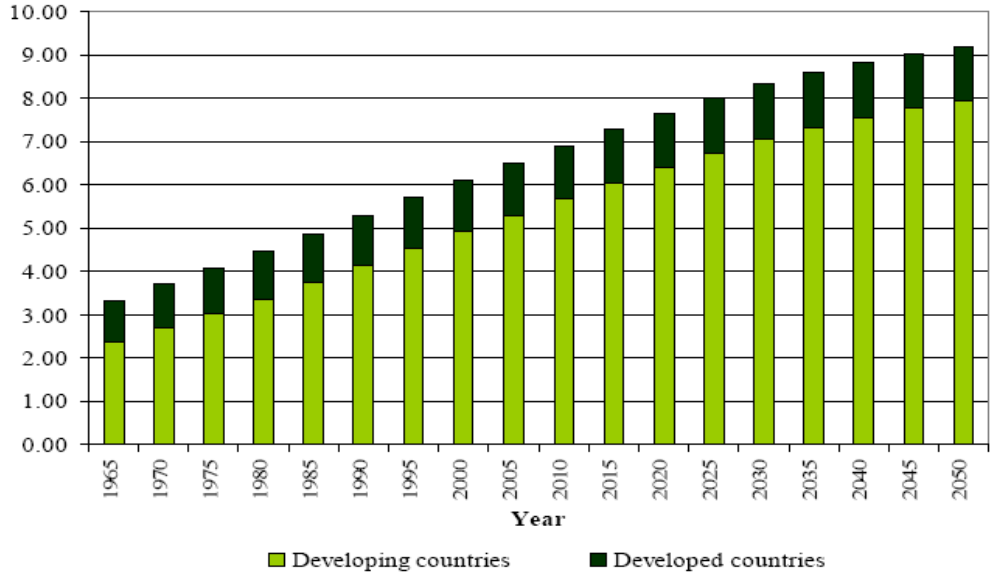
# Why Bioeconomy development?

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

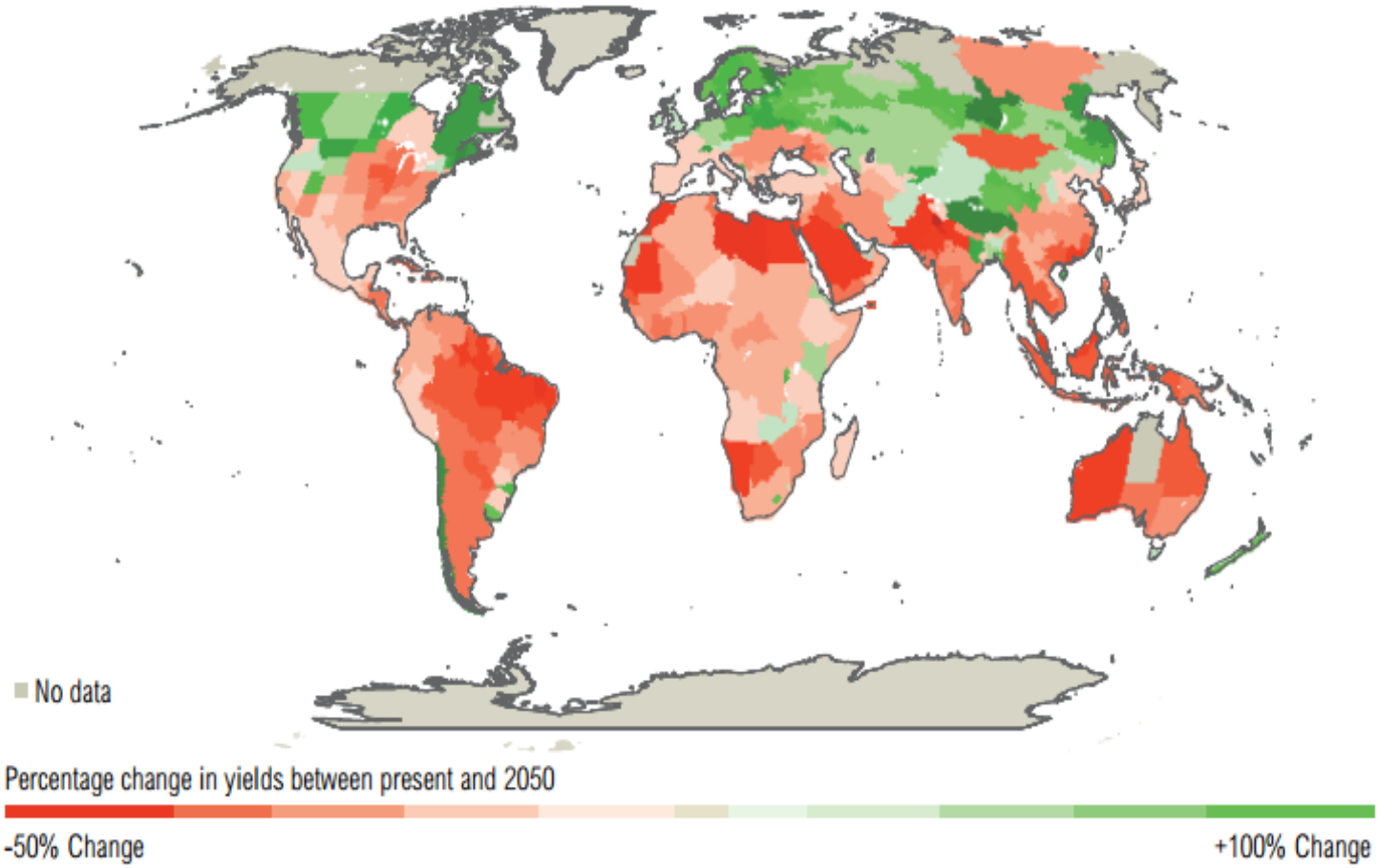
# New global economic tendencies

- The United Nations estimated the world population will reach 8.1 billion in 2025, and a further increase to 9.6 billion in 2050




- Demand will also rise - many more people will have higher incomes and eating habits are changing
- It will likely double the demand for food, increasing the use of cropland for biofuels, competition between land usage will increase
- New, rapidly changing technologies in many different fields
- Global climate change etc.

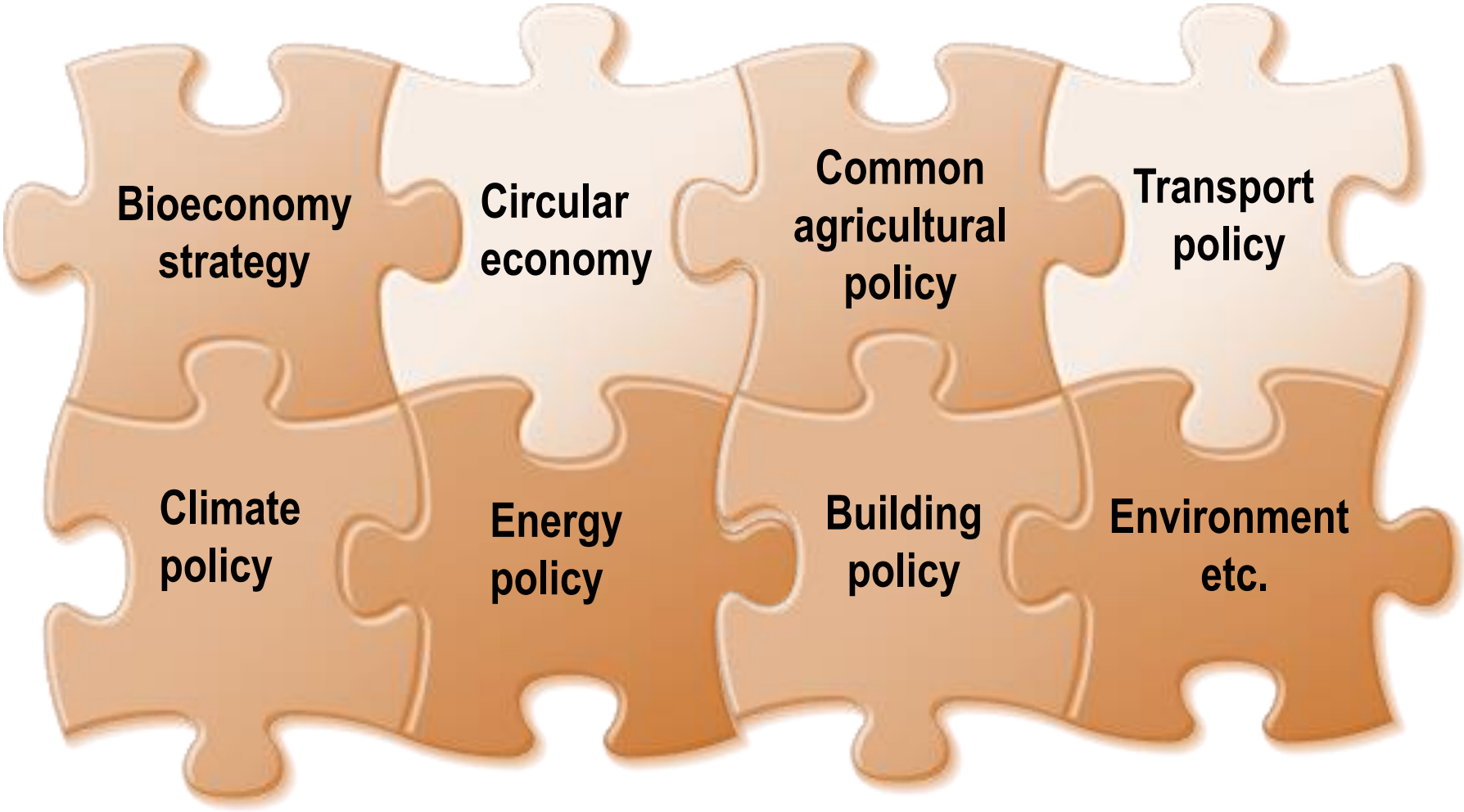
# New global economic tendencies



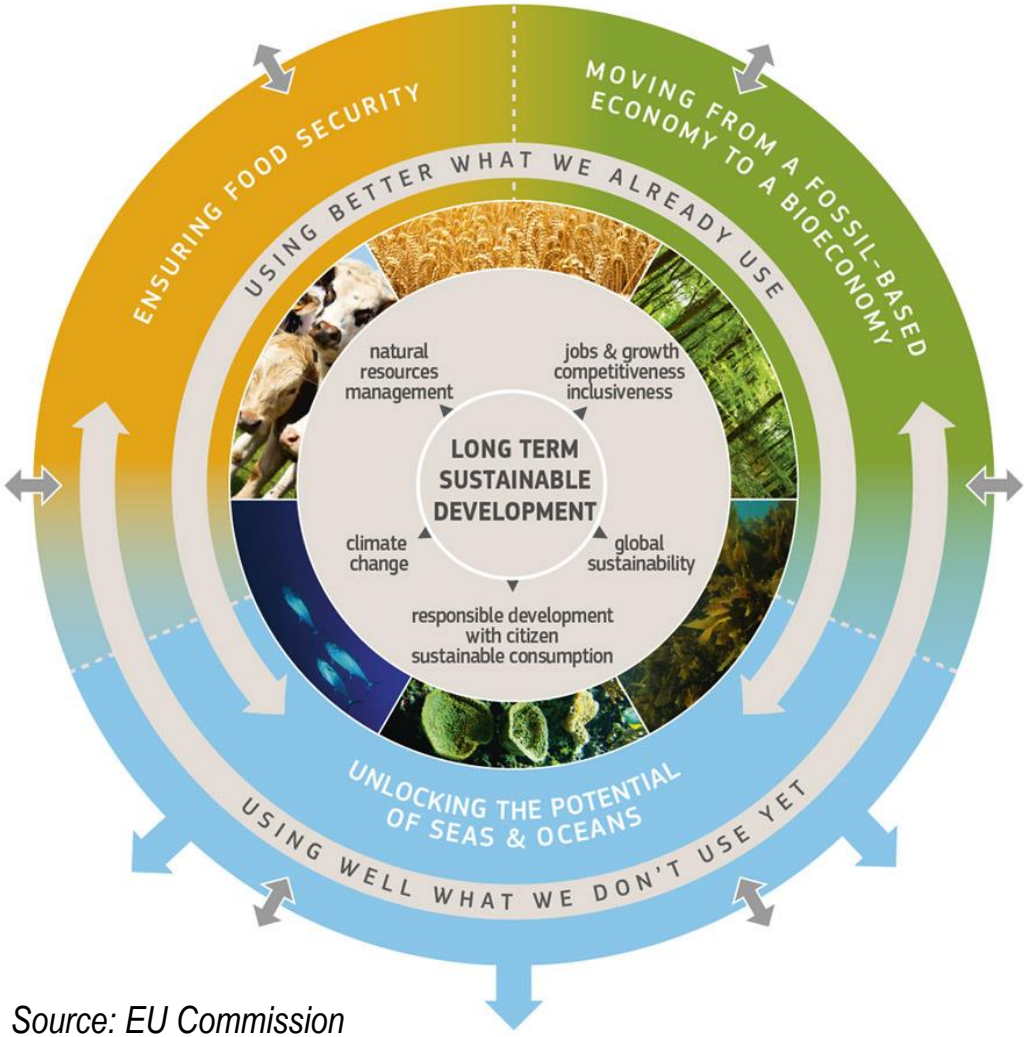

Source: World Bank (2010a).

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

# Policy coherence and integration



# EU Bioeconomy Strategy 2012




*Source: EU Commission*

**It is structured around three pillars:**

- ✓ Investments in **research, innovation** and skills
- ✓ Reinforced **policy interaction** and stakeholder engagement;
- ✓ Enhancement of **markets and competitiveness**

# Review of the 2012 EU Bioeconomy Strategy

1. **Support strategic research and innovation** trough the EU, focusing national and regional investments and private funds
2. **Strengthen support for education and training** of a skilled workforce
3. **Strengthen and upscale the bio-based sectors** to sustainably convert resources supporting industrial transformation
4. **Mobilise investments**, including trough the developments of new financial instruments to scale up and roll out existing and new technologies

# Review of the 2012 EU Bioeconomy Strategy

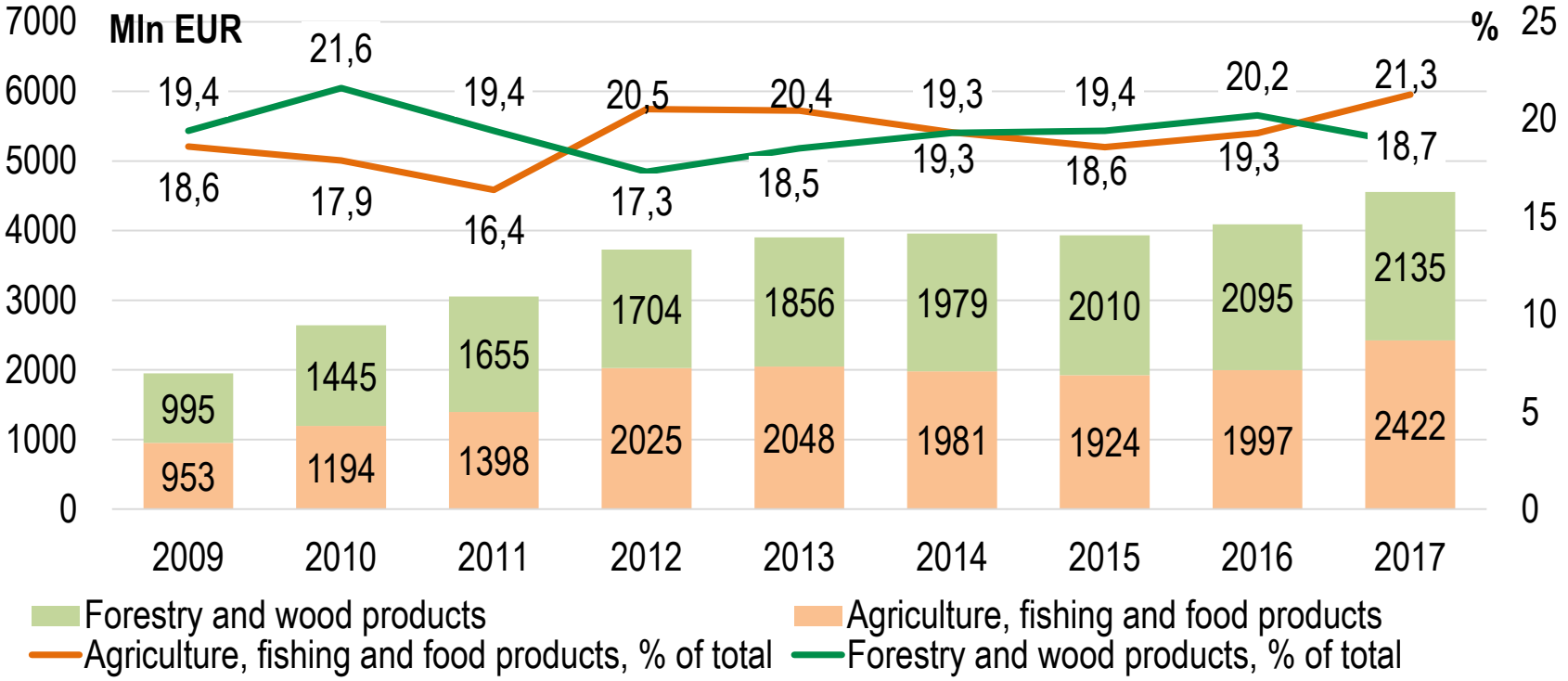
5. **Support the creation of markets** for novel, innovative and more sustainable and circular bioeconomy products and processes

**6. Develop better performance monitoring and assessment framework** with SMART indicators

**7. Encourage the adoption, update and coherence** of national and regional Bioeconomy Strategies

**8. Strengthen the understanding and resilience of land and see ecosystems**, with a view to increasing resource efficiency, minimising harmful impacts and maximising co-benefits

# 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

**The narrowest definition of a bioeconomy** encompasses agriculture, forestry, fisheries, as well as food production, and manufacture of wood and of products of wood or conventional bioeconomy industries (NACE: A01, A02, A03, C10-12, C16, C17, C31-32)

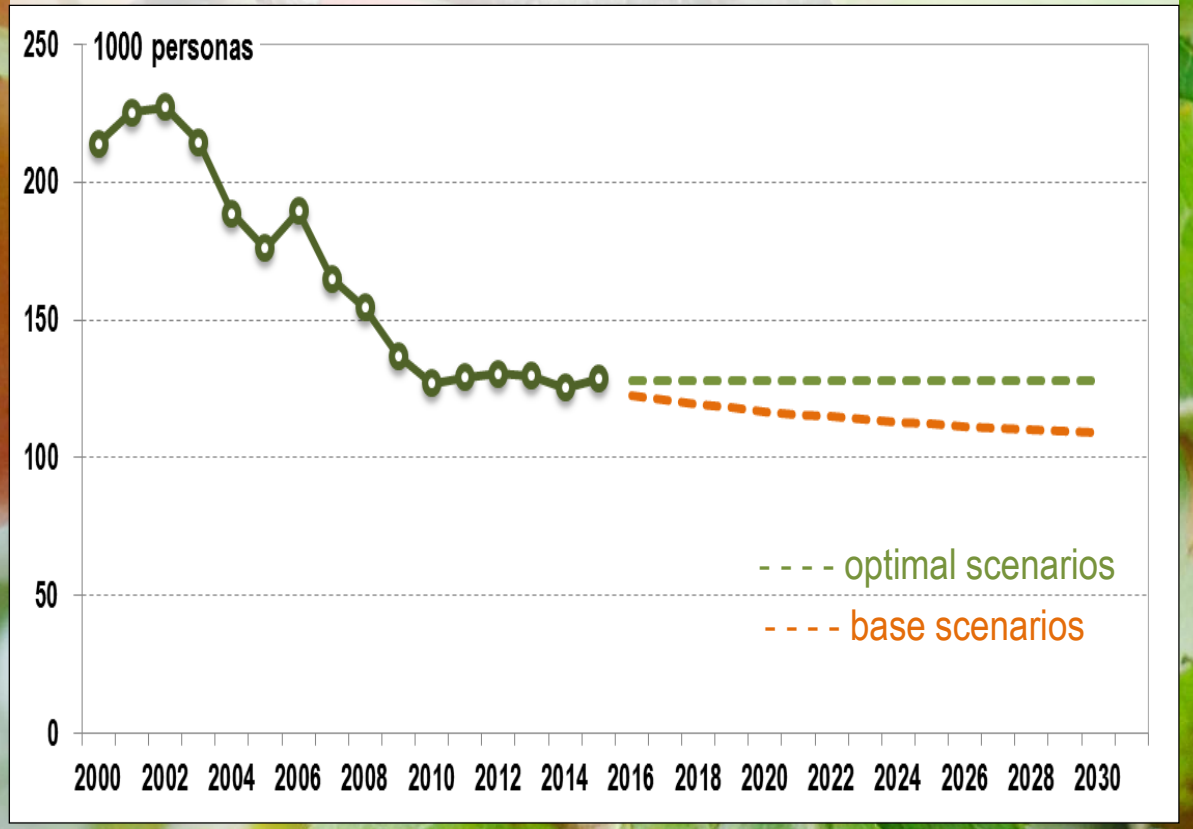
# VISION

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*

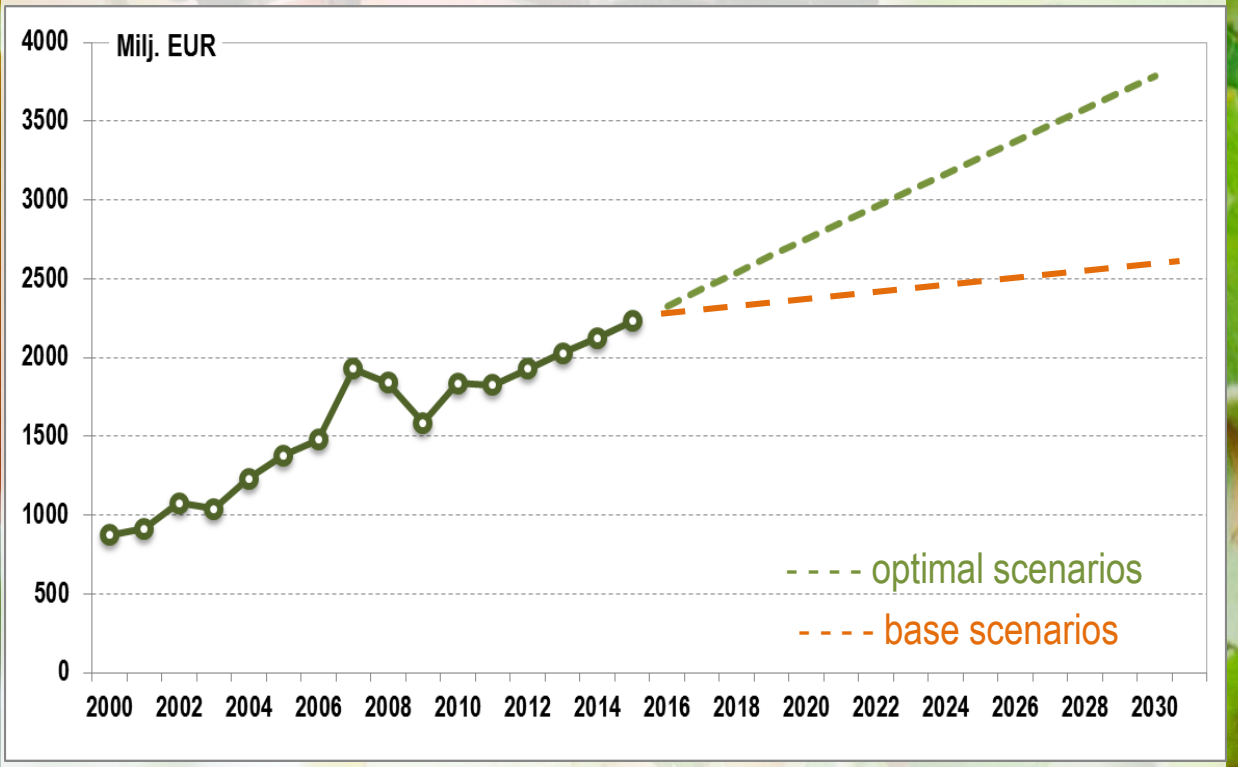
# STRATEGIC GOALS

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



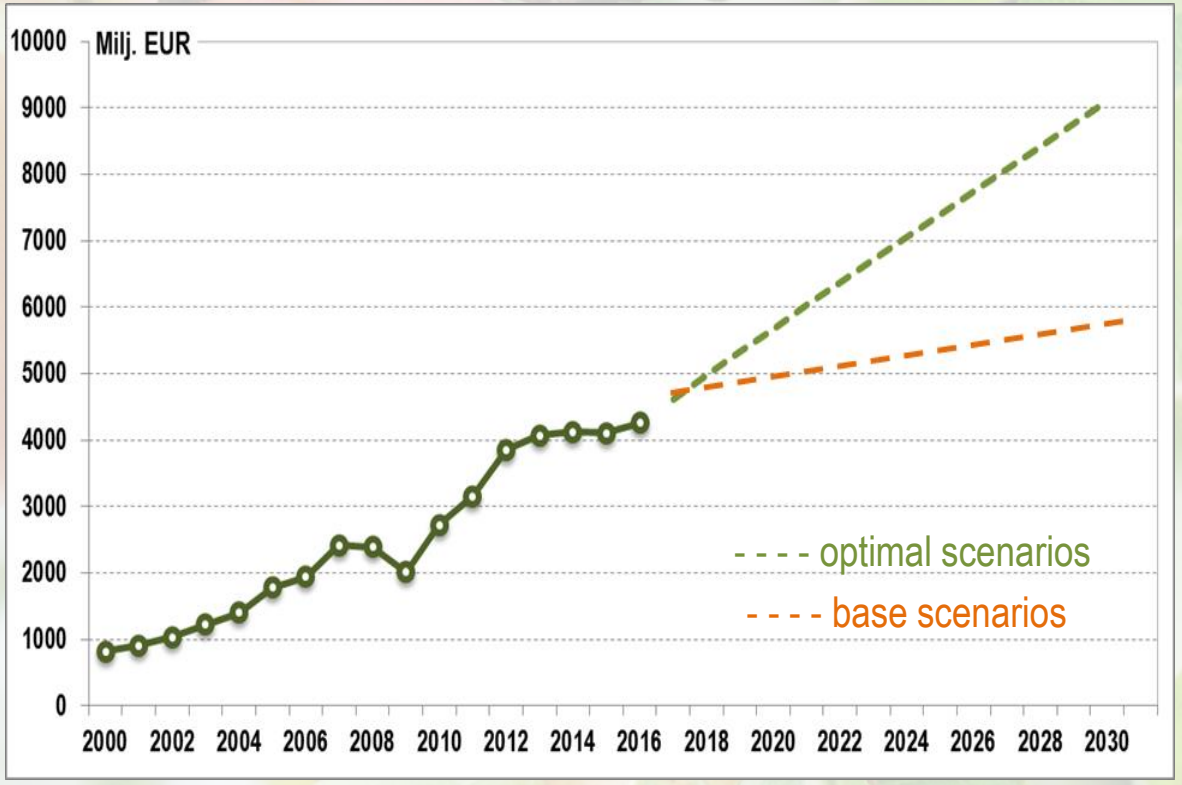
# STRATEGIC GOALS

2) Increasing the **value added** of bioeconomy products to at least EUR 3.8 billion in 2030.



# STRATEGIC GOALS

3) Increasing the value of bioeconomy **production exports** to at least EUR 9 billion in 2030.



# STRATEGIC GOALS

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

*Latvia Bioeconomy strategy 2030*

Achieving the goals involves 5 key integrated and complementary groups of measures:

1. Attractive business environment for the entrepreneurship in bioeconomy

2. Result-oriented, efficient and sustainable resource management

3. Knowledge and innovation development in bioeconomy

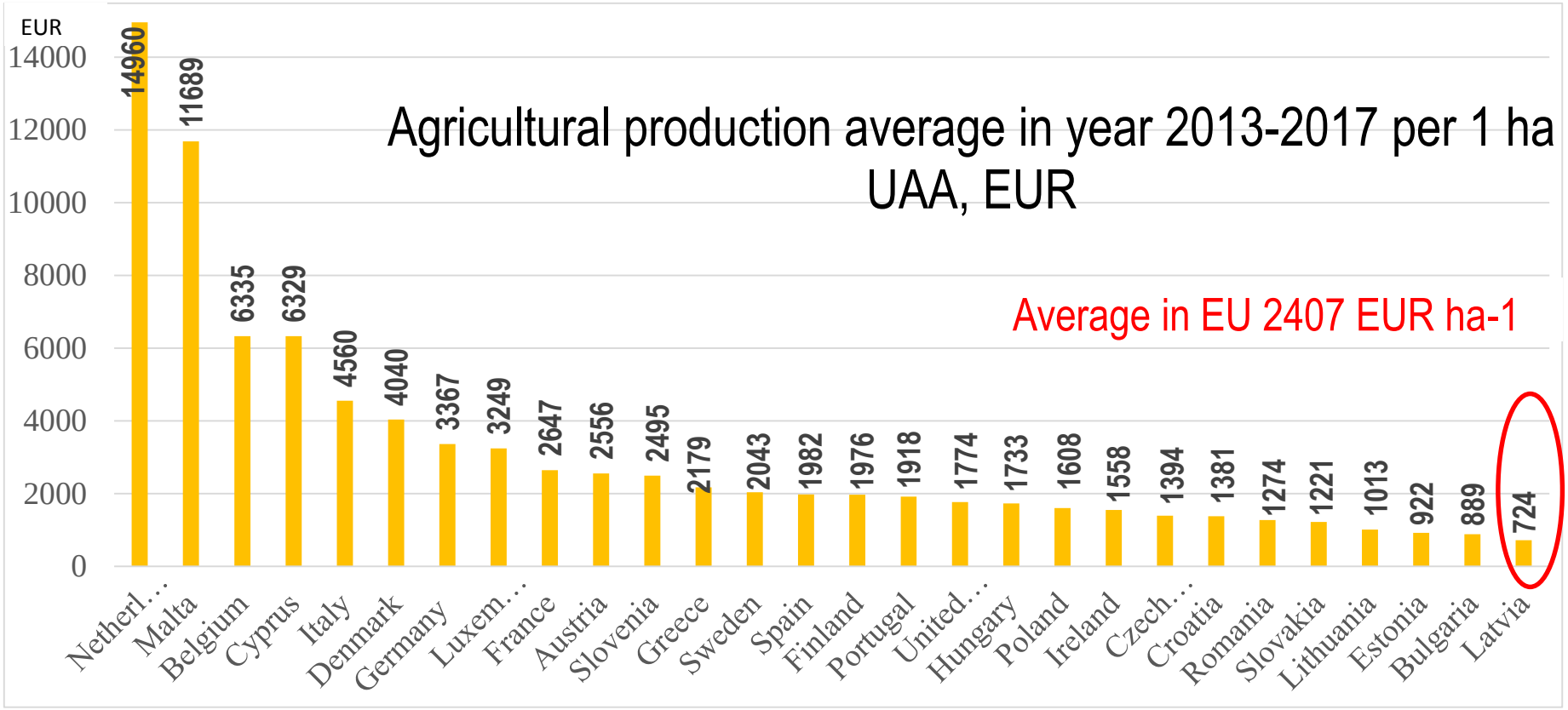
4. Promotion of production in bioeconomy

5. Socially responsible and sustainable development

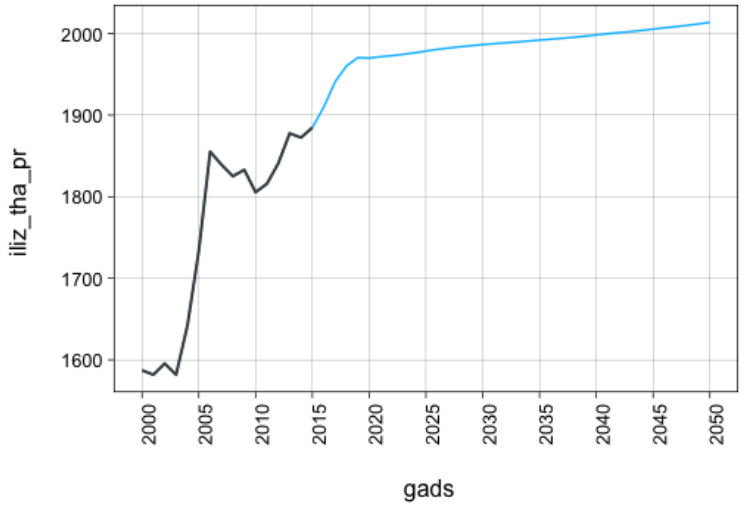
# Bioeconomy challenges in Latvia – agriculture case

## In Latvia in 2017:

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

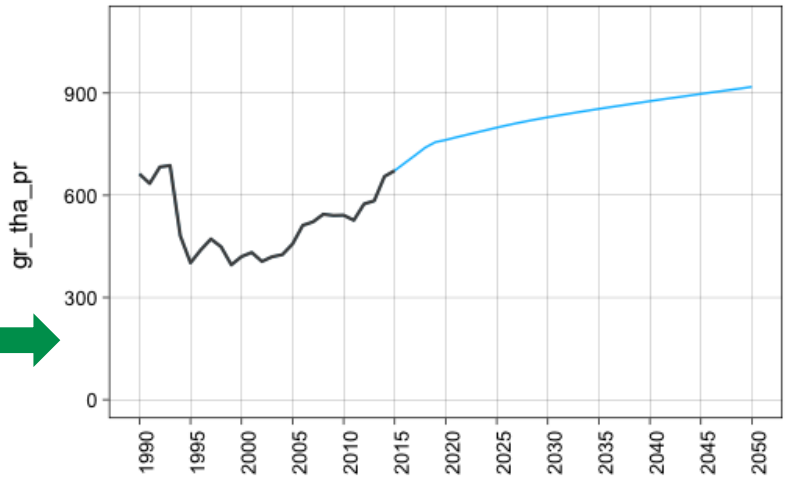


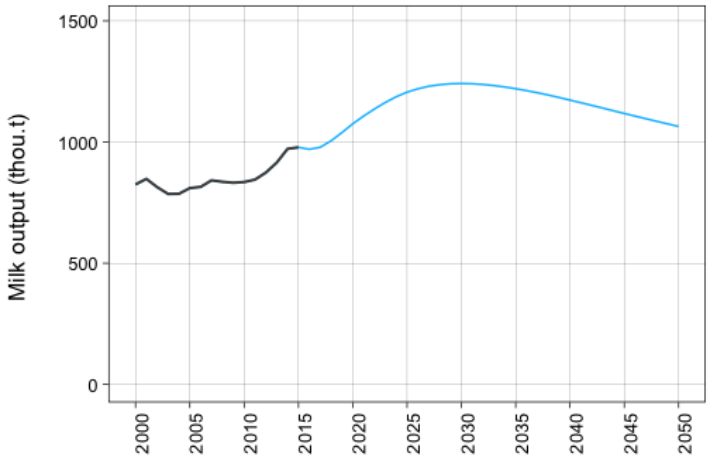
# Bioeconomy challenges in Latvia – agriculture case




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

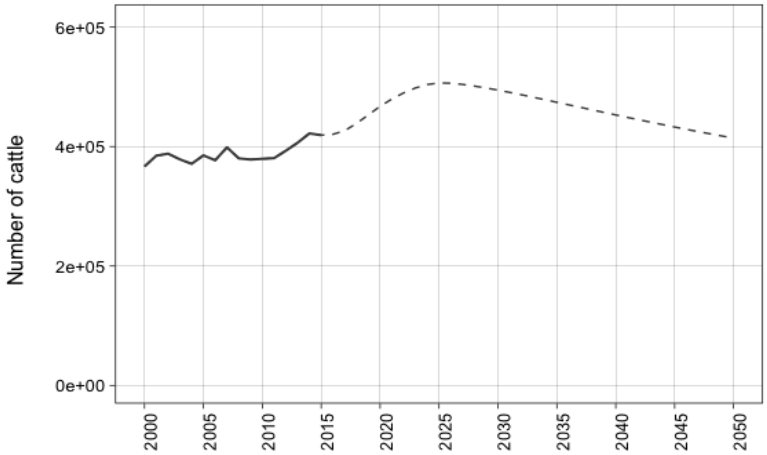
UAA cereal area



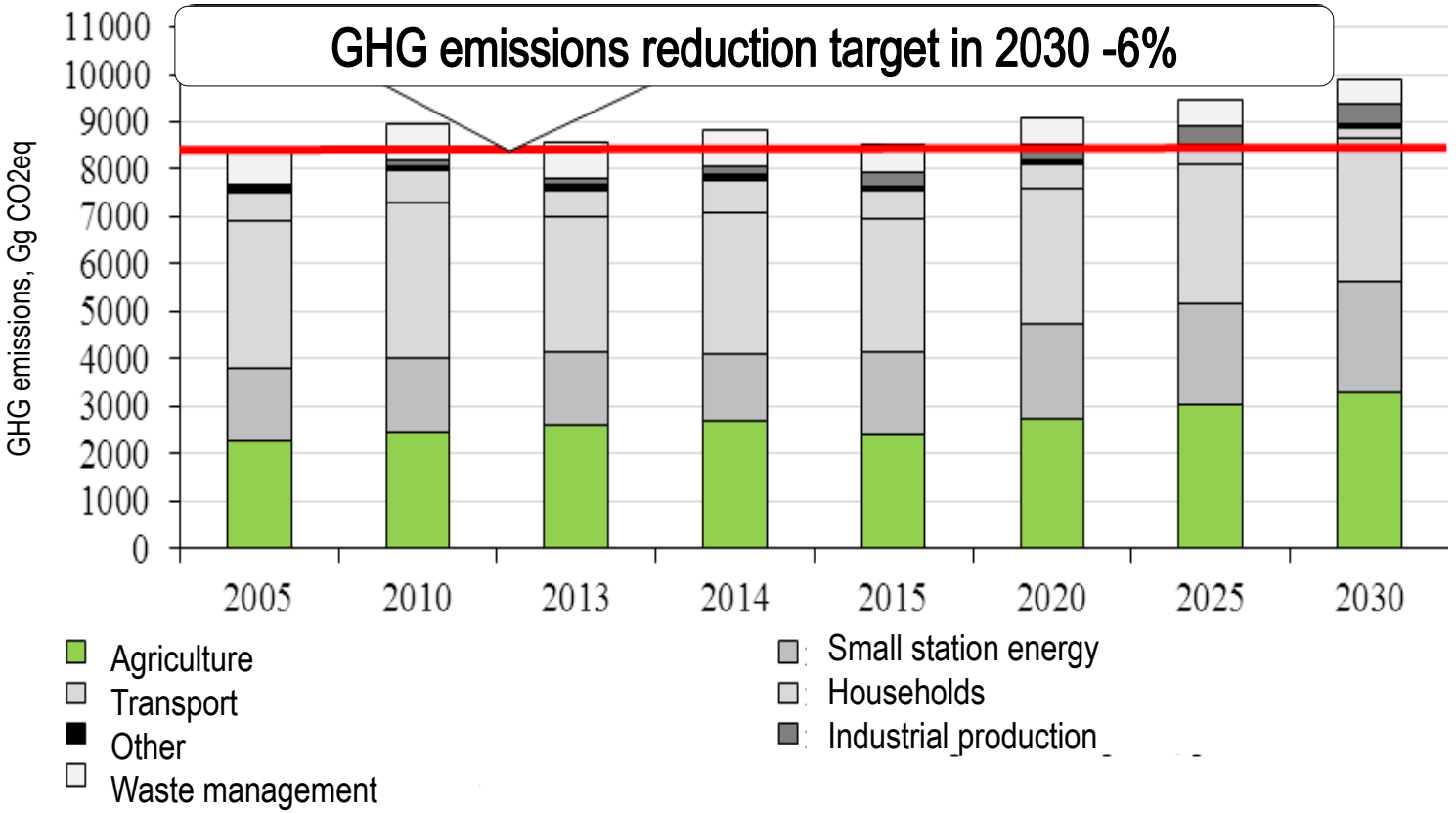




Milk output projection thou.t

Number of cattle



# GHG emissions in Latvia in non-ETS sectors




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

# Strengthening research and innovation

European Commission

## 2017 EUROPEAN INNOVATION SCOREBOARD

### EU MEMBER STATES' INNOVATION PERFORMANCE


Since 2010, the innovation performance improved in 15 EU countries.

# Life Sciences Universities

Will be **as partners for the developing Bioeconomy** to provide:

1. **Education** for a skilled workforce for the Bioeconomy fields
2. Support the **development of the research and innovations** for the Bioeconomy
3. Engagement **in the Public-Private partnerships** – to support links with industry for knowledge and innovation transfer
4. Engagement in the **Policy development**


Thank you!
Questions?