# **Republic of Latvia** Sustainability Bond Allocation and Impact Report

March 2023

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# 1. INTRODUCTION AND SUMMARY OF KEY TAKEAWAYS

# 1.1 Rationale for Sustainability Bond Issuance

One of the most significant global challenges faced by countries today, but also a source of opportunity, is the steering of national economies towards a sustainable development by combining decarbonisation and sustainable growth. The Government of the Republic of Latvia is committed, with its long-term focus on funding investments with tangible environmental and/or feasible social benefits, to supporting the Republic of Latvia in implementing its transition process and reaching its long-term sustainability goals.

Recognizing the force of sustainable finance in accelerating Environmental, Social and Governance (ESG) progress, the Republic of Latvia issued its debut Sustainability Bond in December 2021. Latvia's Sustainability Bond issuance can contribute to financing its environmental and social transition, and supports the development of sustainable finance in the Republic of Latvia in line with the key priorities set out in the Financial Sector Development Plan 2021–2023. This was the first sovereign Sustainability bond issue from the Baltic and Nordic regions.



On 6th December 2021, the Republic of Latvia priced its debut Sustainability bond:

Amount	EUR 600 million		
Maturity	23rd January 2030 (long 8-year)		
Coupon	0.250%, Fixed, Annual, ACT/ACT		
Re-offer Yield	0.263%		
Re-offer Spread	MS+25bps		
Final Orderbook	Over EUR 2.5bn		
Governing Law	English		
Listing	Luxembourg Stock Exchange		
ISIN	X52420426038		

Latvia's Sustainability Bond Framework (November 2021) contributes to the UN Sustainable Development Goals ("UN SDGs") and the environmental goals defined in the European Taxonomy Regulation. The Framework was developed by an inter-ministerial working group representing a diverse set of ministries and chaired by the Ministry of Finance. The Framework confirms Latvia's strong commitment to its environmental and social goals as elaborated in Latvia's Sustainable Development Strategy to 2030 and subsequent medium term national development plans, and contributes to European and global climate objectives to mitigate the effects of climate change and ensure climate neutrality by 2050, as well as to the reduction of poverty and inequality of opportunity. The Framework has been reviewed by the second party opinion provider «ISS ESG» and is deemed aligned with the ICMA Green and Social Bond Principles and Sustainability Bond Guidelines.

An amount equal to the net proceeds from the issue of Latvia's Sustainability Bond is allocated for the financing or refinancing of eligible expenditures falling within the eligible green and/or social categories, as outlined by the Framework, for example, for ensuring environmentally friendly transport, preserving Latvia's forests, waters, biological diversity, reducing inequality of opportunity and poverty, and other measures aimed at achieving the goals of sustainable development.

The aim of this report (published on the Treasury's website) is to outline how the funds were allocated and how they positively contributed to achieving Latvia's environmental, climate, and social objectives.

### 1.2 Sustainable policies and strategies in Latvia – latest developments

Since 2010 Latvia has elaborated a hierarchy of policies mandating Latvia's transition to a green and inclusive economy. The year 2010 marked the beginning of the sustainable development era in Latvia with the approval by the Saeima (Parliament) of Latvia's Sustainable Development Strategy to 2030. In 2020 Latvia adopted the <u>Climate Neutrality by 2050 vision document</u> and the <u>National Energy and Climate Plan 2030</u>. These, along with <u>Latvia's National Plan for Adaptation to Climate Change until 2030</u>, are the three most important documents for climate policy.

Mitigation of climate change is one of the priorities across different sectors. Latvia is committed to reducing the negative impacts of climate change at international, EU and national levels and moving towards climate neutrality by 2050. In order to promote a successful transition to a climate-neutral economy, Latvia has begun to lay the foundations for strengthening the sustainable finance system. The establishment of the Sustainability Bond Framework is driven by Latvia's current commitments and ambitions to upscale its green and social policies. This is also an integral step among other measures stipulated in the Financial Sector Development Plan.

Key drivers of sustainable development in Latvia include monitoring and periodic assessment of national policies, ensuring coherence with EU level policies and the promotion of state budget expenditures in line with national sustainable development goals.

Latvia presented its latest Voluntary National Review on the UN SDGs at the UN High Level Political Forum on July 12th, 2022. The review "Implementation of the Sustainable Development Goals -2022" assesses Latvia's progress towards achieving each of the 17

SDGs and their targets, outlines planned activities until 2027, and concludes that the Latvian economy is on the path to becoming innovative, digital and climate-neutral.

The Government approved the Environmental Policy Concept 2021–2027 in August 2022. The concept document sets the policy directions, objectives and implementation priorities for environmental policy in line with the EU Green deal and other EU and national legal acts and policy documents.

On 11th of November 2022, the European Commission approved the <u>Common Agriculture Policy (CAP) Strategic Plan of Latvia 2023–2027</u>. The plan sets priorities and financing instruments for agriculture and rural areas, including targets for environmental and climate actions. The plan focusses on climate change mitigation, pollution reduction, biodiversity conservation and sustainable forestry issues.

Latvia established a Climate and Energy Ministry that began operations on January 1st, 2023 to accelerate the transition to renewable resources. Climate and Energy Ministry.

### 1.3 Commitment to reporting

For all issuances under the Sustainability Bond Framework, the Republic of Latvia intends to produce and publish an Allocation Report and an Impact Report covering all the information available at least annually until one year following full allocation of the Green, Social and/or Sustainability bond proceeds.

The Allocation Report provides a transparent disclosure on the allocation of net proceeds, revealing a detailed breakdown of proceeds allocated to each of the eligible expenditures (incl. projects, activities) within the respective State budget programme. This report includes such State budget expenditures that are fully eligible with criteria described in the Sustainability Bond Framework. The Impact Report provides detailed information on the relevant environmental impact metrics and outcomes of the green and social eligible expenditures, subject to the availability of information and data. Latvia has taken into consideration the technical screening criteria of <u>Annex 1 to the EU Taxonomy adopted in June 2021</u> on a best effort basis where possible. Latvia has already a strong regulatory landscape that addresses environmental, social and governance risks.

The Ministry of Finance, in cooperation with the European Commission and the European Bank for Reconstruction and Development (EBRD), has launched a consultancy project called "EU Taxonomy Implementation and Sustainable Finance Roadmap for Estonia and Latvia". The Project provides technical support to the Ministries of Finance of Latvia and Estonia to develop a strategic approach for sustainable finance and to assist in implementing the EU Taxonomy in both countries. The Project will also provide an



assessment of investment needs per key economic sectors to meet Latvia's and Estonia's climate and environmental objectives, and application of the EU Taxonomy Regulation through targeted case studies. The projects started in Q1 of 2022 and will be implemented by August 2023.

Sustainability Bond Allocation and Impact report covers 34 Green and 7 social programs/projects/activities, within 8 Green categories and 3 Social categories. For example, allocated expenditures contributed to key impact figures as following, with more and detailed information to be found in next sections:

#### **Clean transportation**

- 139 electric vehicle charging stations maintained in 2021
- The new European gauge (1435mm) railway connection main line of Rail Baltica in Latvia under construction. In November 2020, the construction of the Riga Central multimodal hub started. In May 2021, the construction of the multimodal transport hub of Rail Baltica International Airport "Riga" was started

#### **Energy Efficiency for Buildings**

- Estimated annual decrease of 7196 tons of greenhouse gas emissions
- 1.065 MW additional power produced from renewable energy sources
- Decrease of 31,45 mill. kWhv annual primary energy consumption of public buildings

#### **Renewable Energy**

- Two implemented research projects. Ten implemented publicity measures
- One scientific publication on planning Latvia's long-term energy policy

#### Land Use and Living Natural Resource:

- 4033 organic farms supported in 2021
- 4698 ha of supported forest area for forest owners for improving the resilience and environmental value of forest ecosystems in 2021

#### **Terrestrial and Aquatic Biodiversity Conservation**

- 7.3 million of fish released in natural waterbodies in 2021
- In 2021 49 071 ha supported forest area and 3286 beneficiaries (forest owners)

#### Sustainable Water Management

- 340 ha of area where flood risks are reduced (ha)
- 179km of restored dams and water drains in 2021

#### Climate Change Adaptation

 Strengthening banks of the Daugava hydroelectric station water reservoir – 245m of territory with engineering-technical solutions introduced in 2020–2021

#### **Circular Economy**

• Pilot facility established for the manufacturing of building insulation material made of recycled paper and hemp fibre

#### Affordable Basic infrastructure

• Subsidized final price of electricity for 146 649 vulnerable consumers

#### Access to essential services: Social Inclusion

- A minimum income reform for population groups at risk of poverty
- 29 passenger carrier companies receiving subsidies for reduced fares in 2021

#### Access to essential services: education

- 2600 beneficiaries receiving Funding for higher education (academic staff remuneration
- scholarships; maintenance costs) and science in 2020 and 2021
- 6261 computers provided to in general education institutions.

# 2. Allocation Report

#### 2.1 Governance and project selection

The evaluation and selection of eligible green expenditures fell under the responsibility of the Interministerial Working Group ("IWG"), which was established to prepare the Sustainability Bond Framework and oversee its implementation.

The IWG is chaired by the Ministry of Finance and coordinated by the Treasury of the Republic of Latvia. The IWG includes participants from the Ministry of Finance, Ministry of Economics, Ministry of the Interior, Ministry of Science and Education, Ministry of Welfare, Ministry of Transport, Ministry of Environmental Protection and Regional Development and the Ministry of Agriculture.

Eligible and allocated expenditures align with the Green and Social categories outlined in Latvia's Sustainability Bond Framework. The task of the Treasury is to coordinate the IWG work. In order to identify of eligible expenditures the Treasury reached out to each ministry represented in the IWG asking to present all expenditure that could be of potential environmental and social effect.

To help determine eligibility of the preselected expenditures, the responsible ministries were consulted to obtain more information on the exact content of a budget item (e.g. further details on the beneficiaries, expected impacts etc.). Meaning that expenditures that may initially have appeared to be eligible can be excluded after further investigation. Potential environmental and/or social risks of eligible expenditures are identified and managed through Latvia's general and comprehensive laws and regulations applicable to the particular area. Each ministry is responsible for ensuring that its respective identified budget expenditures are aligned with all relevant and applicable national. EU and/or international environmental and social legislation.

After several round of bilateral discussion with each ministry and final review and verification, a list of fully eligible projects were set (i.e. identified and selected eligible budget programmes/projects/ activities were presented during the investor's roadshow in December 2021). After first Sustainability bond issuance, the Treasury coordinated collection and screening of actual budget execution data and concluded round of discussions with each ministry responsible for its budget programmes with a purpose of making a cross check about the selected expenditures to be allocated in this report, in the same time avoiding any possibility of "double counting" with expenditures already financed via a dedicated funding source, including EU funds or any other Green or Social financing, as well as making sure that other exclusions set in the Sustainability Bond Framework are respected - rail infrastructure dedicated solely for the transportation of fossil fuels, power generation with greenhouse gas emissions above 100g CO<sub>2</sub>/kWh and nuclear power, production, transmission and distribution of fossil fuels, armament, tobacco, alcohol or gaming industries.

It was the responsibility of the Treasury of the Republic of Latvia to coordinate and ensure that an amount equal to the net proceeds of the Sustainability bond is fully allocated to finance or refinance Latvian State budget expenditures in accordance with the Framework.

The allocated amount of EUR 600 million is equal to the net proceeds of the Sustainability bond issued under the Republic of Latvia's Sustainability Bond Framework in December 2021. Allocated expenditures align with the Green and Social categories outlined in Latvia's Sustainability Bond Framework.

The Framework foresees that the «look back» period is two budget years preceding the bond issuance date and the «look forward» period is the two budget years following the bond issuance date. For the purpose of this inaugural Sustainability bond, Latvia identified eligible expenditures in the 2020, 2021 (mainly) and 2022 (partially) budget years, leaving most of the eligible State budget expenditures in 2022 available for allocations under future Green, Social or Sustainability bond issues. Latvia's State budget maps the calendar year. Respectively budget expenditures allocated for 2020 and 2021 covers period of January to December. As the 2022 data for this report were collected and analysed before the closure of budgetary year, it represents (i) the period of actual expenditures from 1<sup>st</sup> January 2022 till 31<sup>st</sup> August 2022 that are eligible and allocated and (ii) the planned expenditures from September till the end of 2022 that are eligible and left for allocations under future bond issues.

The State Audit Office performs audits for the public sector in accordance with the international auditing standards. It provides an opinion on the annual financial report on the execution of the State budget and the budgets of local and regional governments, as well as opinions on the accuracy of annual financial reports of ministries and other central state institutions<sup>1</sup>. Results of the State Audit Office performed audits are publicly available. State budget annual financial reports for 2020 and 2021 have been audited. Taking into account those audited data, the respective expenditures that are eligible under the Framework were allocated for the purpose of this report. The State budget expenditures presented for 2022 are unaudited. As soon as the an opinion and an audit report on the financial statement for 2022 is concluded and submitted to the Parliament (it is expected by 15 October, 2023), the IWG will review expenditures of 01 January – 31 August, 2022 currently allocated in this report, thus fulfilling Latvia's commitment to reporting.

The allocation for the Sustainability bond has been made to 34 Green and 7 Social State budget programmes/projects/ activities covering period 2020–2022 (Jan-Aug) and representing 85 % of all eligible expenditures identified for the period of 2020-2022 (Jan-Aug). Bond proceeds have been 100% allocated. The net proceeds of the Sustainability bond till its full allocation were managed according to the singe Treasury account principle within the central bank.

<sup>1 &</sup>lt;u>https://www.lrvk.gov.lv/en/about-us/sao-of-latvia/about-sao-of-latvia</u>

### Summary of the allocation of December 2021 Sustainability Bond net proceeds

Category	Eligible expenditures 2020-2022 (EUR)	Allocated expenditure 2020-2022* (EUR)	% of bond proceeds allocated	% of eligible expenditures allocated	
Land Use and Living Natural Resources	79 110 156.74	56 156 276.74		71%	
Energy Efficiency for Buildings	2 748 800.48	1 588 247.44		58%	
Renewable Energy	4 821 393.00	3 251 393.00		67%	
Terrestrial and Aquatic Biodiversity Conservation	53 525 202.65	33 207 002.80		62%	
Sustainable Water Management	16 837 138.31	11 680 739.34		69%	
Climate Change Adaptation	Climate Change Adaptation 5 773 009.35			69%	
Clean transportation	300 019 557.65	289 320 175.40	100% (600 million EUR)	96%	
Circular Economy	256 000.00	256 000.00		100%	
GREEN TOTAL	463 091 258.18	399 461 716.75		86%	
Affordable Basic infrastructure	67 918 200.00	38 393 280.00		57%	
Access to essential services: Social Inclusion	118 151 958.00	104 287 588.00		88%	
Access to essential services: education	59 247 629.01	57 857 415.25		98%	
SOCIAL TOTAL	245 317 787.01	200 538 283.25		82%	
TOTAL	708 409 045.19	600 000 000.00	100%	85%	

\*Actual expenditures from January 2022 till 31 August 2022, unaudited



As regard to the second party verification, Latvia has asked ISS ICS powered by ISS ESG to review and provide an opinion of this Allocation and Impact report.

# 2.2 Allocation per category

#### **GREEN CATEGORIES**

### Land Use and Living Natural Resource

			Year			
SUBCATEGORY	PROJECT/EXPENDITURE NAME	2020	2021	2		
		Allocated (EUR)	Allocated (EUR)	Allocated (EUR)*	Eligible (EUR)**	(EUR)
	Support for organic farming commitments	4 420 965.15	4 698 602.40	0	5 250 000.00	9 119 567.55
	Agricultural and rural development	1 892 423.22	1 929 956.17	0	2 211 135.00	3 822 379.39
	State monitoring of forest resources	15 016 658	15 156 317	10 018 256	24 138 303	40 191 231.00
Promotion and support of sustainable	Support for forest expansion and improvement of forest viability	746 188.95	378 895.80	0	391 500	1 125 084.75
agriculture and forestry practices	Implementation of innovative climate change mitigation measures in management of nutrient-rich organic soils	133 856	128 856	0	177 198	262 712
	National forest monitoring in the whole territory of the State by the Latvian State Forest Research Institute Silava	654 000	654 000	0	654 000	1 308 000.00
Reduce and eliminate sources of radiation avoiding risk of soil and groundwater pollution	Maintenance and safety monitoring works for the non-operational Salaspils nuclear research reactor, built in Soviet times and now decommissioned and being dismantled	157 770.36	169 531.69	0	150 000	327 302.05
	CATEGORY TOTAL	23 021 861.68	23 116 159.06	10 018 256	32 972 136.00	56 156 276.74

\*Actual 2022 State budget expenditures from 01.01.2022 till 31.08.22 that has been allocated, unaudited

\*\* Total 2022 State budget expenditures (incl. actual until 31.08.22 and planned expenditures 1.09.22-31.12.22) that are eligible for allocation, unaudited

# Energy Efficiency for Buildings

SUBCATEGORY		2020	2021	2022	
JUDCALLOUT		Allocated (EUR)	Allocated (EUR)	Eligible (EUR)*	(EUR)
Increasing the energy efficiency of municipal buildings	Support for measures reducing primary energy consumption and greenhouse gas emissions in municipal buildings	1 225 371.48	362 875.96	1 160 553.04	1 588 247.44

\* Total 2022 State budget expenditures (incl. actual till 31.08.22 and planned expenditures 1.09.22-31.12.22) that are eligible for allocation, unaudited

### Renewable Energy

			Year				
	JBCATEGORY PROJECT/EXPENDITURE NAME	2020	2021	2022		ΤΟΤΛΙ	
SUBCATEGORY		Allocated (EUR)	Allocated (EUR)	Allocated (EUR)*	Eligible (EUR)** Camille Roux	ALLOCATION (EUR)	
National Energy Research Programme	Research in the field of renewable energy technologies	498 379	1 403 014	1 350 000	2 920 000	3 251 393	

\* Actual 2022 State budget expenditures from 01.01.2022 till 31.08.22 that has been allocated, unaudited

\*\* Total 2022 State budget expenditures (incl. actual until 31.08.22 and planned expenditures 1.09.22–31.12.22) that are eligible for allocation, unaudited

# Terrestrial and Aquatic Biodiversity Conservation

			Year			
SUBCATEGORY	PROJECT/EXPENDITURE NAME	2020	2021	2022	ALLOCATION	
		Allocated (EUR)	Allocated (EUR)	Eligible (EUR)*	(EUR)	
Restocking of fish	Regulation, reproduction and exploration of fish use	1 049 135	1 012 140	1 109 105	2 061 275	
resources	Fish Fund	913 505	899 401	277 875	1 812 906	
Surveillance costs for phytosanitary safety and non- contamination	Plant health and surveillance of plant circulation	6 091 363	6 027 941	3 977 203	12 119 304	
Support for restrictions in Natura 2000 territories	Support for restrictions in Natura 2000 territories	624 548.25	653 780.55	684 263.85	1 278 328.80	
Infrastructure in Natura 2000 sites	Support for the construction of infrastructure to reduce anthropogenic pressures in Natura 2000 sites in order to improve the status of species and habitats, as well as to promote habitat restoration	0 0		74 947.95	0	
Ensuring the operation of national	Compensations paid for the damage caused by non-game and migratory species	996 073	350 549	78 024	1 346 622	
areas)	Ensuring the operation of Nature Conservation Agency	5 917 783	6 045 116	3 480 728	11 962 899	
Co-financing o	f projects within LIFE programmes	715 757	1 909 911	2 152 914.10	2 625 668	
	CATEGORY TOTAL	16 308 164.25	16 898 838.55	11 760 112.95	33 207 002.80	

\* Total 2022 State budget expenditures (incl. actual until 31.08.22 and planned expenditures 1.09.22–31.12.22) that are eligible for allocation, unaudited

# Sustainable Water Management

			TOTAL		
	DRO JECT / EXDENIDITI IRE NAME	2020	2021	2022	
SUBCALLOUNT		Allocated (EUR)	Allocated (EUR)	Eligible (EUR)*	(EUR)
Development, construction, operation and maintenance of water and wastewater	Maintenance of the amelioration cadastre, operation and maintenance of State amelioration systems and amelioration systems of State importance	3 856 530	4 406 548	4 664 042	8 263 078
management systems which result in significant	Development, construction, operation and maintenance of water and wastewater management systems (Daugava HPP)	752 260	752 260	467 311	1 504 520
efficiency and/or water quality	Projects to improve the status of water bodies at risk (Within LIFE programme)	604 538.34	1 308 603	25 045.97	1 913 141.34
	CATEGORY TOTAL	5 213 328.34	6 467 411	5 156 398.97	11 680 739.34

\* Total 2022 State budget expenditures (incl. actual until 31.08.22 and planned expenditures 1.09.22–31.12.22) that are eligible for allocation, unaudited

### Climate Change Adaptation

			TOTAL		
SUBCATEGORY	PROJECT/EXPENDITURE NAME	2020	2021	2022	ALLOCATION
		Allocated (EUR)	Allocated (EUR)	Eligible (EUR)*	(EUR)
Infrastructure and	Subsidies for insurance policies support climate change adaptation (e.g. sown areas climate risks insurance)	1 579 741.35	1 724 542.20	1 569 778.20	3 304 283.55
resources for climate	Flood risk prevention in populated areas	104 461.51	284 825.77	342 309.02	389 287.28
change adaptation	Financing for strengthening banks of the Daugava hydroelectric station water reservoir	139 411.18	168 900.02	98 190.53	308 311.20
CATEGORY TOTAL		1 823 614.04	2 178 267.99	1 771 127.32	4 001 882.03

\* Total 2022 State budget expenditures (incl. actual until 31.08.22 and planned expenditures 1.09.22–31.12.22) that are eligible for allocation, unaudited

### Clean transportation

	PROJECT/EXPENDITURE					
SUDCALEGUNT	NAME	2020	2021	2022	2022	(FUR)
		Allocated (EUR)	Allocated (EUR)	Allocated (EUR)*	Eligible (EUR)**	
Construction, operation	Rail Baltica	4 535 820.19	9 978 235.99	8 176 770.47	8 176 770.47	22 690 826.65
and maintenance of Rail Transport services	A project for new electric trains	0	0	0	276 505.00	0
Construction, operation	Maintenance of charging infrastructure for electric vehicles (ETL)	348 165	502 566	0	622 000	850 731.00
and maintenance	Bus transport services	52 019 02	60 578 130	36 004 398	36 004 398.00	148 601 551
Transport services	Rail transport services	18 203 11	20 629 316	9 521 191	9 521 191.00	48 353 622
	Financing of public railway infrastructure	23 874 774	23 874 774	21 073 896.75	30 874 774.00	68 823 444.75
CATEGORY TOTAL		98 980 897.19	115 563 021.99	74 776 256.22	85 475 638.47	289 320 175.40

\* Actual 2022 State budget expenditures from 01.01.2022 till 31.08.22 that has been allocated, unaudited

\*\* Total 2022 State budget expenditures (incl. actual until 31.08.22 and planned expenditures 1.09.22–31.12.22) that are eligible for allocation, unaudited

# Circular Economy

		Year	TOTAL
SUBCATEGORY	PROJECT/EXPENDITURE NAME	2020	ALLOCATION
		Allocated (EUR)	(EUR)
Expenditures related to the promotion of circular economy: Collection, treatment and recycling of municipal waste	Support of a pilot project for the manufacturing of building insulation material made of recycled paper and hemp fibre	256 000	256 000

# **SOCIAL CATEGORIES** Affordable Basic infrastructure

	PROJECT/EXPENDITURE NAME		TOTAL			
SUBCATEGORY		2020	2021	20	22	
JUDCAILGUNT		Allocated (EUR)	Allocated (EUR)	Allocated (EUR)	Eligible (EUR)*	(EUR)
Expenditures to ensure access to affordable, reliable, sustainable and modern energy for all	Subsidised final price of electricity for a targeted group of citizens	6 710 000	12 000 000	19 683 280	49 208 200	38 393 280

\* Total 2022 State budget expenditures (incl. actual until 31.08.22 and planned expenditures 1.09.22–31.12.22) that are eligible for allocation, unaudited

#### Access to essential services: Social Inclusion

			Year		ΤΟΤΑΙ	
		2020	2021	2022		
JUDCAILGUNT		Allocated (EUR)	Allocated (EUR)	Eligible (EUR)	(EUR)	
Providing minimum income for population groups at risk of poverty	Minimum income reform	0	70 673 874	75 444 653	70 673 874	
Provision of public transport services at subsidised fares for certain passenger groups	Subsidies to passenger carrying companies to compensate reduced fares to certain passenger groups (trains and buses)	18 001 540	15 612 174	13 864 370	33 613 714	
	CATEGORY TOTAL	18 001 540	86 286 048	89 309 023	104 287 588	

#### Access to essential services: education

			Ye	ar			
SUBCATEGORY	PROJECT/EXPENDITURE NAME	2020 2021		20	TOTAL ALLOCATION		
		Allocated (EUR)	Allocated (EUR)	Allocated (EUR)*	Eligible (EUR)**	(EUR)	
	Funding for vocational education (teachers' salaries; scholarships; maintenance costs).	662 270	682 056	11 285 973	11 285 973	12 630 299.00	
Improving quality and providing access to essential educational infrastructure, programmes and services	Funding for higher education (academic staff remuneration; scholarships; maintenance costs) and science.	9 924 056	11 020 428	15 651 670	15 651 670	36 596 154.00	
	Improving technological equipment in general education institutions by remote education initiated by the Covid-19 pandemic.	3 969 724.44	0	0	0	3 969 724.44	
Supply of fresh products supported by accompanying educational measures	Scheme for supply of fruit, vegetables and milk in educational establishments.	2 399 257.25	2 261 980.56	0	1 390 213.76	4 661 237.81	
A	TEGORY TOTAL	16 955 307.69	13 964 464.56	26 937 643	28 327 856.76	57 857 415.25	

\* Actual 2022 State budget expenditures from 01.01.2022 till 31.08.22 that has been allocated, unaudited

\*\* Total 2022 State budget expenditures (incl. actual till 31.08.22 and planned expenditures 1.09.22–31.12.22) that are eligible for allocation, unaudited

# **3. IMPACT REPORT**

### 3.1 Introduction

The impact report has been prepared with close interactions with the line ministries represented in the IWG. The IWG took into account the Harmonized Framework for Impact Reporting published by the ICMA, and the Harmonised Framework for Impact Reporting for Social Bonds (2022) published by ICMA, as well as the example impact indicators provided per category in Latvia's Sustainability Bond Framework. The respective green and social categories in the report are also mapped to the UN SDG.

While several State budget programmes/projects/activities allocated in this report are financed by EU funds and co-financed with State budget, the impact is evaluated for the whole project irrespectively of the source of funding. Implementation of some of the State budget programmes/projects/activities publicly available, thus included in the impact report where deemed necessary. In terms of the impact evaluation, not all of the projects have been completed in the reporting period and are still under progress; therefore, not all of the defined impact metrics from the framework are available in this report.

Impact tables bellow provide an information on a project's lifetime. Abbreviation "A" corresponds to annual ongoing expenditures, "C"activity completed, "P" – project based expenditures with concrete completion date.



# 3.2 Impact Report per category

# GREEN CATEGORIES

#### Energy Efficiency for Buildings

#### Subcategory: Increasing the energy efficiency of municipal buildings



	Total project	Year		ΤΟΤΛΙ				
EXPENDITURE NAME	expenditure amount incl. EU Funds	2020 Allocated (EUR)	2021 Allocated (EUR)	ALLOCATION (EUR)	Project timeline	IMPACT INDICATOR	IMPACT EVALUATION	
Support for measures reducing						Estimated annual decrease of greenhouse gas emissions (tons of CO2 equivalent)	7196 <sup>2</sup> tons	
primary energy consumption 91 9 and greenhouse gas emissions in municipal buildings	91 934 977,67*	1 225 371.48	362 875.96	1 588 247.44	P (2017–2023)	Additional power produced from renewable energy sources (MW)	1,065 MW	
						Decrease of annual primary energy consumption of public buildings (kWh/year)	31,45 mill. kWh	

\*EU funds 2014–2020 planning period Operational Programme "Growth and Employment", specific objective 4.2.2. "According to the integrated development programme of the municipality, to facilitate the increase of energy efficiency in municipal buildings" and measure 13.1.3.1. "Energy efficiency in municipal infrastructure to improve the economic situation" EU funds (ERDF) EUR 85 481 256, earmarked State budget grants EUR 6 453 721, 67 (covering 218 projects).

The sector of public buildings and other non-residential buildings has a huge potential for energy savings. The EU Funds 2014–2020 Operational Programme "Growth and Employment"<sup>3</sup> foresees implementation of energy efficiency measures, including projects for energy efficiency in municipal buildings. The specific goal set in the EU Fund 2014–2020 Operational Programme is to implement primary energy support,

<sup>2</sup> https://www.esfondi.lv/upload/Planosana/raditaju-pases.7z

<sup>3</sup> https://m.esfondi.lv/upload/Planosana/FMProg\_270115\_OP\_ENG\_2.pdf

promoting the increase of energy efficiency and the reduction of municipal expenses for energy supply.

As of January 17, 2023, there are 126 completed projects (out of 218 approved) for this objective in 38 municipalities and 189 of those have received State budget grants as a State budget co-financing. The already achieved estimated annual decrease of greenhouse gas emissions in all the 120 completed projects (financed by EU and state budget grants) all together is 7196 tons of CO2 equivalent. The achieved annual decrease of primary energy consumption of public buildings is 31, 45 GWh. Additional power produced from renewable energy sources is expected 1,065 MW. All theese three indicators are based on project level data stemming from the buildings' energy certificates.

The decrease of both greenhouse gas emissions and primary energy consumption is estimated by comparing the accordant data included in the energy certificates of the supported buildings before and after the support measures. CO2 emissions before the project begins are used as a baseline. For the 1st and 2nd rounds tons and kWh data is obtained by calculating the difference between values before and after the project. For the 3rd–5th rounds, the total amount is calculated based on the final values available.<sup>4</sup>

Additional power produced from renewable energy resources (RER) derives from the power of RER equipment (indicated in the

technical documentation of the accordant solar panels/batteries, heat pumps) that has been installed in the municipal buildings within the completed 126 projects.

Latvia follows EU Energy Performance of Buildings Directive (2010/31/EU)<sup>5</sup> that provides the main conditions of how buildings are certified and energy efficiency calculations made. Respective EU Directive in transposed at national level by adopting the Law on Energy Efficiency of Buildings of Latvia<sup>6</sup>. Standards for the energy certification in Latvia are set in the Regulations of the Cabinet of Ministers No. 222<sup>7</sup> On the methods of calculating the energy efficiency of buildings and the rules of energy certification of buildings. Energy certification is carried out by independent experts or energy auditors. Energy auditors as certified and supervised by the Association of Heat, Gas and Water Technology Engineers of Latvia.<sup>8</sup>

Detailed description of methodology and calculations for decrease of greenhouse gas emissions, power production from renewable energy sources and decrease of annual primary energy consumption for this budgetary programme can be found in the project indicator passports (in Latvian only).<sup>9</sup>

<sup>4</sup> Data derived from the Cohesion Policy Information Management System (kpvis.cfla.gov.lv)

<sup>5</sup> https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:153:0013:0035:en:PDF

<sup>6</sup> https://likumi.lv/ta/id/253635-eku-energoefektivitates-likums

<sup>7</sup> https://likumi.lv/ta/id/322436-eku-energoefektivitates-aprekina-metodes-un-eku-energosertifikacijas-noteikumi

<sup>8</sup> https://www.lsgutis.lv/

<sup>9</sup> https://www.esfondi.lv/upload/Planosana/raditaju-pases.7z (see files SAM\_4\_2\_2\_Raditaju\_pase\_VARAM\_10032022 and SAM\_13.1.3.\_Raditaju\_Pase\_VARAM\_06042022)

### Renewable Energy

#### Subcategory: National Energy Research Programme

#### UN Sustainable Development Goals



Project/ Expenditure Name		Year		TOTAL				
	2020	2021	2022		Project			
	Allocated (EUR)	Allocated (EUR)	Allocated (EUR) *	(EUR)	timeline	INFACT INDICATOR		
Research in the field of	400.000		4 252 222		P (To Be	Implemented research projects	2 projects (titled: The Integrated MARKAL-EFOM1 System (TIMES) and Computable general equilibrium (CGE) model "alpha" versions)	
renewable energy technologies	498 379   1 403 014	1 403 014	1 350 000	3 251 393	Completed by 31.05.2023)	Implemented publicity measures	1 conference, 2 discussions, 7 internal consultations	
						Prepared scientific publications on defined challenges	1 on planning the country's long- term energy policy	

\* Actual 2022 State budget expenditures from 01.01.2022 till 31.08.22 that has been allocated, unaudited

In order to provide a research base to contribute to the development and implementation of Latvia's long-term national energy policies and to promote safe, environment-friendly and competitive energy supplies, research in the field of renewable energy technologies has been carried out. Two research projects (with the goal of developing The Integrated MARKAL-EFOM1 System (TIMES) and Computable general equilibrium (CGE) in order to reflect on the possible scenarios of the "green transition" in the energy sector as well as within the broader macroeconomic context respectively) have been implemented. In terms of publicity measures, one conference and two discussions have been held and seven internal consultations have been carried out. Those include local and international scientific conferences, discussions and consultations. Furthermore, one scientific publication has been made on planning the countries long-term energy policy.

### Land Use and Living Natural Resource

#### UN Sustainable Development Goals



#### Subcategory: **Promotion and support of sustainable agriculture and forestry practices**

	Total costs	Year		TOTAL				
	incl EU	2020	2021		Project	IMPACT		
NAME	Funds	Allocated (EUR)	Allocated (EUR)	(EUR)	timeline	INDICATORS		
Support for organic farming	60 797 117	4 420 965.15	4 698 602.40	9 119 567.55	A*	Number of organic farms supported and supported organic area (ha)	2020: 3744 organic farms; 254 468 ha organic area. 2021: 4033 organic farms; 292 327 ha organic area.	
Agricultural and rural development	0	1 892 423.22	1 929 956.17	3 822 379.39	A	Number of beneficiaries	5 State and research institutes; 10 organizations; more than 500 beneficiaries (promotion of participation in food quality schemes); Latvian Rural Advisory and Training Centre (improvement of vocational educational programmes).(2021)	

\* Payments has been made in accordance with the implementation of the Rural Development Programme 2014–2020 of Latvia (from 2014–2022). From 2023 – implementation of the CAP Strategic plan 2023–2027

The contribution of agriculture to the total volume of GHG emissions in Latvia is relatively large – in 2020 it accounted for 21,5% of the total GHG emissions in the country (not including land, land use change and forestry obligations). Therefore, commitments of implementing organic farming have been supported by the state under Rural Development programme 2014–2020 measure M11 Organic farming and will continue in the planning period until 2027 under the CAP strategic plan. No CO2 measurements are taken at individual farm level, but according to the assessment of RDP measures impacts by the Agro Resources and Economic Institute, the overall estimated reduction in direct and indirect GHG emissions in Latvian organic farming is 62.1 kilotons' of CO2 equivalent per year, which is considered significant.<sup>10</sup>

<sup>10</sup> https://www.arei.lv/sites/arei/files/files/lapas/AIR2019\_LAPnovert%20\_zinojums\_2019.%20%281%29.pdf

To promote and support sustainable agriculture State budget subsidies have been granted for developing crop production which includes the preparation of high-quality seed, testing of selection material to introduce integrated and organic crop production technologies, monitoring of soil quality, conservation of genetically high-quality plant genetic resources of the national significance. Non-governmental organizations receive support each year to develop collaboration by raising capacity of nongovernmental organizations in the field of sustainable agriculture. Participation of primary producers and processors of agricultural products in food quality schemes has been promoted with State budget subsidies every year. Vocational educational programmes have been improved. Every year the Latvian Rural Advisory and Training Centre receives funding and in collaboration with vocational schools improve vocational educational programmes.

		Year						
	incl FU	2020	2021	2022		Project	IMPACT	IMPACT
NAME	NAME Funds Allocated Allocated Allocated (EUR) (EUR) (EUR)*		timeline	INDICATORS	EVALUATION			
State monitoring of forest resources	0	15 016 658	15 156 317	10 018 256	40 191 231	A	Forest area subject to supervision of forest management	2020: 3292 thsd.ha 2021: 3296 thsd.ha 2022: 3299 thsd.ha
National forest monitoring	0	654 000	654 000	0	1 308 000	A	Surface of sample plots where timber resources characterization data are measured	4374 sample plots surveyed and 3078 sample plots measured.
Support for forest expansion and improvement of forest viability	7 500 565	746 188.95	378 895.80	0	1 125 084.75	A**	Supported forest area (ha)for forest owners for improving the resilience and environmental value of forest ecosystems	2020: 12398 ha; 2021: 4698 ha.

\* Actual 2022 State budget expenditures from 01.01.2022 till 31.08.22 that has been allocated, unaudited

\*\* Within the framework of the European Agriculture Fund for Rural Development fund, evaluation activities are carried out according to regulatory acts. Annual figures are not evaluated, but On-going evaluation of the fund activities is ensured. Payments has been made in accordance with the implementation of the Rural Development Programme 2014–2020 of Latvia (from 2014–2022). From 2023 – implementation of the CAP Strategic plan 2023–2027

See more information about State measures in the forestry sector at the case studies section of this report.

#### Subcategory: Reducing and eliminating sources of radiation avoiding risk of soil and groundwater pollution

	Year		TOTAL			
PROJECT/	2020	2021		Project		
EXPENDITURE NAME	Allocated (EUR)	Allocated (EUR)	(EUR)	timeline		INFACT EVALUATION
Maintenance and					Population with reduced risks from radiation in numbers	17 885 people (an average) <sup>11</sup>
safety monitoring works for the non- operational Salaspils nuclear research reactor, built in Soviet times and now	157 770.36	169 531.69	327 302.05	A	Results from radiation level monitoring in groundwater and soil not exceeding "x" year values.	Samples taken for radiation level monitoring are not exceeding 2020 year values: 2020 – 68 samples, 2021 – 74 samples, 2022 (9 months) – 64 samples.
decommissioned and being dismantled					Monitoring report on quality of groundwater and soil and in the building of the reactor	One report has been prepared each year

Latvian Environment, Geology and Meteorology Centre carries out work for management of the Salaspils city nuclear reactor to reduce and eliminate source of radiation avoiding risk of soil and groundwater pollution. Monitoring reports on quality of groundwater and soil and in the building of the reactor are available <u>here</u>.

<sup>11</sup> The Average population in city Salaspils in the last three years of 2020–2022 according to the Official Statistics Portal (Link here) is the baseline

	Total costs incl. EU	Year		TOTAL				
PROJECT/		2020	2021		Project	IMPACT	IMPACT	
EXPENDITURE NAME	AME Funds Allocated Allocated (EUR) (EUR) (EUR)		timeline	INDICATORS	EVALUATION			
Implementation of innovative climate change mitigation measures in management of nutrient-rich organic soils	3 360 948	133 856	128 856	262 712	P (30.06.2023)	Number of innovative climate change mitigation technologies, systems, methods and instruments implemented	16 different climate change mitigation techniques implemented	

Project "Demonstration of climate change mitigation potential of nutrient rich organic soils in Baltic States and Finland" (LIFE OrgBalt, LIFE18 CCM/LV/001158) is being implemented with financial support from the LIFE Programme of the European Union and the state budget co-financing. Allocation include the state budget co-financing part, but the impact is estimated for the whole project irrespectively of the source of funding. The project started in 2019 and is planned to be concluded in 2024.

See more information about **innovative climate change mitigation measures in management of nutrient-rich organic soils** at the case studies section of this report.

#### Terrestrial and Aquatic Biodiversity Conservation

#### Subcategory: Fish resources and stocks

UN Sustainable Development Goals



	Year		TOTAL			
	2020	2021		Project		
NAME	Allocated (EUR)	Allocated (EUR)	(EUR)	timeline	INFACT INDICATON	
Regulation, reproduction and exploration of fish use <sup>12</sup>		1 012 140	2 061 275	A	Number of fish released in natural waterbodies	5,8m (2020); 7,3m (2021)
	1 049 135				Number of scientific recommendations for restocking fish resources, improving habitats and restoring spawning grounds prepared	84 (2020); 86 (2021)
					Number of scientific recommendations for the regulation of fishing and angling prepared	57 (2020); 57 (2021)
Fish fund <sup>13</sup>	913 505	899 401	1 812 906	A	Number of projects implemented	134 (2020); 120 (2021)

This State budget programme on developing the national regulation, reproduction and exploration of fish use envisages operational expenditures for restocking of fish resources, the implementation of the measures of the artificial reproduction plan of fish resources, research on freshwater and migratory fish stocks, as well as for preparing the information, making consultations and providing of scientifically based recommendations, including, but not only, restocking fish resources, improving habitats and restoring spawning grounds.

Additional State budget programme of Fish fund includes expenditures of financing projects for fish resources restocking, research, conservation, control and providing of public information.

<sup>12</sup> The indicators are defined in the Artificial fish resources restocking plan 2022–2024, in the contract between the ministry (MoA of Latvia) and the service provider, as well as constitute a part of the state budget performance indicators.

<sup>13</sup> This impact indicator constitute a part of the state budget performance indicators.

#### Subcategory: Surveillance costs for phytosanitary safety and non-contamination

PROJECT/ EXPENDITURE NAME	Ye	ar	TOTAL			
	2020	2021		Project		
	Allocated (EUR)	Allocated (EUR)	(EUR)	timeline	IN ACT INDICATOR	
Plant health and surveillance of plant circulation	6 091 363 6 02				Plant quarantine organisms, present in Latvia (number of plants)	314 (2020; 2021)
		6 027 941	12 119 304	А	Proportion of farms in which crops are grown according to integrated farming guidelines (%)	46% <sup>15</sup> (2021)
	6 091 363 6 027 941				Area where soil agrochemical research has taken place over a period of five years (% of the total area of Agricultural land)	8,9% <sup>16</sup> (2021)

Surveillance costs for phytosanitary safety and non-contamination provides a surveillance and control system for phytosanitary safety with the purpose to protect the country from outbreaks of plant quarantine organisms and promote the competitiveness of plants and plant products on the international market. Ensured national phytosanitary safety activities include performed inspections and analysed samples. Ensured phytosanitary surveillance of plants and plant products for their export include activities such as issued phytosanitary certificates for export, re-export of plants, and plant

products. Expenditures in this State budget programme also provide a surveillance of the circulation and use of plant protection products, seeds, varieties and fertilizers as well as agronomic mapping of soils. The purpose is to promote sustainable crop production and agricultural land management activities, such as assessments, analysis, inspections in the field of plant protection, fertilization, seed and variety circulation and soil research. The aim of the action is to protect the environment from possible contamination by plant protection products and fertilizers.

<sup>14</sup> The figure represents the actual number of Plant quarantine organisms identified in Latvia .Data source: Ministry of Agriculture by State Plant Protection Service

<sup>15</sup> This figure represents the number of farms in which crops are grown according to integrated farming guidelines and number of farms in which the plant protection products are used professionally.

<sup>16</sup> This figure represents the area of farms in which agrochemical research of soil has taken within period of 5 years and the total area of utilized agricultural land. Data source: Ministry of Agriculture by State Plant Protection Service

#### Subcategory: Support for restrictions in Natura 2000 territories

PROJECT/ EXPENDITURE NAME		Ye	ar	TOTAL			
	incl EU	2020	2021	ALLOCATION (EUR)	Project		
	Funds	Allocated (EUR)	Allocated (EUR)		timeline		
Support for restrictions in Natura 2000 territories	8 522 192	624 548.25	653 780.55	1 278 328.80	A*	Supported forest area – habitat surfaces (ha)	In 2020: 48 302 ha supported forest area and 3180 beneficiaries. (forest owners) In 2021: 49 071 ha supported forest area and 3286 beneficiaries (forest owners)

\* Payments has been made in accordance with the implementation of the Rural Development Programme 2014–2020 of Latvia (from 2014–2022). From 2023 – implementation of the CAP Strategic plan 2023–2027

#### Subcategory: Ensuring the operation of national parks (protected areas)

	Ye	ar	TOTAL				
	2020	2021		Project			
NAME	Allocated (EUR)	Allocated (EUR)	(EUR)	timeline	IMPACT INDICATON	INFACT EVALUATION	
Compensations paid for the damage	996 073	350 549	1 346 622	А	Number of migratory birds protected (number of species) <sup>18</sup>	19	
and migratory species					Area left for feeding and compensated (hectares) <sup>19</sup>	178.71	

<sup>17</sup> Impact in those programmes is measured as a total for both 2020 and 2021

<sup>18 19</sup> species have been determined according to the expert methods based on the Regulations of the Cabinet of Ministers (Link here)

<sup>19</sup> The total area of agriculture land for which the respective compensation is paid is determined by land owner's applications based on the Regulations of the Cabinet of Ministers (Link here)

					Proportion of specially protected nature territories	<b>18</b> % <sup>20</sup>
					Tourism and nature education infrastructure objects maintained and improved in good condition (number)	748
Ensuring the					Nature education classes, events and other activities organized (number).	600
operation of Nature Conservation Agency	5 917 783	6 045 116	11 962 899	A	Target audience reached through awareness-raising events / classes, etc. (number)	20 000
					Surface area of habitats <sup>21</sup> supported in order to attain a better conservation status (ha)	18037 ha
					Number of species in a favourable conservation status	44 <sup>22</sup>

The State budget provides compensations for the damage caused by non-game and migratory species. This is done to ensure protection of the legally protected species (bears, otters, fish-eating birds) as well as migratory bird species (geese, cranes). Compensation for the damage caused by these species are made since other methods for limiting the damage (e.g. hunting) are not allowed. As a result, protection has been ensured of at least 19 bird species: Grey Heron, Great egret, Black-headed gull, Little Gull, Cormorant, Osprey, White-tailed eagle, Graylag Goose, White-fronted Goose, Bean Goose, Pink-footed Goose, Lesser White-fronted Goose, Barnacle Goose, Brent Goose, Canada Goose, Red-breasted Goose, Whooper Swan, Bewick's Swan and Crane. The total compensated area for damage to agricultural land is 178,71 hectares and 2 compensations have been made for damage to aquaculture.

<sup>20</sup> The indicator is set in the Latvian National Development plan 2021–2027 (Link here). Definition and calculations (link here).

<sup>21</sup> Surface area of habitats under supervision of Nature Conservation Agency. Fulfillment in 2020 was 18562ha, in 2021 – 15470ha and in 2022 – 18037 ha.

<sup>22</sup> Data of the country report prepared pursuant to the Article 17 of the Habitats directive 92/43/EEC. Latest report to European Commission submitted in 2019. Next report due in 2025. (link here)

18% of the Latvia territory consists of specially protected nature territories. Therefore, the work of the Nature Conservation Agency (NCA) (<u>link here</u>) is aimed at preserving biological diversity and maintaining specially protected nature territories. The activities of the NCA include also awareness-raising events – informing and educating the society on nature protection issues.

#### Co-financing of projects within LIFE programmes

	Total costs	Year		TOTAL			
PROJECT/	incl. EU	2020	2021		Project		IMPACT
EXPENDITURE NAME	Funds	Allocated (EUR)	Allocated (EUR)	(EUR)	timeline		EVALUATION <sup>23</sup>
S	ubcategory: Pr	eservation of b	iological diversi	ity, maintained s	pecially protec	ted nature territories	
Restoration or increase		241 300	241 300	482 600		Area of different habitats covered in restoration activities (ha)	239 ha
of the natural processes of peat accumulation in the degraded sites ( <u>link</u> <u>here</u> )	1 828 318				С	Scientific publications prepared (number)	2
						Networking, scientific and public awareness building events (number)	20
Developing, optimizing and improving the conservation status of EU priority grasslands in Latvia ( <u>link here</u> )	4 374 118	111 667	0	111 667	C	Priority grassland habitat types restored (number and ha)	5; 504 ha

<sup>23</sup> Impact in these programmes is measured as a total for both 2020 and 2021 and only for the State budget co-financing part

Subcategory: Implementation of complex management activities in order to improve the status of species and habitats and to reduce anthropogenic pressures										
Mitigation of heavy anthropogenic pressures to restore vulnerable coastal habitats of	970 067	362 790	0	362 790	С	Area of implemented restoration activities (ha); Positively affected total habitat area (ha)	255ha; 963 ha			
Piejūra Nature Park ( <u>link</u> <u>here</u> )						Area cleared from invasive alien species (ha)	177 ha			
Improving the conservation status of the protected habitats and contributing to a comprehensive management system of marine protected areas in Latvia ( <u>link here</u> )	4 007 105	0	247 455	247 455	C	Revised descriptions of two marine EU protected habitats stony reefs (1170) and sandbanks (1110) <sup>24</sup> facilitating the easier identification of these habitats in the Eastern Baltic Sea area. Improved monitoring methodology for assessment of qualitative and quantitative changes in the benthic habitats allowing for better quantification of pressures on the benthic	Completed			

<sup>24</sup> EU protected habitats are described by using 2 parameters – name of the habitat and their respective code as listed in the Habitats directive. Therefore, number in the parenthesis are codes of the EU protected habitats

Subcategory: Measures for implementation of the Priority Action Framework 2021–2027											
		-				% of contribution to the implementation of the PAF measures (link here)	50% (planned)				
						References values for terrestrial and freshwater habitat types and species of EU importance ( <u>link</u> <u>here</u> )	59 types and 115 species				
Measures for implementation of the Priority Action Framework (PAF) for 2021–2027	19 484 173	Ο	1 126 561	1 126 561	P (31.12.2028)	Site conservation objectives are legal obligation stemming from the Habitats directive and Each Natura 2000 site should have quantitative and /or qualitative objective against which all management measures or potential impacts has to be compared. Respectively the indicator is "Site conservation objectives". In total there are 326 sites Natura 2000 sites in Latvia. Conservation objectives adjusted and published in the Natura 2000 database and Nature Conservation agency website for all terrestrial Natura 2000 sites in Latvia are planned for December 2024. (link here)	326 objectives to be established till 2024				

Subcategory: Protection of the legally protected species								
Revising and scientifically justifying list of the protected species						New up-to-date threatened species list for Latvia. Number of species being evaluated (link here)	1505	
	1 400 191	0	294 595	294 595	P (31.12.2024)	New up-to-date protected and micro-reserve species lists for Latvia. ( <u>link here</u> )	The list is under development. As of day, the criteria and points for selection and assessment algorithm – completed	
						Data sheets for each threatened species including scientific information, threats, and recommendation. Estimated species that will be included in the data sheet (number)	750–800	

All the henceforth-listed projects are implemented with financial support from the LIFE Programme of the European Union (EU's funding instrument for the environment and climate action) and the state budget co-financing. Allocation includes the State Budget co-financing part, but the impact is estimated for the whole project irrespectively of the source of funding.

# Restoration or increase of the natural processes of peat accumulation in the degraded sites.

Project is aimed at restoration or increase of the natural processes of peat accumulation in the degraded sites. The project raised awareness on the impact of peatland use on climate change. The aim of the expenditures was the implementation of internationally applicable guidelines with recommendations and the implementation of an internationally-applicable handbook on the restoration of degraded mire habitats.

#### Developing, optimizing and improving the conservation status of EU priority grasslands in Latvia.

Project GrassLIFE aims to restore and improve EU priority grasslands and to promote their multiple use in Latvia. The project focuses on developing, optimizing and improving the conservation status of five EU priority grasslands in Latvia. This project also elaborated grassland connectivity model, which will facilitate the planning and implementation of the management and restoration measures for the grassland habitats, as well as designation of the protected areas, if necessary and appropriate.

# Mitigation of heavy anthropogenic pressures to restore vulnerable coastal habitats of Piejūra Nature Park

The conservation status of almost all habitats and species targeted by the Project is unfavourable throughout the country including NP "Piejūra" and was estimated as inadequate or unfavourablebad (including all EU priority habitats). There are a number of short-term and long-term threats identified in NP "Piejūra". The project elaborated the nature management plan for Natura 2000 sites "Piejūra" thus contributing to the further management of the Natura 2000 site (link here).Since the nature park Piejūra is located on shores of Riga gulf and in close proximity of the capital city Riga, this territory faces large influx of tourists especially in summer. Therefore, balancing the nature conservation needs and heavy anthropogenic pressure is essential for securing favorable conservation status for vulnerable coastal habitats.

#### Improving the conservation status of the protected habitats and contributing to a comprehensive management system of marine protected areas in Latvia.

The aim of this project is the implementation of complex management activities in order to improve the conservation status of the protected habitats and contribute to a comprehensive management system of marine protected areas in Latvia. Although there are several new sections elaborated to update the Nature Management Plan, the work on the development of the plan continues. In 2021 a lot of information have been collected and analyzed, for example, on climatic conditions, hydro chemical and hydrological characteristics, minerals in existing protected areas, on the socio-economic situation of the protected area (anthropogenic pressures) and the assessment of the protected area (scenic assessment, assessment of potential threats).

#### Measures for implementation of the Priority Action Framework (PAF) for 2021–2027.

The project will contribute to 50% of the implementation of the PAF measures. Favourable reference values at a national level both for all terrestrial and freshwater habitat types (59) and species (115) of EU importance and site conservation objectives for all terrestrial Natura 2000 sites (in total 326 sites) will be established in the course of the implementation of the project. In line with the project planning, work to set favourable reference values at a national level is to be completed by 2024.

# Revising and scientifically justifying list of the protected species.

The expected impact from this project is a new up-to-date threatened species list for Latvia, a new up-to-date protected and micro-reserve species lists for Latvia. A proposal is to be made for improvement of the national regulation on the use and acquiring of protected species and access to vulnerable species data. Data sheets are to be developed for each threatened species (at least 750800 species), including scientific information, threats, and recommendation. Approximately 1505 species are being evaluated (an exact number will be known when the evaluation is concluded) using IUCN criteria. IUCN criteria has never been used in Latvia before, hence why training seminars were organized for experts of species and prepared various useful materials. The list will be ready in September 2023. Criteria and respective scoring for each of the criteria for the selection and inclusion of species in the new list, including microreserve species, has been developed. The work on this activity has just begun and it is expected to be concluded in 2023 or 2024. In the spring of 2022, the creation of species data sheets was started. A work plan has been created, detailed guidelines for species data sheets and books have been developed, illustrative materials (photographs of species and habitats) are being collected, maps are being developed, etc. After the finalization, data sheets can be considered as Red Data book on Latvian species. Out of 1211 species that are currently evaluated within the framework of activity B.1 and for which preliminary categories are known, 834 species or 69% can be classified as endangered. Therefore, the tentatively mentioned number of 750-800 species has been reached within the project. So far, popular scientific descriptions (drafts) have been prepared for 204 species.

# Sustainable Water Management

#### UN Sustainable Development Goals



#### Subcategory: **Development, construction, operation and maintenance of water and wastewater management systems**

	Total sosts	Year		TOTAL			
		2020	2021		Project		IMPACT
NAME	Funds	Allocated (EUR)	Allocated (EUR)	(EUR)	timeline		EVALUATION
Maintenance of the amelioration cadastre, operation and						Number of waterbodies with improved status due to implemented rehabilitations of watercourses through re-naturalization actions	30 (2020); 20 (2021)
maintenance of State amelioration systems and amelioration systems of State importance	0	3 856 530	4 406 548	8 263 078	A	Surface of flood-resilient floor space, areas where flood risks are reduced;	55080 ha (2020); 0430 ha (2021)
						Length of restored dams and water drains (km)	324 (2020); 179 (2021)
						Number of implemented projects	30 (2020); 20 (2021)
Development, construction, operation and maintenance	0 752.260					Number of waterbodies with improved status due to implemented rehabilitations of watercourses through re-naturalization actions	2
of water and wastewater management systems (Daugava HPP)	0	752 260	752 260	1 504 520	A	Area where flood risks are reduced (ha)	340 ha
						Length of restored dams and water drains (km)	6,2 km
,						Implemented projects (number)	2

Projects to improve the status of water bodies at risk (Within LIFE programme)						Number of water bodies at risk in Latvia addressed by supported projects ( <u>link here</u> )	27
	13 125 783	604 538.34			P (31.12.2027)	Number of water bodies at risk in Latvia in 2022 and in 2027 ( <u>link here</u> )	516
			1 308 603	1 913 141.34		Number of surface water bodies in high/good status in 2022 and 2027 ( <u>link here</u> )	At the moment (2022) in high/good status are 165 river water bodies (34%) and 91 water bodies of lakes (33%). It is foreseen that in 2027 in high/good status will be 335 water bodies of rivers (68%) and 238 water bodies of lakes (86%).
						Volume (m3) and proportion (% of total) of wastewater discharged into environment and complying with the treatment standards (link <u>here</u> )	167,1 m3/ ~95,5% (2020); 167,7 m³/ ~95% (2021);

#### Maintenance of the amelioration cadastre, operation and maintenance of State amelioration systems and amelioration systems of State importance

State budget programme "Maintenance of the amelioration cadastre, operation and maintenance of State amelioration systems and amelioration systems of State importance" includes different environmental benefits. It ensures the operation and maintenance of polder pumping stations, the maintenance and operation of dams and the operation and maintenance of amelioration systems of national significance (water drains). Expenditures under this programme also include maintenance of amelioration cadastre and the maintenance and modernization of ameliorative hydrometric items as well as the maintenance of ameliorative technical documentation storage facilities and the implementation of Latvian river basin management plans to achieve good surface water status.

# Development, construction, operation and maintenance of water and wastewater management systems (Daugava HPP)

There are annual payments for compensating damages caused by the Daugava cascade HES land resources ensures the operation and maintenance of polder pumping stations and the operation and maintenance of dams.

See detailed information about **projects to improve the status of water bodies at risk** at the case studies section of this report.



### **Climate Change Adaptation**

# Subcategory: Infrastructure and resources for climate change adaptation

UN Sustainable Development Goals



	Total contr	Year		TOTAL			
EXPENDITURE	incl. EU	2020 Allocated	2021 Allocated	ALLOCATION	Project timeline	IMPACT INDICATOR	IMPACT EVALUATION
NAME	Funds	(EUR)	(EUR)	(EUR)			
Support for purchase of insurance policies	22 028 557	1 579 741.35	1 724 542.20	3 304 283.55	A**	Number of beneficiaries	2300 (2020 and 2021)
Flood risk prevention in	25 530 339*	104 461.51	284 825.77	389 287.28	P (2017–2023)	Number of inhabitants that benefit from the flood protection measures	174 188 (planned), of which 85 221 already benefited
populated areas						Number of beneficiaries (municipalities)	8 (planned in period 2015–2023), of which 4 already benefited in period 2015–2022
Financing for strengthening banks of the Daugava	0	139 411.18	168 900.02	308 311.20	A	Protected population, reduced negative effects of the affected territory (in numbers)	N/A for 2020 – 2021 Approx. 6 households or population of 12 people (planned in 2023)
hydroelectric station water reservoir	U			555 511.20		Length of territory with engineering- technical solutions introduced (m)	245 m (2020 – 2021) Approx. 380 m (planned in 2023)

\*EU funds 2014–2020 planning period Operational Programme "Growth and Employment", specific objective 5.1.1. "To prevent the threat of flood and coastal erosion risks in urban areas": EU funds (ERDF) EUR 24 299 268, earmarked State budget grants EUR 1 231 071 (10 projects covering 8 municipalities)

\*\*Payments has been made in accordance with the implementation of the Rural Development Programme 2014–2020 of Latvia (from 2014–2022). From 2023 – implementation of the CAP Strategic plan 2023–2027

#### Support for purchase of insurance policies

The farmers received support for purchase of insurance policies. Sown areas are insured mostly against climate risks, and climate risks are more frequent due to climate change (e.g. drought, hail, heavy rain etc.). State budget support is intended to partly cover cost of insurance policies, which cover climate and disease risks of plants and animals.

#### Flood risk prevention in populated areas

The outcome of EU Funds 2014–2020 planning period Operational Programme "Growth and Employment" Specific Objective "To prevent the threat of flood and coastal erosion risks in urban areas" will apply to 10 projects (8 municipalities as beneficiaries of funding) in total. The number of inhabitants benefiting from antiflood measures are expected to be 174 188. Currently there are 6 projects (4 municipalities) completed and 85 221 inhabitants already benefiting from anti-flood measures. Both impact indicators are retrieved from the KPVIS system (kpvis.cfla.gov.lv) and based on project level data stemming.

In those projects new constructions that protect against floods and the reconstructions of existing ones, incorporating naturebased solutions have been created. In some projects the green infrastructure solutions have been implemented.

# Financing for strengthening banks of the Daugava hydroelectric station water reservoir

Bank strengthening takes place in accordance with the LVGMC's methodology for specifically selected coastal areas of the Daugava

HPP reservoirs, evaluating the most critical areas of bank erosion. Regulation of the Cabinet of Ministers (20.12.2016) No.860 "Procedure of the use of the annual budget grant allocated for the financing of the shore strengthening works of the reservoirs of the Daugava hydroelectric power station and the operational expenses of the engineering protection structures of the reservoir of the Riga hydroelectric power station" 5.2. Paragraph states that LVĢMC determines the most suitable way of strengthening the shores of the Daugava HPP reservoirs, the scope of the work to be performed and calculates the necessary costs. Data is obtained from the State Land Service. (Link here)

See detailed information about **strengthening banks of the Daugava** at the case studies section of this report.

### Clean transportation

#### UN Sustainable Development Goals

# 7 AFFORDABLE AND CLEAN ENERGY

# Subcategory: Construction, operation and maintenance of Sustainable Road Transport services

PROJECT/ EXPENDITURE NAMEYearTOTAL Allocated (EUR)Allocated (EUR)Allocated (EUR)(EUR)	Year		TOTAL				
	2020	2021		Project			
	timeline		INFACT EVALUATION				
Maintenance of charging infrastructure for electric vehicles (ETL) ( <u>link here</u> )	348 165	502 566	850 731	P (2020–2027)	Charging stations maintained (number)	70 (2020); 139 <sup>25</sup> (2021)	

The State budget programme include maintenance of charging infrastructure for electric vehicles (ETL). Maintenance costs of National electric vehicle charging network includes costs for electricity, security, equipment maintenance, management and infrastructure monitoring costs and other costs related to ensure uninterrupted operation, thus ensuring that electric vehicle users can charge at a price that works as an incentive to promote electric vehicle popularity (charging costs are lower than those for fossil fuel vehicles).

PROJECT/ EXPENDITURE NAME		Year		TOTAL				
	2020	2021	2021 2022		Project			
	Allocated (EUR)	Allocated (EUR)	Allocated (EUR)*	(EUR)	timeline	IMPACT INDICATON		
Bus transport services	52 019 023	60 578 130	36 004 398	148 601 551.00	A	Passenger turnover in regional bus routes (million pas./km) <sup>26</sup>	695,82 (2020); 594,97 (2021); 502,5 (2022 January – August)	
Rail transport services	18 203 115	20 629 316	9 521 191	48 353 622.00	A	Passenger turnover in regional rail routes (million pas./km) <sup>27</sup>	409,223 (2020); 363,61 (2021); 350,2 (2022 January – August)	

\* Actual 2022 State budget expenditures from 01.01.2022 till 31.08.22 that has been allocated, unaudited

<sup>25 139</sup> is the plan based on research, impact on approximately 693 cars.

<sup>26</sup> Calculations made by CSP (<u>link here</u>)

<sup>27</sup> Calculations made by CSP (link here)

In order to make public transport attractive, promoting the shift from private vehicles, the State budget grants subsidies to passenger carrying companies for unprofitable regional bus and train routes. The purpose of compensation for the loss is to ensure the availability of transport for citizens to get to state, municipal, medical and educational institutions, as well as workplaces. The impact from these subsidies is measured by passenger turnover in regional bus and rail routes (million pas./km<sup>28</sup>).

PROJECT/ EXPENDITURE NAME		Year		TOTAL			
	2020	2021	2022		Project timeline		IMPACT
	Allocated (EUR)	Allocated (EUR)	Allocated (EUR) *	(EUR)			EVALUATION
Financing of public railway infrastructure	23 874 774	23 874 774	21 073 896.75	68 823 444.75		Share of rail passengers in passenger transport <sup>29</sup>	12,9m (2020) 11,2m (2021)
					А	Number of serious railway accidents <sup>30</sup>	9 (2020) 11 (2021)
						Passenger turnover in regional rail routes (million pas./km) <sup>31</sup>	413(2020); 361(2021)

\* Actual 2022 State budget expenditures from 01.01.2022 till 31.08.22 that has been allocated, unaudited

Financing of public railway infrastructure includes the provision of public transport services on regional intercity routes by rail. The state grants support to state joint stock company "Pasažieru vilciens", i.e. the rail service provider and to the state joint stock company "Latvijas Dzelzceļš" – i.e. railway infrastructure manager, to cover the costs of maintaining and renewing the passenger segments.

<sup>28</sup> Passenger kilometer is an indicator of passenger turnover, which is defined as the sum of the distance traveled by all transported passengers or the number of passengers multiplied by the average transportation distance.

<sup>29</sup> The share of rail passengers is the total number of rail passengers.

<sup>30</sup> Serious accidents are defined according to EU legislation. (Data available here)

<sup>31</sup> Calculations made by CSP (link here)

#### Subcategory: Construction, operation and maintenance of Rail Transport services

	Total consta		Year		TOTAL			
EXPENDITURE NAME	incl EU	2020	2021	2022		Project	IMPACT	IMPACT
	Funds	Allocated (EUR)	Allocated (EUR)	Allocated (EUR)*	(EUR)	timeline	INDICATOR	EVALUATION
Rail Baltica	538 000 000	4 535 820.19	9 978 235.99	8 176 770.47	22 690 826.65	P (2022 – 2030)	Length of new European gauge (1435mm) railway connection main line of Rail Baltica in Latvia under construction (km)	Planned 265 km long route in Latvia (until 2030). Project is divided into six sections. In four sections designs are in their Master Design phase while on two sections construction has already started and is ongoing.

\* Actual 2022 State budget expenditures from 01.01.2022 till 31.08.22 that has been allocated, unaudited

See detailed information about **Rail Baltica** at the case studies section of this report.

# Circular Economy

#### UN Sustainable Development Goals



#### Subcategory: Collection, treatment and recycling of municipal waste

Project/ Expenditure Name	Total costs incl. EU Funds	Year 2020 Allocated (EUR)	TOTAL ALLOCATION (EUR)	Project timeline	IMPACT INDICATOR	EXPECTED RESULTS
Support of a pilot project for the manufacturing of building insulation material made of recycled paper and hemp fibre. (Projects of LIFE programme) (link here)	2 942 225	256 000	256 000	P (03.09.2018 – 30.06.2023)	Volume of produced product in Latvia from recycled material (m3/ year or t/year)	A stable production process capable of manufacturing 250 cubic metres per day of paper-hemp building insulation mats (batts), which can supply 7% of the estimated market of mineral wool insulation in Latvia

In the Circular Economy category, support has been provided to a pilot project for the manufacturing of building insulation material made of recycled paper and hemp fibre. The project "Alternative Recycling of Paper Waste and Hemp Fiber Into Innovative Thermal Insulation Materials With Improved Thermal Conductivity" (LIFE\_Phipp, LIFE17 env/lv/000335) is implemented with the financial support of the LIFE programme of the European Union and co-financing from the State budget. The project will demonstrate the environmental benefits and cost effectiveness of a new type of building insulation material made of recycled paper and hemp fibre. This will be manufactured at a pilot facility in Latvia. The new insulation mats are designed to be easy-to-install, structurally sound and with thermal insulation properties comparable to those of mineral wool. Other advantages will include breathability, recyclability

and health safety benefits. The product will be manufactured at about one-third of the cost of pure natural fibre material. It will be displayed in retail building material stores making it widely accessible to individual homeowners.

Pilot facility has been established. Different combination of raw materials (paper, textile wastes, hemp fibre) tested for production and respective analysis performed. The initial results show that properties and qualities of the insulation materials produced in the pilot facility are comparable with those in the regular market. Testing and fine-tuning of the material production will be continued in 2023.

# **SOCIAL CATEGORIES**

#### Affordable Basic infrastructure





#### Subcategory: Expenditures to ensure access to affordable, reliable, sustainable and modern energy for all

Project/ Expenditure name	Year			TOTAL	Desired		
	2020	2021	2022	ALLOCATION	Project	IMPACT INDICATOR	IMPACT EVALUATION
	Allocated (EUR)	Allocated (EUR)	Allocated (EUR)	(EUR)	uneme		
Subsidized final price of electricity for a targeted group of citizens	6 710 000	12 000 000	19 683 280	38 393 280	А	Number of beneficiaries (vulnerable consumers)	146 649

The central government in close cooperation with local municipalities need to provide housing support, which includes the costs of electricity and heating. At the same time, the conditions and targets for energy poverty must be set and seen in conjunction with the conditions and targets for the protection of energy consumers. The Government has created targeted measures to significantly reduce energy poverty. The target population of vulnerable consumers is families with three or more children, families with children with disabilities; persons with category I disability, low-income or poor households. The result of this programme is subsidized final price of electricity for 146 649 vulnerable consumers. The baseline is the monthly average number of vulnerable consumers, who applied manually for the support before ALDIS system was introduced in 2021, which was around 80 000 vulnerable consumers.

The data system (ALDIS) that is operated by Construction State Control Bureau receives data 1) from municipalities regarding poor and low-income persons; 2) from Directorate of Citizenship and Migration Affairs regarding families with 3 or more children; 3) from State Commission of Physicians for Health and Work Capacity Examination regarding families with disabled children and regarding persons with disability Group I; 4) from electricity suppliers regarding all their electricity users. ALDIS combines and analyses the data and provides feedback back to electricity suppliers identifying which of the consumers are the vulnerable consumers. The number of vulnerable consumers varies each month depending on whether they are still compatible with the criteria (impacted by income level, disability, underage children).

Periodic checks of the pay-outs are carried out and controls are made not only about the amounts that has been paid, but also whether and why the pay-outs differ from what has been planned. The Ministry of Economics coordinates with social partners and Construction State Control Bureau to identify what can be improved in the system and amends the corresponding legal acts.

#### Access to essential services: Social Inclusion

#### Subcategory: **Providing minimum income for population groups at risk of poverty**

UN Sustainable Development Goals



PROJECT/ EXPENDITURE NAME	Year 2021 Allocated (EUR)	TOTAL ALLOCATION (EUR)	Project timeline	IMPACT INDICATOR	IMPACT EVALUATION
Minimum income reform	70 673 874	70 673 874	A (From 2021)	Average monthly beneficiaries (i.e number of people) of minimum old-age pension	35 987
				Average monthly beneficiaries(i.e number of people) of minimum disability pension	44 567
				Average monthly beneficiaries(i.e number of people) in case of loss of provider	13 161
				People (i.e number of people) of retirement age and people with disabilities receiving state social security benefit	20 329

Latvian Ministry of Welfare has introduced a minimum income reform for population groups at risk of poverty. The beneficiaries are persons receiving low old-age pensions, persons with disabilities receiving low disability pensions, persons receiving low pensions in case of loss of provider, persons receiving state social security benefit. The expenditure performance is analysed once a year based on 12-month performance indicators. The average monthly beneficiaries data for 2021 is based on the actual number of beneficiaries data from The State Social Insurance Agency.

#### Subcategory: Public transport services

	Year		TOTAL			
Project/ Expenditure Name	2020	2021		Project		
	Allocated (EUR)	Allocated (EUR)	(EUR)	timeline	INFACT INDICATON	
Provision of public transport services for certain passenger groups	18 001 540		33 613 714		Number of passenger carrier companies receiving subsidies for reduced fares	32 (2020); 29 (2021)
		15 612 174		A	Passenger turnover in regional bus routes (million pas./km)	155,46 (2020); 128,36 (2021)
					Passenger turnover in regional rail routes (million pas./km)	54,87 (2020); 50,25 (2021)

This State budget programme includes provision of public transport services (trains and buses) at subsidized fares for certain passenger groups for example. The target population includes preschool children; – persons with a group I or II disability, persons under the age of 18 with a disability and a person accompanying a person with a group I disability or a person under the age of 18 with a disability; orphans and children left without parental care, who are in foster care, guardianship, childcare institutions or study in general and vocational education institutions, as well as universities and colleges until the age of 24; politically repressed persons and members of the national resistance movement; members of large families who use the state-implemented support program "Latvian Honorary Family Certificate" 3+ Family Card. Subsidies are made to passenger carrying companies to compensate reduced fares to certain passenger groups. Number of passengers with fare concessions in 2022 will be larger, i.e. a new category of a fare discount for Ukrainian citizens.

#### Access to essential services: education

UN Sustainable Development Goals



# Subcategory: Improving quality and providing access to essential educational infrastructure programmes and services

	Year			TOTAL	Project			
	2020	2021	2022		timeline	IMPACT		
NAME	Allocated (EUR)	Allocated (EUR)	Allocated (EUR)*	(EUR)		INDICATOR		
Funding for vocational education (teachers' salaries; scholarships; maintenance costs) <sup>32</sup>	662 270	682 056	11 285 973	12 630 299.00	A	Number of beneficiaries	176 (2020 and 2021) 351 (planned result indicator for 2022)	
Funding for higher education (academic staff remuneration; scholarships; maintenance costs) and science <sup>33</sup>	9 924 056	11 020 428	15 651 670	36 596 154.00	A	Number of beneficiaries	2600 (2020 and 2021) 2574 (planned result indicator for 2022)	
Improving technological equipment in general education institutions by remote education initiated by the Covid-19 pandemic.	3 969 724.44	0	0	3 969 724.44	C (2020)	Number of computers provided	6261 computers	

\* Actual 2022 State budget expenditures from 01.01.2022 till 31.08.22 that has been allocated, unaudited

<sup>32</sup> In the annual agreement (on the basis of the contract between Ministry of Agriculture-Latvia University of Life Sciences and Technologies-Malnavas college/Bulduri Technical School) the planned achievable result for the use of budget funds is determined. The performance of the indicators is reported and taken into account when preparing the next year's agreement

<sup>33</sup> In the annual agreement (on the basis of the contract between Ministry of Agriculture-Latvia University of Life Sciences and Technologies-Ministry of Education and Science) the planned achievable result for the use of budget funds is determined. The performance of the indicators is reported and taken into account when preparing the next year's agreement

Funding has been provided for vocational and higher education.

Bulduri Horticultural Secondary School provides training for specialists in the field of bioeconomy, sustainable management of natural resources (horticultural technician, landscape technician). Latvia University of Life Sciences and Technologies is one of the leading universities of science and technologies in the Baltic Sea region, specializing in the sustainable use of natural resources aimed at the enhancement of quality of life for society (agricultural and veterinary sciences, forestry, environmental engineering, and food technologies). They are the leading university in Latvia in the field of bioeconomy. The main beneficiaries are young people after primary school (after 9th grade) or people after high school (after 12th grade) who have chosen to acquire this specific profession.

Detailed information about **improving technological equipment in general education institutions** can be found at the case studies section of this report.

Subcategory: Supply of fresh products supported by accompanying educational measures on: agriculture production, local products, healthy eating habits, environmental issues, food waste reduction etc., promoting healthy eating habits

Project/ Expenditure Name	Total costs incl. EU Funds	Year		TOTAL			
		2020	2021	ALLOCATION (EUR)		IMPACT INDICATOR	IMPACT
		Allocated (EUR)	Allocated (EUR)		Project timeline		EVALUATION
Scheme for supply of fruit, vegetables and milk in educational establishments	7 017 607	2 399 257.25	2 261 980.56	4 661 237.81	A	Number of beneficiaries	264 727 beneficiaries in 2020; 264 551 beneficiaries in 2021

EU scheme (European Agriculture Guaranty Fund) that is cofinanced from the State budget for supply of fruit, vegetables and milk in educational establishments includes the supply of fresh products and promoting healthy eating habits. This scheme is aimed at forming healthy eating habits in an early age by supplying fresh products and educating children on agriculture production, local products, healthy eating habits, environmental issues, food waste reduction etc.

# Case Studies

#### 4.1 State measures in the forestry sector

Forests in Latvia take up 3.435 million hectares of land, or 53% of the country's territory. The Latvian state owns around one-half of the country's forests, while most of the rest of the forest belongs to approximately 135,000 private owners.

The State Forestry Service supervises the management and use of the forest, compliance with the regulatory acts governing hunting, monitors and implements firefighting in the forest, and also participates in the development and implementation of the state forest policy.



Source: Ministry of Agriculture

On the other hand, information, including international scientific based information, on forest resources and forest health for statistical purposes is provided by the Latvian State Forestry Institute Silava.

Every year, Latvian State Forest Research Institute Silava perform a forest statistical inventory, surveying 4,374 sample plots and measuring 3,078 sample plots.

In a five-year cycle, information is obtained from the gathered data about the area of forest lands (by how much it increases or decreases), about changes in the stock of forest stands. Data is collected on damage to forest stands and dead wood, the course of development of forest stands, the state of forest health, the spread of the most dangerous forest pests and diseases, as well as information on the damage caused to forest stands by deer and their population density, and background information on the state of forest biodiversity and its assessment of changes in the country. The information obtained from the national forest monitoring ensures the submission of data and the preparation of results reports at the national and international level.

According to the data of the third cycle of national forest monitoring, forestland occupies 55.6% of Latvia's land area. The largest part of the forestland is occupied by forest stands (3233.4±25.4 thousand ha or 90.1%), and their area has increased insignificantly by 57.5 thousand ha compared to the first cycle ha, which is about 1.8%.



Source: Ministry of Agriculture

Considering the scientifically based information obtained in national forest monitoring, it is possible to develop a climate policy appropriate for the development of the national economy and public interests. By determining economically justified and goal-focused measures to reduce greenhouse gas emissions, by balancing costs and benefits – in the division of energy, agriculture, transport and industry sectors, climate policy goals binding on Latvia can be achieved. Scientific information about the state of forest resources allows planning the development of forestry in the long term.

#### 4.2 Innovative climate change mitigation measures in management of nutrient-rich organic soils

Project "Demonstration of climate change mitigation potential of nutrient rich organic soils in Baltic States and Finland" (LIFE OrgBalt, LIFE18 CCM/LV/001158) is being implemented with financial support from the LIFE Programme of the European Union and the state budget co-financing.

The lack of data on greenhouse gas (GHG) emissions in carbon-rich organic soils in the Baltics and Finland is one of the main reasons for the implementation of the LIFE OrgBalt project. GHG emission measurements at the project demonstration sites are carried out using the GHG measurement methodology developed as part of the project, including the acquisition of additional data on biomass production, weather conditions, soil and water level measurements. Using the climate change mitigation scenario



Figure 1. Taking a gas sample Source: https://www.orgbalt.eu/



Figure 2. Measuring GHG fluxes Source: https://www.orgbalt.eu/

analysis tool developed and tested within the project, the long-term impact of climate change mitigation measures will be modeled. More information on GHG emissions measurement and sampling in agricultural lands available on the OrgBalt website.<sup>34</sup>

<sup>34</sup> https://www.orgbalt.eu/wp-content/uploads/2022/10/LIFE-OrgBalt4th\_measurements\_agricult\_FIN\_19102022.pdf.

The project is expected to improve the knowledge base for the assessment, monitoring, projection and implementation of effective climate change mitigation measures in the management of nutrient rich organic soils. It will also enhance the capacity of national and local authorities to apply the obtained knowledge in practice in the TCM (temperate cool and moist) climate zone. Project started the testing of 16 different climate change mitigation techniques on agriculture and forest lands. Project also contributed to the filling of the knowledge gap regarding the organic soils in Latvia – distribution, their contribution to the climate change etc.

### 4.3 Strengthening banks of the Daugava hydroelectric station water reservoir

Daugava is the largest river in Latvia. There are three water reservoirs in the Daugava and each has a hydroelectric power station (HPP) – Riga, Kegums and Plavinas. Daugava HPP contributes to the intense erosion process of reservoir banks, HPP operation i.e. water level fluctuations, stream, ice activity and wind. Therefore, the bank sections of the Daugava HPP reservoirs are regularly monitored.

Monitoring is made by the Latvian Environment, Geology and Meteorology Centre Ltd (LEGMC). The Center monitors the bank erosion process, analyzes it and carries out banks' strengthening activities of the Daugava HPP (Riga, Kegums and Plavinas) reservoirs. The monitored bank sections are prioritized, which gives the opportunity to choose the next bank section to be protected and the type of strengthening.





Bank erosion process in the town of Koknese Source: LEGMC

Flooding and coastal erosion in Latvia is intensifying and causes dangerous damage to economy activity, society (wellbeing, health, safety) and biodiversity. Therefore, projects tackling adaptation to climate change are implemented integrating best solutions ensuring socio-economic benefits.

Bank fortification in the town of Koknese Source: LEGMC

During the period 2020–2021, bank strengthening was carried out in the town of Koknese, (Plavinas HPP reservoir), in a 245 m long section. The erosion process was influenced by the conditions listed above, and by the fact, that the section of river bank is located in the outer bend of the river course, as well as waves caused by W-SW and SE direction winds with a maximum run length of 5.2 km. Strengthening the bank in this section protects the part of Koknese town and Koknese Evangelical Lutheran church built in 1687.

Currently, there is an on-going procurement for construction work for the next section of the bank to be strengthened in Lielvarde. In this section erosion process is facilitated by the aspects listed above, as well as waves caused by the W-NW and SE direction winds with a maximum

#### 4.4 Rail Baltica

Rail Baltica is a greenfield rail transport infrastructure project. As part of EU's North Sea – Baltic TEN-T core network it will play a crucial role in ensuring the full functioning of the North Sea – Baltic TEN-T Core Network Corridor. Rail Baltica will provide the currently missing cross-border railway link connecting the Baltic states to the rest of the European gauge (1435 mm) rail network, i.e connecting Tallin with the Lithuanian/Polish border. run length of 4 km. The next river bench strengthening is planned to start in 2023 in the territory in the city of Lielvarde. It will protect the property of private owners and will be located in the protection zone of the national cultural and historical monument – castle hill (Dieva kalns). The new bank section will connect the two previously completed bank fortifications. According to the current information, the planned river bench strengthening work zone in the city of Lielvarde will be approximately 380 m long and the cost of the project will be known when the procurement process will be completed. River bank strengthening works by LEGMC so far have been carried out in:

- Prevention of river bank deformation of the protective dam of the pumping station "Tome";
- River bank strengthening works in Lielvarde, Koknese and Kegums.
- Restoration of the reinforcement of the concreting of the underwater part of the Daugmale castle hill;
- Restoration of river bank fortifications in the territory of Daugmale parish.



Visualization of Riga Central multimodal hub, Source : Eiropas Dzelzceļa līnijas publicity photo

Rail Baltica is a new fast, conventional double-track electrified and ERTMS35<sup>35</sup>- equipped railway line with a strong geopolitical significance and consistent with the European Green Deal.

Rail Baltica as far as possible avoids the Natura 2000 protected areas and leaves as little impact as possible on other environmentally sensitive protected areas. Wherever necessary, noise protection barriers will be installed as well as special animal passages (ecoducts) will be built to ensure safe animal migration.

Total granted budget of the Project is 1 486 million EUR with a joint participation of Latvia, Estonia and Lithuania and largely financed by the EU funds, including Connecting Europe Facility (CEF). Latvia state budget co-financing is planned in the amount of around 92 million EUR. The financing received in Latvia so far has been used for planning, design and construction activities.

Rail Baltica will be built according to the most stringent safety requirements and will use the most up-to-date technologies and materials. Railway stations will



Construction works of the Riga Central multimodal hub on 20 July 2022, source: Eiropas Dzelzceļa līnijas publicity photo

represent the latest developments in the area of multimodal passenger terminals connecting conveniently different urban, regional and long-distance services with car and bike parking, shopping and recreative areas. New intermodal freight terminals will be built in each of the Baltic countries to allow for fast and efficient transfer of containerized cargo between different transports modes. The Rail Baltica 265 km long route in Latvia is divided into six sections. In four sections designs are in their Master Design phase while on two sections construction has already started and is ongoing.

In November 2020, the construction on the Riga Central multimodal hub mainline section started. In May 2021, the construction of the Rail Baltica mainline connection with the International Airport

<sup>35</sup> ERTMS- European Rail Traffic Management System

"Riga" section started. In November 2021, the procurement for the construction of ~200 km of the Rail Baltica mainline outside Riga was announced with expected start of construction of the mainline in 2023. Rail Baltica is planned to be completed by 2030.

As the initial stage of the planning process of the Rail Baltica project, an Environmental Impact Assessment was carried out in each country affected, thus fulfilling the national legal requirements. In 2019 a dedicated study was conducted to identify climate change associated risks. Respective reports and other project related documents are available at Rail Baltica web site. The Environmental Impact Assessment made in 2015 has estimated that the public use of European standard gauge railway infrastructure line will contribute CO2 emission savings of 104 791 tons in 2030 and up to 141 368 tons in 2040. The Rail Baltica Global Project Cost Benefit Analysis made on April 30 2017 shows, that for every thousand passengers shift from cars and buses to train, will decrease emission costs by 2 949 EUR. Estimation example is as following<sup>36</sup>:

Passengers	Transport mode	Passengers per transport	Trips needed	Riga–Tallin distance	vkm driven	Rate per vkm	Emmision cost	Emmision cost savings
	Car	1	690	309	213 103	0.01	1 860	
1000	Bus	29	34	309	10 655	0.10	1 089	2 949
	Train	281	4	364	1 295	0.000	0	

Taking into account that underlying economic situation has changed substantially since 2015 and the CO2 savings today would differ as well, the a new Cost Benefit Analysis would be made, but not earlier than in 2023. As soon as the analysis is undertaken, results will be made available.

In terms of the reduction of air pollution in Latvia, the total monetary benefit from the implementation of Rail Baltic project is estimated at around 500 million EUR. As soon as a new assessment is made, the results will be made available.

<sup>36</sup> https://www.railbaltica.org/wp-content/uploads/2017/04/RB\_CBA\_FINAL\_REPORT\_0405.pdf

# 4.5 Projects to improve the status of water bodies at risk

In order to improve the condition of water bodies at risk in Latvia, in 2020, 19 organizations launched a joint project "Implementation of Latvian river basin management plans to achieve a good surface water condition" (LIFE GoodWater IP). The project is implemented with the financial support of the European Union environment and climate programme LIFE and co-financing of State and project associated beneficiaries' budget. Total budget of the project is 14.5 mmEUR, of which the State budget will co-finance 4.3 EUR.

There are 516 waterbodies at risk in Latvia (338 river waterbodies and 178 lake waterbodies) and the biggest problems are caused by pollution with plant nutrients (nitrogen and phosphorus compounds, which respectively cause eutrophication), as well as modifications of the banks and beds of watercourses and water bodies.

The overall aim of LIFE GoodWater IP is to improve the status of water bodies at risk in Latvia by means of the full implementation of the measures laid down in the Daugava, Gauja, Lielupe and Venta River Basin Management Plans (RBMPs).<sup>37</sup>

The start of the project was in 2020 within the 2nd cycle RBMPs (2015–2021) and is planned to be completed in 2027. According to the newest assessment within the 3rd cycle RBMPs (2022–2027), the project is addressing problems improving quality within 27 waterbodies at risk in Latvia. 17 waterbodies at risk will be addressed through direct implementation of the project activities, 10 waterbodies at risk will be addressed through complementary actions.



Figure: Surface Water Quality Map of the Republic of Latvia (developed by LEGMC, 2020. Source: https://goodwater.lv/en/about-project/

<sup>37</sup> https://goodwater.lv/en/about-project/

The aim is to achieve 10% less flooded agricultural and forest areas after green infrastructure activities implementation in pilot areas. The improvement number is calculated using modeling results from flood risk areas, where practical measurements of river bed and water depth were made. Improvement works are planned within pilot territories during reconstruction works of river stretches including cleaning of the river beds, thus potential water level during floods will be lowered. The total area of agricultural and forest lands in the demonstration territories is 102 386 ha, and the planned flooded area after achieving the project goal of – 10% less flooded agricultural and forest areas is 92 147 ha.



Photo: Raunis L. Fībiga, Rāzna S. Reitere, Engure lake I. Balasovs, Lielupe river E. Rubīns

#### 4.6 Supply of equipment for secondary and primary schools in 2020

Remote education in the midst of Covid-19 pandemic accelerated the necessity for modern technological equipment. In order to improve accessibility of technological equipment in general education institutions, thereby reducing the impact of the negative consequences of the Covid-19 crisis on the education sector, Ministry of Education and Science of Latvia acquired computers and passed them to municipalities for free, primarily for children from large families and families classified for social protection. These devices were distributed for children use at home while remote learning progress was taking place. Based on the number of computers per school, number of pupils in 7–12 grade were taken into account. It is foreseen to continue the provision of portable devices for vulnerable groups in 2023 for general education institutions by RRF funding. Within the Framework of Investment 2.3.2.3 of the European Union Renewal Fund "Bridging the digital gap for socially vulnerable learners and educational institutions" until the end of 2023, portable computer equipment, which is primarily intended for learners from socially vulnerable population groups, will be purchased.

When providing support to educational institutions from the state budget program 02.00.00 "Funds for unforeseen cases", the number of pupils in the educational institution was taken into account when determining the number of laptops intended for each general educational institution and special educational institution (as of 1 September 2020 in the 7th–12th grade group). In order to ensure a fair distribution of the number of laptops corresponding to the number of pupils were grouped into 20 groups according to the number of students in these educational institutions.

In general the grouping was done in such a way that each group includes 21 educational institutions, counting the number of pupils in 7th–12th grade group (day training programs as of 1 September 2020). A total of 20 such groups have been created with group numbers (coefficients characterizing the number of students of the institution from 20 (for the group of the largest institutions) to 1 (for the group of the smallest institutions). Since the number of supported educational institutions is greater than 400, the group of educational institutions with the smallest number of students (group with coefficient 1) was increased to 26. Oher educational institutions with less than 20 pupils correspond to coefficient 0 (group of the smallest institutions), and laptops were not allocated to these educational institutions."





Source: Ministry of Education and Science

Number of computers: **6261** 

Approximate number of computers per school in largest institutions: **30** 

Number of municipalities and state cities: **113** 

Number of beneficiary institutions **425** 

Cost for State budget – **3,97 mEUR**