Sectoral policies (agriculture and forestry) within the framework of climate policy and goals

Ministry of Agriculture of the Republic of Latvia
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EU LIFE Programme project
"Demonstration of climate change mitigation potential of nutrients rich organic soils in Baltic States and Finland"

Why policy makers need this project?

- As a party of the UNFCCC, Kyoto Protocol and Paris Agreement, Latvia is required to report on GHG emissions. **Updated country-specific and reliable information** on land resources is the basis for climate policy planning and implementation in agriculture and LULUCF.
- Information on organic soils is one of the key factors for effective work towards meeting the **EU 2030 and 2050 climate targets, as well as the Paris Agreement**.
- **Lack of comprehensive and updated information on organic soils** complicates adoption of sustainable resource management decisions, especially in land management planning.
- Country-specific GHG emission factors will provide the **necessary information for planning of climate mitigation and adaptation measures** regionally and locally.

Facts on Latvia

Area km^2	64 573
Population density per 1 km^2	31.3

Average elevation above the sea level 87 m, Highest point (Gaiziņkalns) 312 m

Mean monthly air temperature C°

Average	**+ 5,9**
Average Jan.	**- 4,6**
Average Jul.	**+ 17**

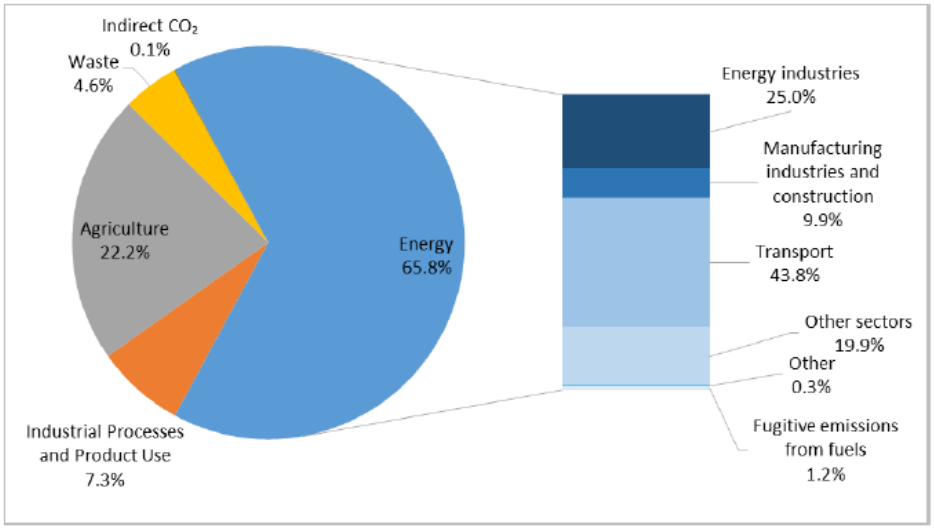
Annual precipitation 667 mm

Latvia is a typical lowland country

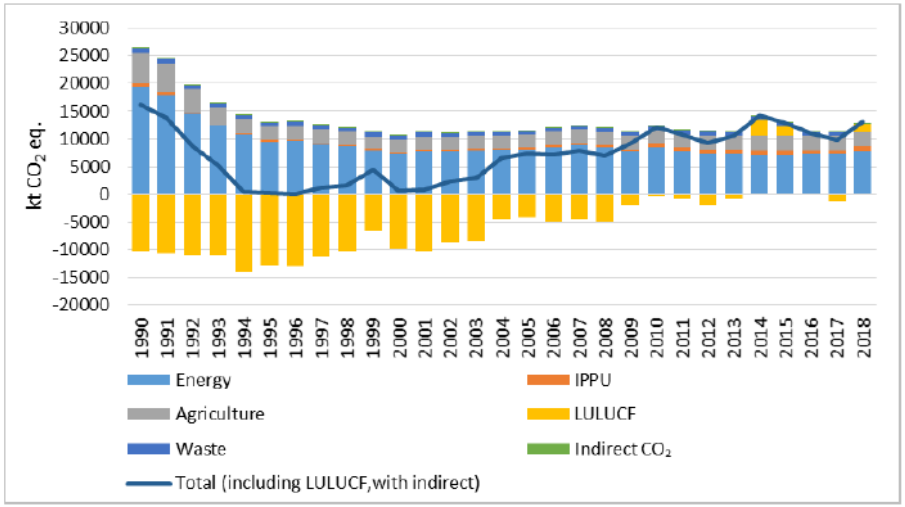
Approximately 90% of lands suffer from abnormal moisture

Latvia`s GHG emissions and removals by sectors 1990-2018 (kt CO_2 eq.)

- Agricultural sector accounted for 22.2% of the total GHG emissions in the country in 2018.

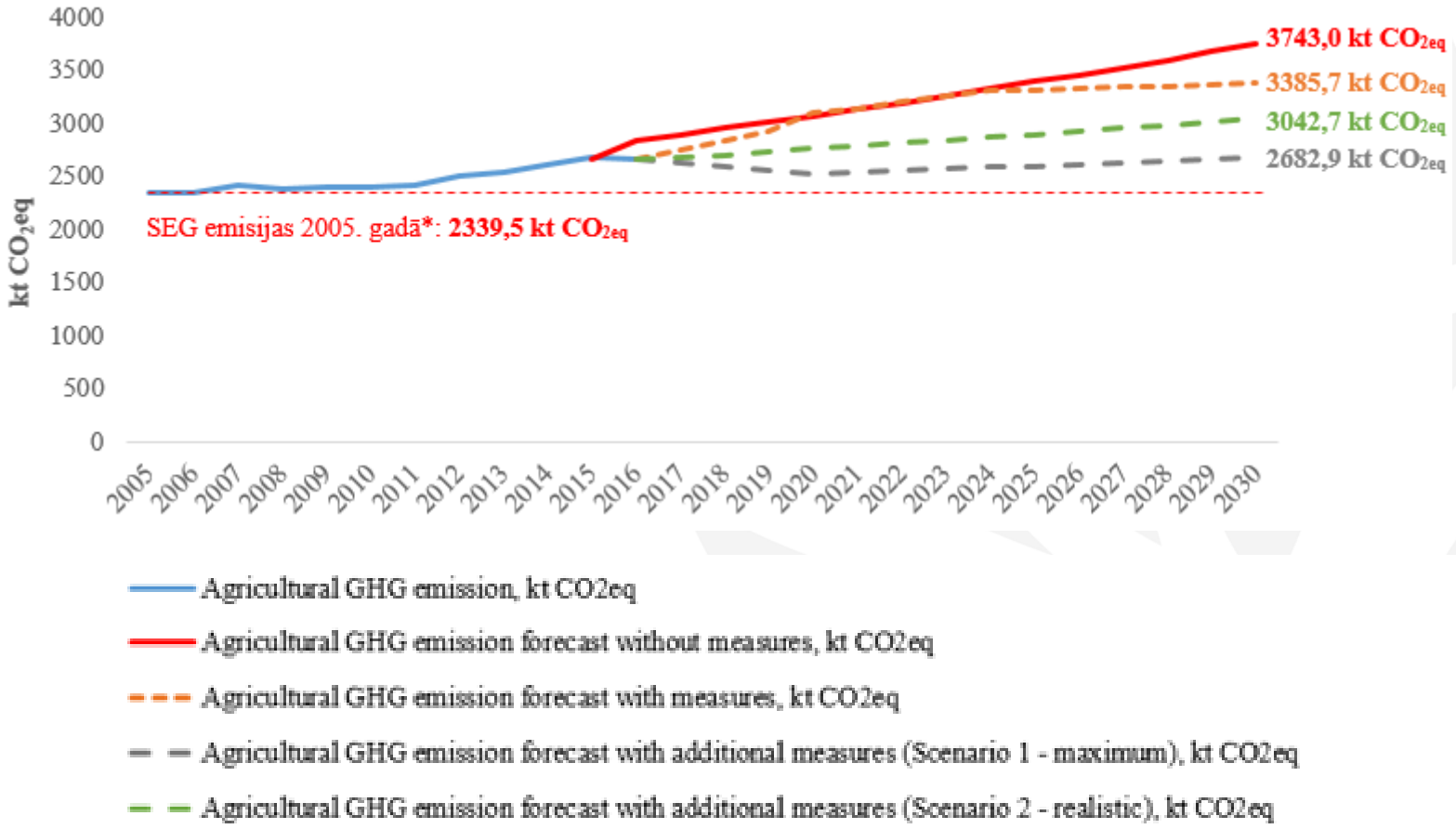


- Net GHG emissions from LULUCF in 2018 were 1417.54 kt CO_2 eq. compared to -10208.72 kt CO_2 eq in the base year.



Source: Draft Latvia's National Inventory Report 1990-2018 (2020).

Agricultural GHG forecasts



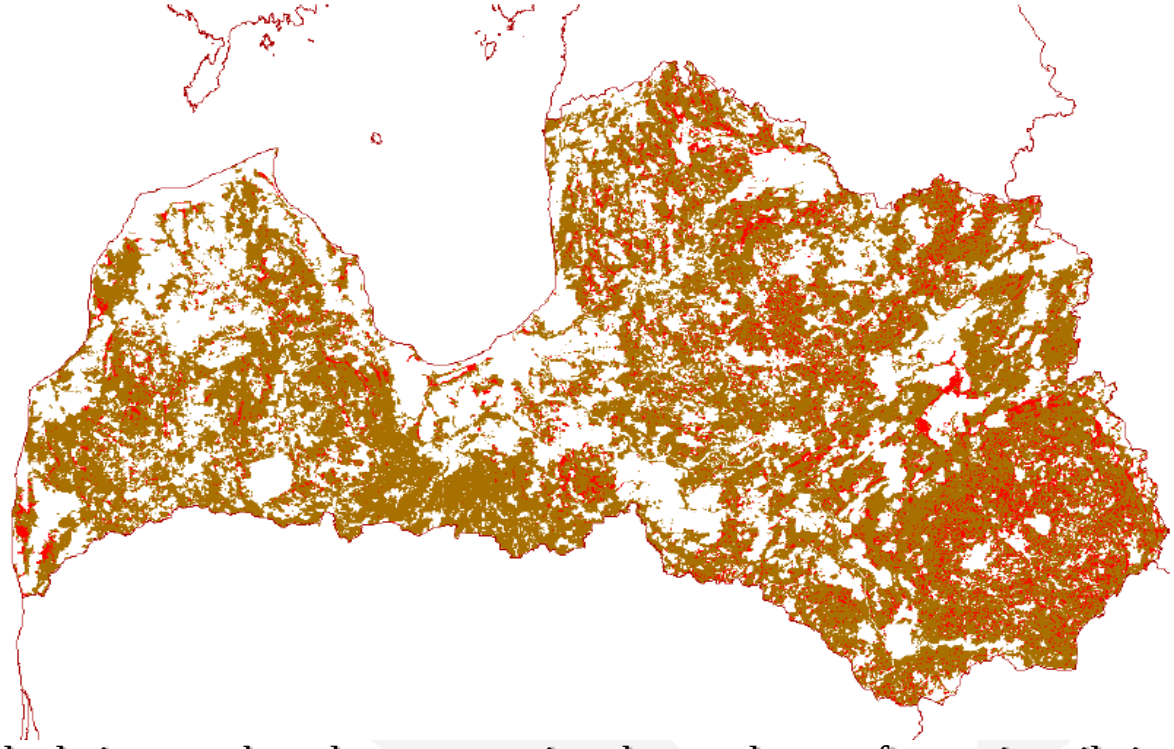
*based on the 2018 national GHG emission inventory report of Latvia.

Distribution of organic soils in Latvia

Overall significance of organic soils in agriculture:

~ 10% of all value added in Latvian agriculture

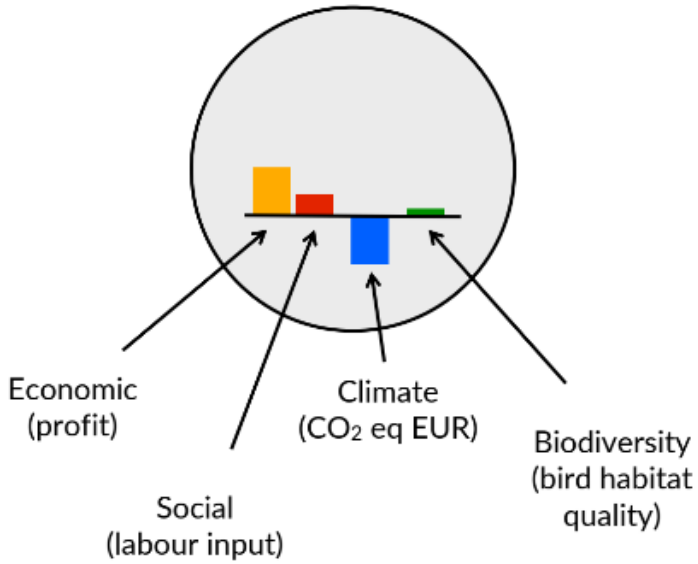
~ 120 mln EUR output per year



Calculations are based on assumption that total area of organic soils in agriculture is 138,1 thousand ha

Source: Interreg Europe project BIO4ECO study «Contribution of organic soils for Latvian agriculture– multifactor impact assessment for effective land use solutions» https://www.interregeurope.eu/bio4eco/

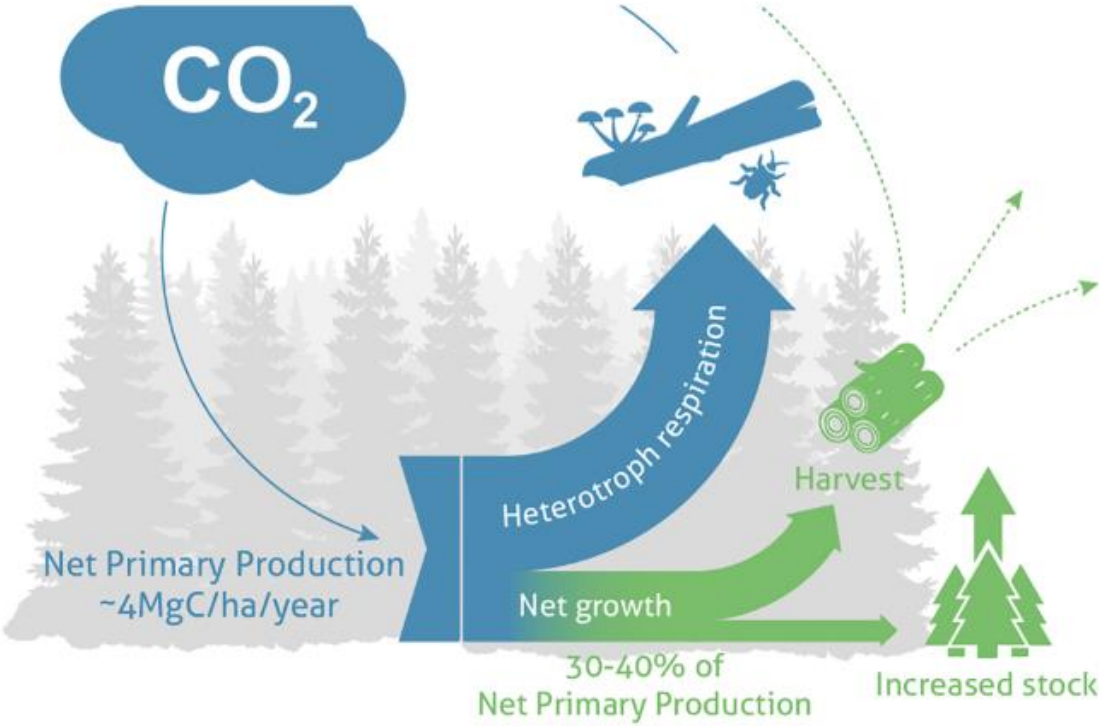
Functional land use of organic soils



- Organic soil areas were evaluated, but soil information is 31-56 years old
- Additional research and up to date information is needed
- To promote higher production from organic soils (e.g., output from extensive dairy is 400 EUR/ha, from cranberries 30 000 EUR/ha, GHG similar)
- Highly extensive and non-producing organic soil should either to be used for production or land use changed
- To consider afforestation: 1) of uncultivated organic soils of low agroeconomic quality with productive forest, 2) of organic soils already covered with trees with productive forest

Source: Interreg Europe project BIO4ECO study «Contribution of organic soils for Latvian agriculture– multifactor impact assessment for effective land use solutions» https://www.interregeurope.eu/bio4eco/

Forest management for climate…

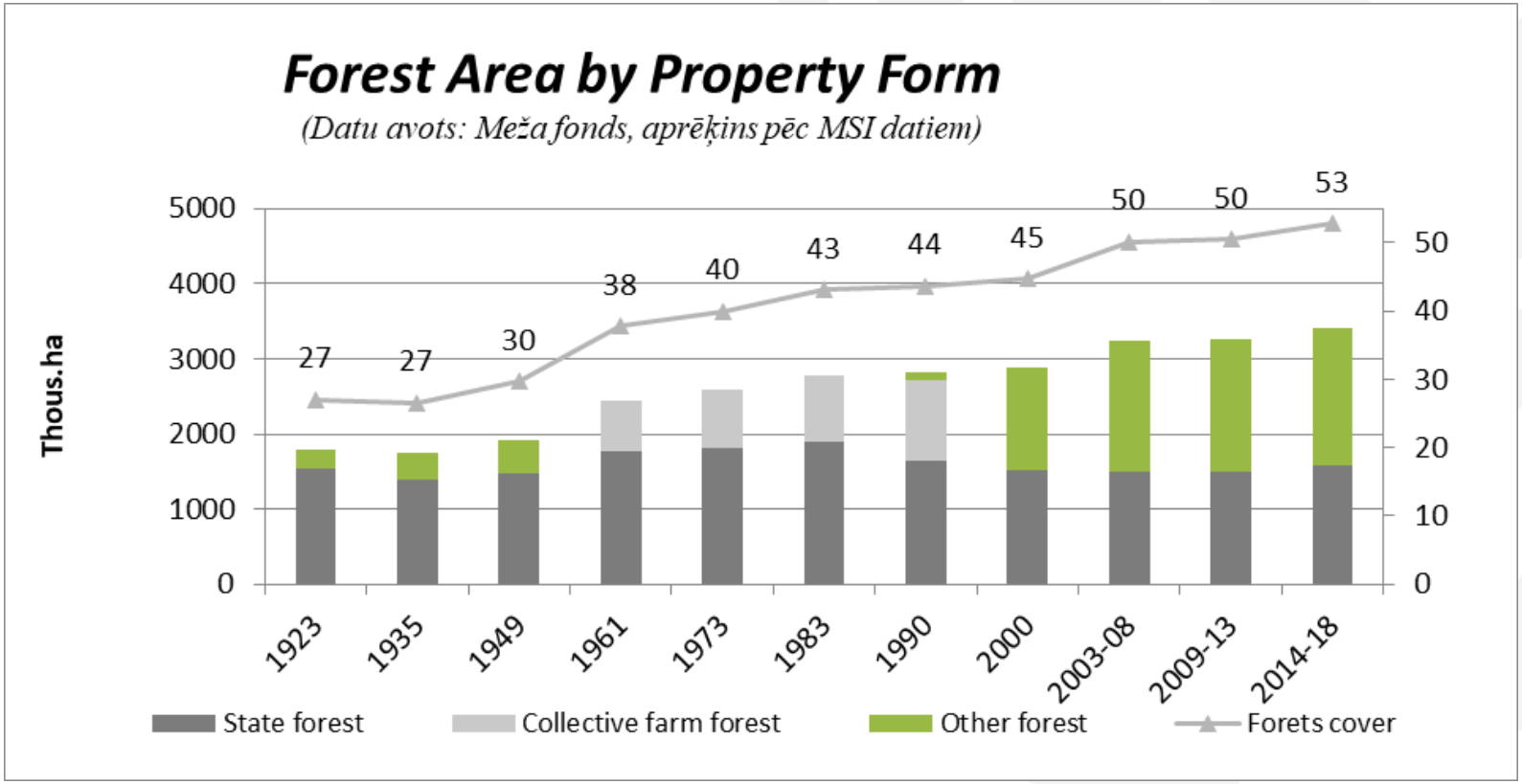


MANAGED FOREST LANDSCAPE

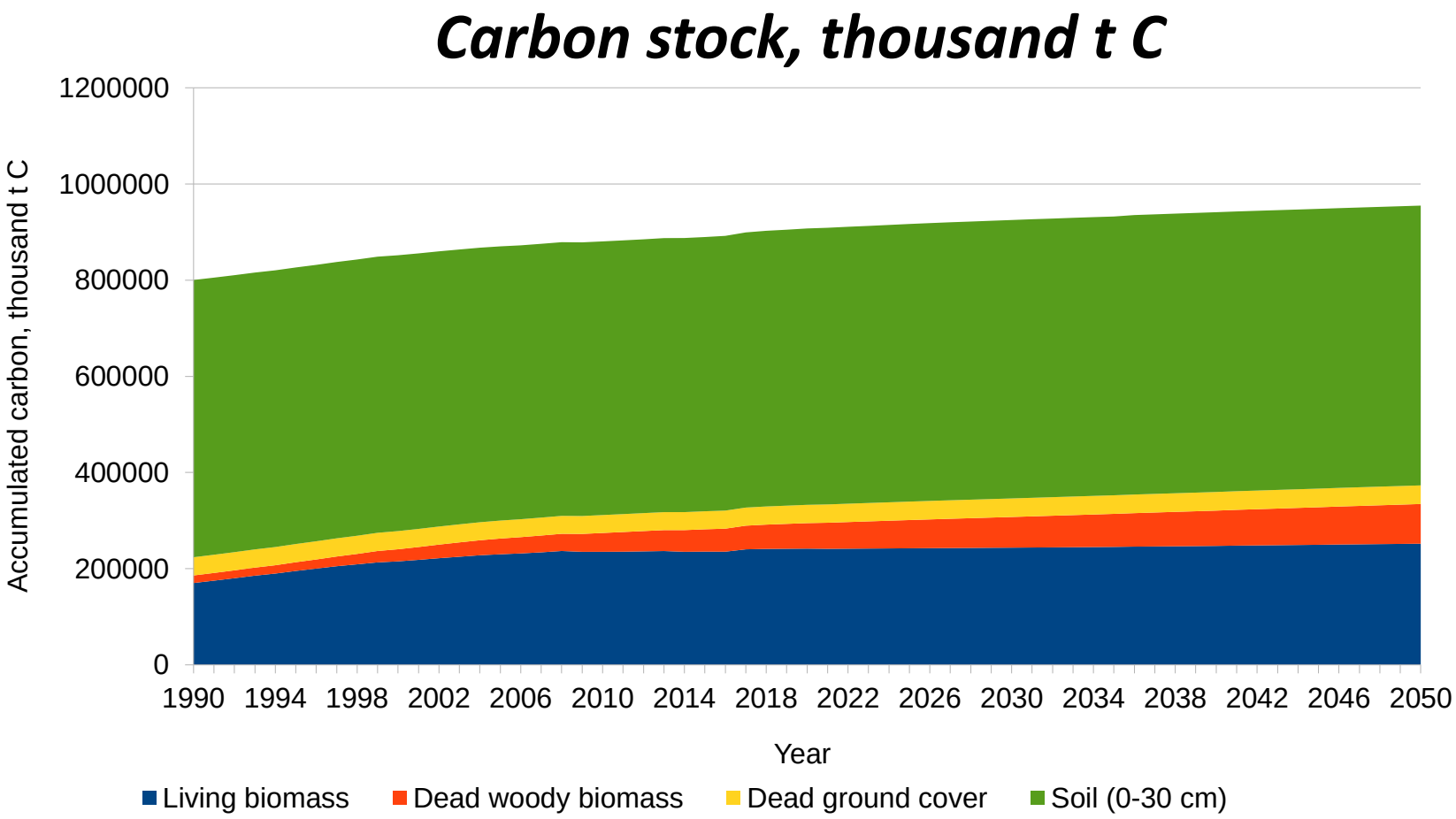
In a managed forest system, the aim is to keep net primary production high and losses due to heterotrophic respiration (mortality, dead wood formation etc.) low to allow sustained surplus to be harvested or stored in the forest to increase growing stocks. ***Illustration:*** *Jerker Lokrantz, Azote bildbyrå*

https://nordicforestresearch.org/climatebenefit/

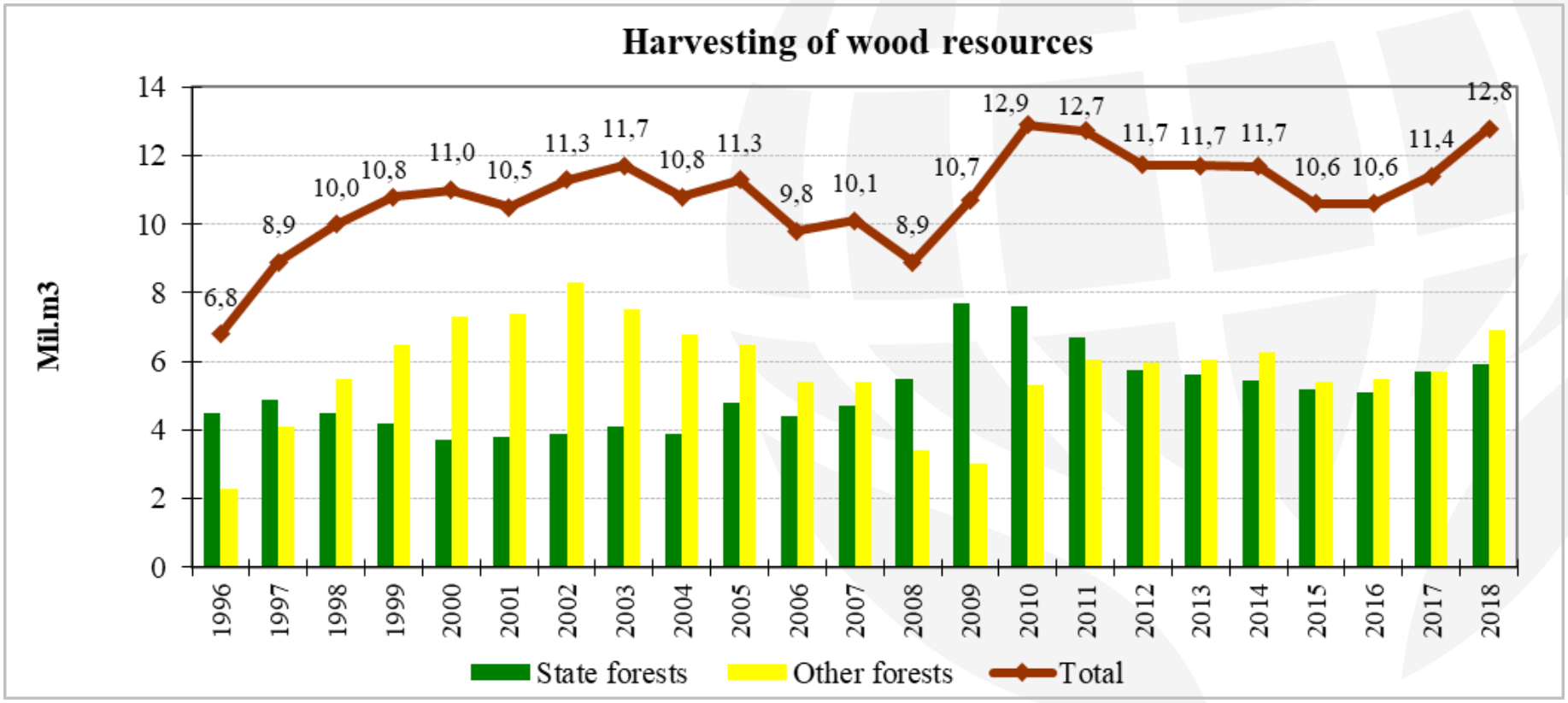
Forest facts I



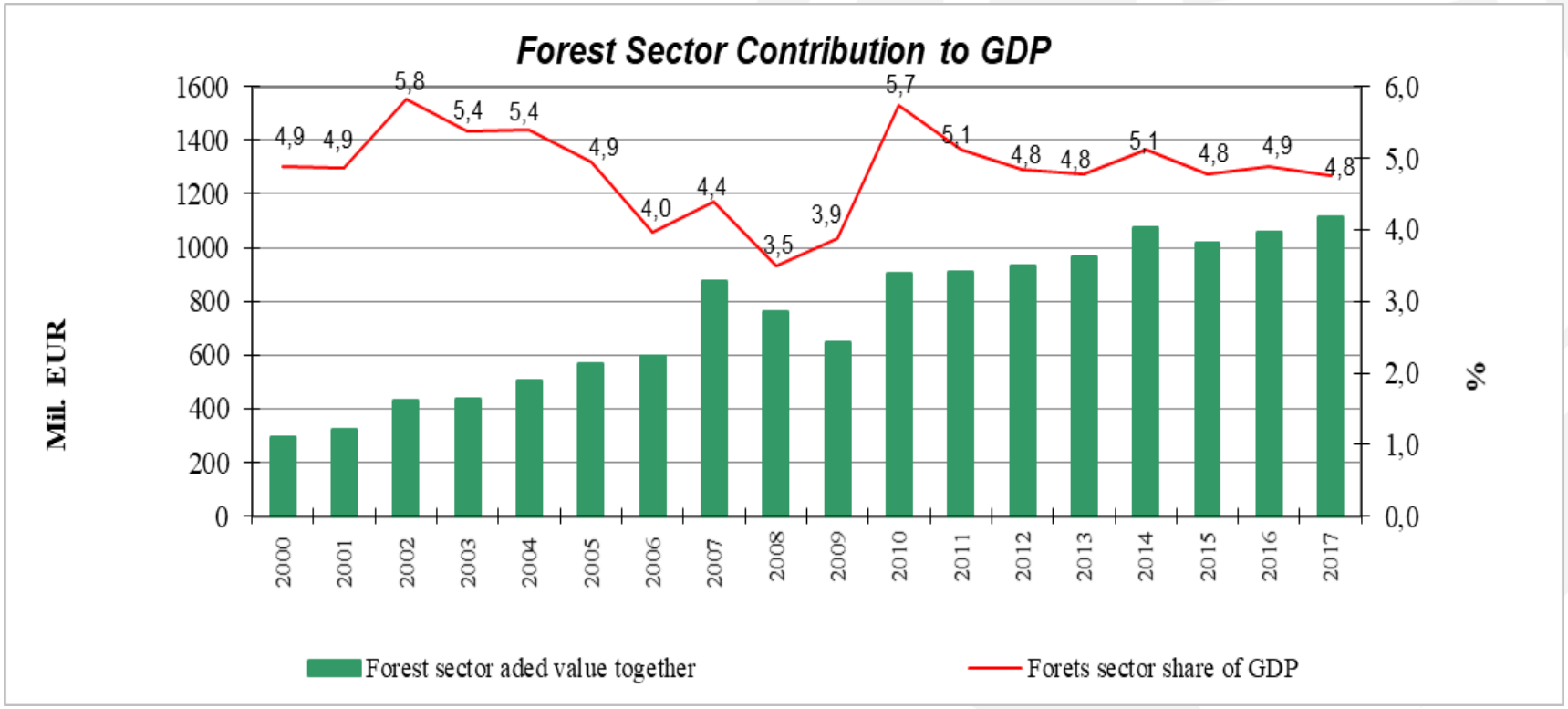
Forest facts II



Forest facts III

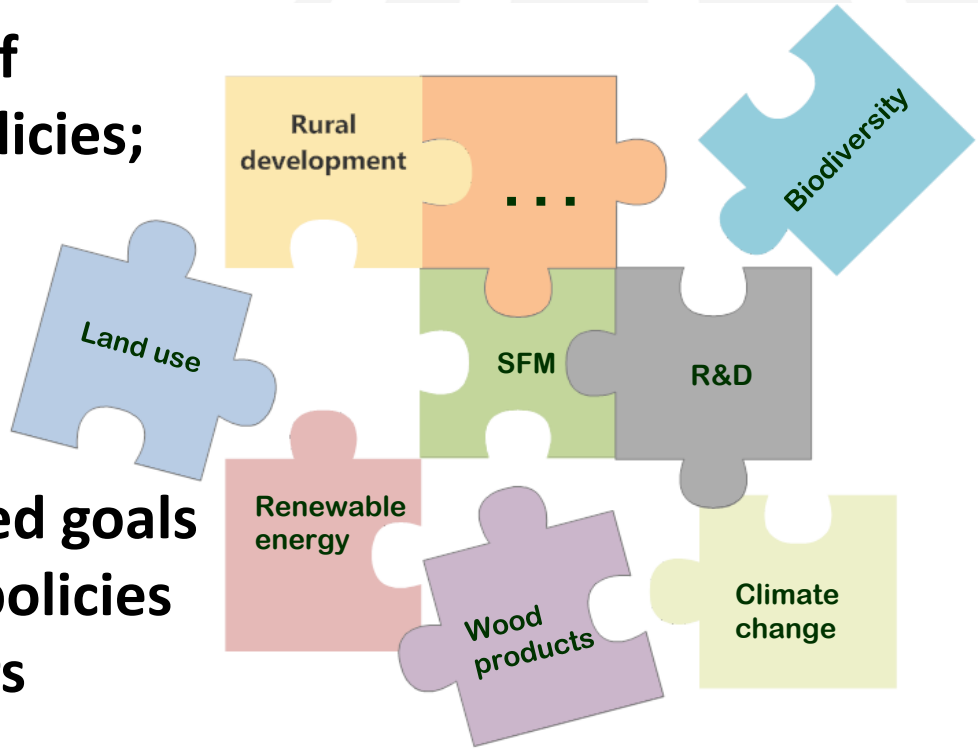


Forest facts IV



Forest Policy for Sustainable Development

- **Integrity of related policies;**
- **Harmonised goals between policies and sectors**



In Latvia: Governoment adopted (in 2015) "Guidelines for Development of ***Forest and Related Sectors****"*

Rural Development Programme 2014-2020

Goal - Each hectare of land creates value

- Productivity of forest, effectiveness of forestry = ***enhancing the sink potential of forests***
- Land resource and forestry

	Producing agriculture land	Non used land	Producing Forest land	Forest for nature protection
The period between the wars	3,9 mill ha		1,6 mill ha	
Today	~ 2 mill ha	**0,3 mill ha**	2,6 mill ha	0,6 mill ha
Future		←? ?→		

Support Measures of the Forest Sector

European Agricultural Fund for Rural Development 2014-2020 (EAFRD) measures:

- Improving the economic value of forests;
- Infrastructure related to the development and adaptation of agriculture and forestry;
- First afforestation of non- agricultural land;
- NATURA 2000 payments (to forest owners);
- Restoring forestry potential and introducing prevention actions;
- Support for creation and development of micro-enterprises (including diversification into non-agricultural activities).

Outcomes from project Actions for forest related decisions

New knowledge in two blocs:

- Improvement in GHG inventory methods for organic forest soils and hydrology regulations – *helps in national inventory*;
- Recommendations for forest management on rich organic forest soils for climate change mitigations including better adaptation and risk prevention – *helps to design support measures for private forest owners in new planning period*.

Agriculture and LULUCF measures in the next CAP

Measures included in Nat. energy and climate plan 2021-2030		Measures included in «Clean air» action plan 2019-2030
Precision mineral fertiliser application		
Fertilisation planning		
Nitrogen fixing crops as a part of crop rotation		
Facilitation of biogas production		
Direct injection of slurry in soil		
Organic dairy farming (emissions reducing dairy farming)		
Planning feed rations		
Enhancement of the quality of feed		
AGRI LULUCF	Maintenance of drainage systems	Reduced time limits for manure incorporation
	Establishment of orchards	Covering of slurry storage facilities
	Undersowing grass	Replacement of lagoons with cylindrical manure storages
	Green fallow	
FOREST LULUCF	Afforestation	
	Replacement/maintenance of non-productive forest stands	
	Regeneration of stands affected by natural disturbances	
	Forest thinning	
	Recultiv. of historic peat-extraction sites, introducing perennial crops	

Role of LIFE OrgBalt

- Cooperation with EE, FI, GE, LT ministries and institutions on policy issues
- Action A2. Task 2: **Development of Stakeholder network**
- Action C4 "Strategies and Action plans" **Proposals for national strategies & action plans /** Task 1: Development of supplements for national climate strategies and action plans
- Expected results (outputs and quantified achievements): **Improvements adopted in national policy documents: 20 documents**
- Work on future CAP post-2020 – development of indicators, SWOT analysis, implementation of CCM measures

OrgBalt LIFE project

EU LIFE Programme project "Demonstration of climate change mitigation potential of nutrients rich organic soils in Baltic States and Finland"

Thank you for your attention!

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