

**PREPARING 2021-2027
PROGRAMMING PERIOD
in Lithuania
PO2 A LOW CARBON AND
GREENER EUROPE**



**Inesis Kiškis
Ministry of Environment
2019-10-18**

LT and SDG

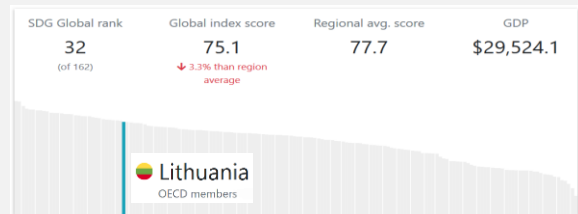


Rating

- SDG achieved
- Challenges remain
- Significant challenges remain
- Major challenges remain
- [information unavailable]

Trend

- ↑ On track to achieve goal by 2030
- ↗ Score moderately increasing, insufficient to attain goal
- ↔ Score stagnating or increasing at less than 50% of required rate
- ↓ Score decreasing
- Trend information unavailable



2 Policy Objective A LOW CARBON AND GREENER EUROPE

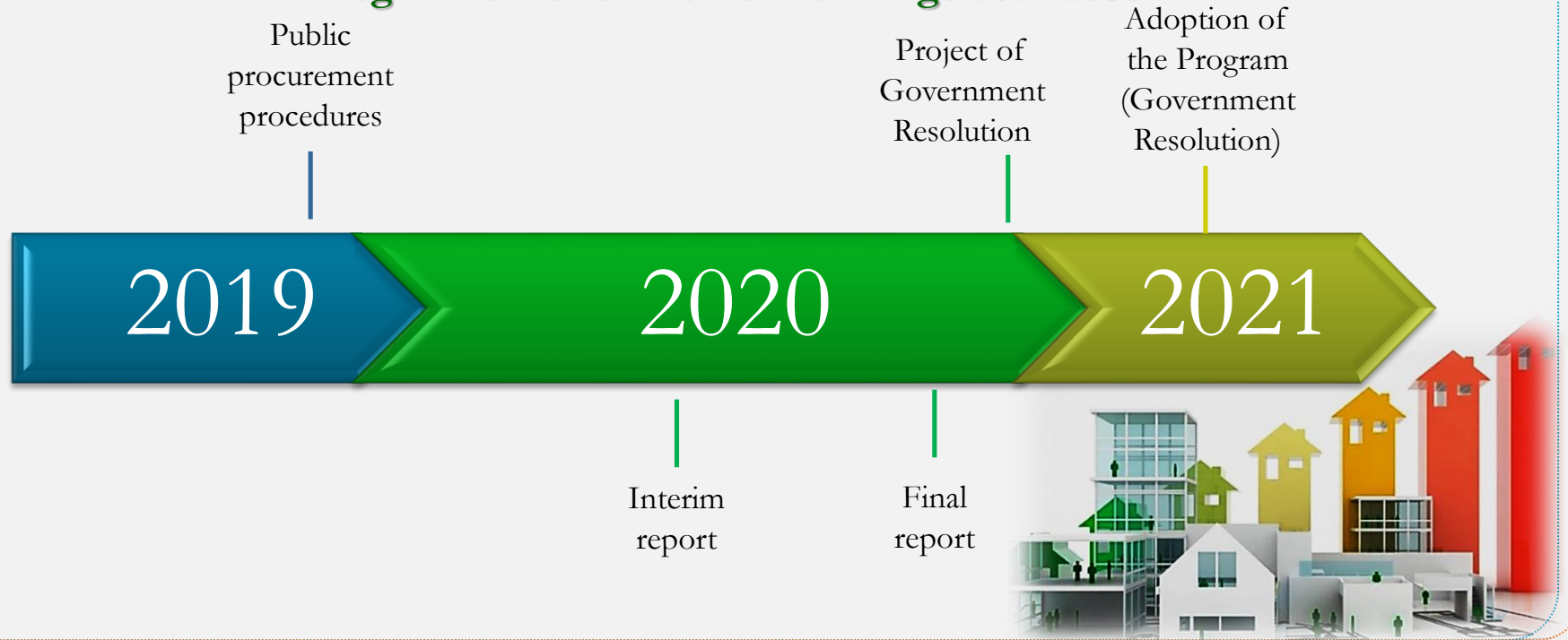
- **SO2.1 promoting energy efficiency measures** ERDF/CF
- **SO2.4 promoting climate change adaptation, risk prevention and disaster resilience** ERDF/CF (ESF+)
- **SO2.5 promoting sustainable water management** ERDF/CF
- **SO2.6 promoting the transition to a circular economy** ERDF/CF (ESF+)
- **SO2.7 enhancing biodiversity, green infrastructure in the urban environment, and reducing pollution** ERDF/CF
- improvement of education and training systems necessary for the adaptation of skills and qualifications, the upskilling of all, including the labour force, the creation of new jobs in sectors related to the environment, climate and energy, and the bio-economy **ESF+**



Enabling condition for Specific Objective 2.1

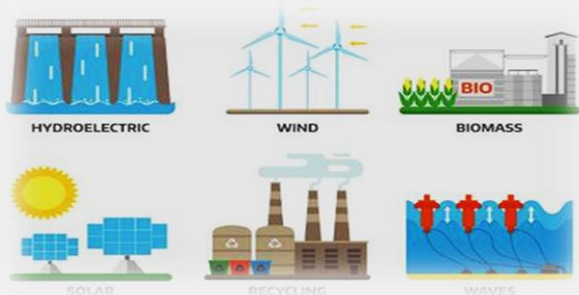
Strategic policy framework to support energy efficiency renovation of residential and non-residential buildings.

Program of renovation of buildings 2021-2030



Enabling condition for SO2.1 and SO2.2

National Energy and Climate Plan 2021-2030



Draft of
Government
Resolution

Adoption of
the Plan
(Government
Resolution)

2019

2020

Draft of NECP
to EC

NECP to EC



MINISTRY OF ENERGY
OF THE REPUBLIC OF LITHUANIA



MINISTRY OF ENVIRONMENT
OF THE REPUBLIC OF LITHUANIA



Target:

- Reducing energy consumption in residual buildings 40% by 2030

Measures:

- Renovation of residential buildings
- Renovation of public buildings
- Renovation of non-residential buildings?
- Promotion, supervision and technical support of renovation of public buildings and multi-apartment buildings (TA)

Financial instruments:

- Guarantees combined with subsidies/grants



Indicators

	Indicators	Measurement unit	Achieved 2014-2018	Projected target value 2014-2023(22)	Target 2021(23)-2030
1.	Number of renovated multi-apartment houses	houses	2093	3748 (2200 2014-2020 ERDF)	4000 (500 a year)
2.	Number of households with improved energy consumption classification	households	59 452	113 570	120 000 (15 000 a year)
3.	Number of renovated public buildings	buildings	0	25	320 (40 a year)
4.	Annual decrease of primary energy consumption	TWh/year	1,9	5,4	4,3
	<i>In residential buildings</i>		<i>1,6</i>	<i>4,6</i>	<i>3,6</i> <i>(0,1 a year)</i> <i>(5,5 2021-2030)</i>
	<i>in public buildings</i>		<i>0,3</i>	<i>0,8?</i>	<i>0,7</i> <i>(0,02 a year)</i>
5.	Total annual reduction of greenhouse gas emissions	kt CO ₂ equivalent	128,7	205,0	224 (28 a year)
	ERDF investments	million €		331 FI 48,8 TA 7,8 prom	360 FI 708 subsidies ⁷

Investment gap €1068 million

- € 1.600 million for multi-apartment houses (€400 000/house)
(€ 320 million for guarantee 1:5)
- € 160 million for public buildings (€500 000/building)
(€ 40 million for guarantee 1:4)
- € ? for non-residential buildings
- € 528 million for 30 % subsidies
- € 180 million for TA subsidies (€40 000/building + €7,2 million
for promotional measures)



Enabling condition for SO2.4

Effective disaster risk management framework

National Risk Assessment and action plans



Updating
Assessment
with forecast

Adoption of the Water
management Program
2021-2029
(Government Resolution)

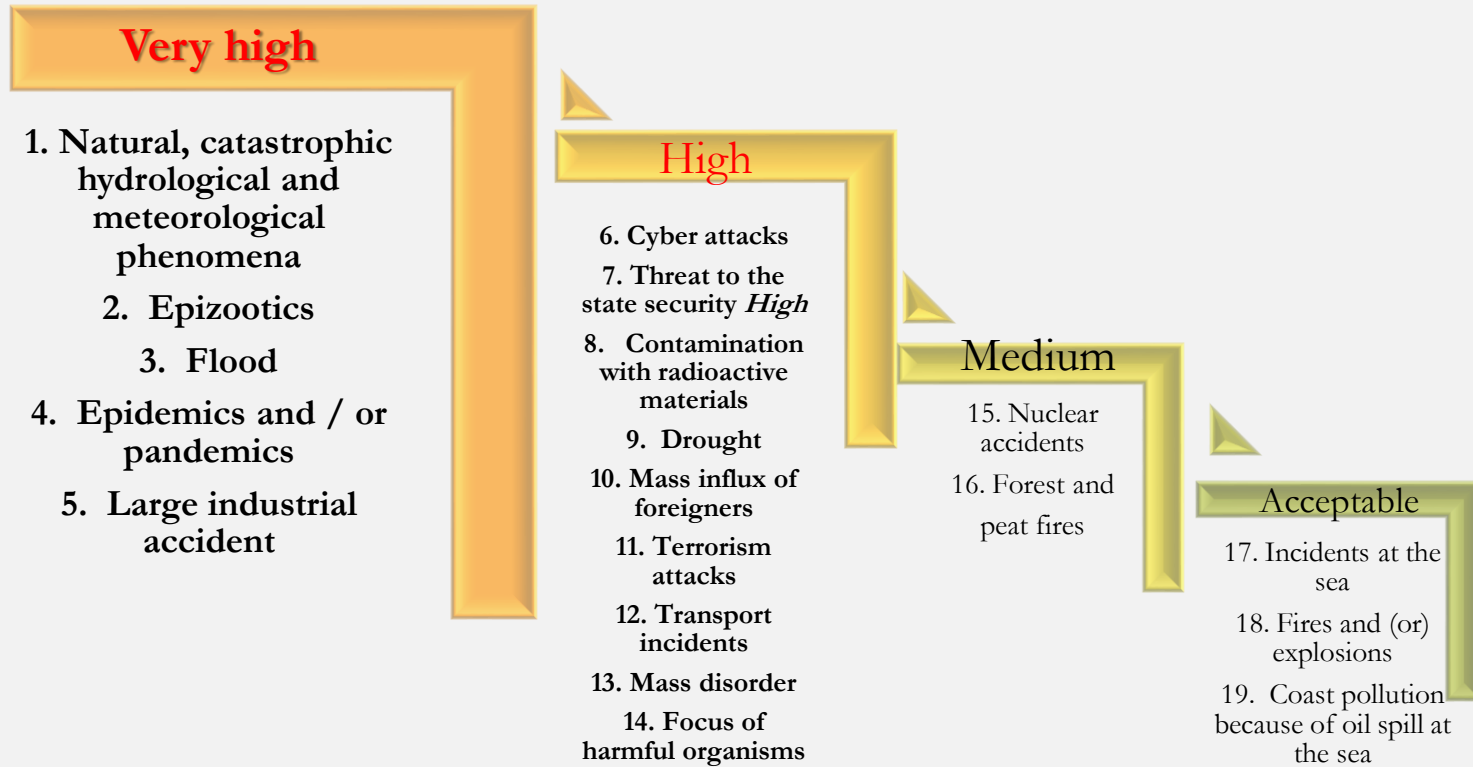


Action plan
(Description of the
disaster prevention,
preparedness and
response measures)

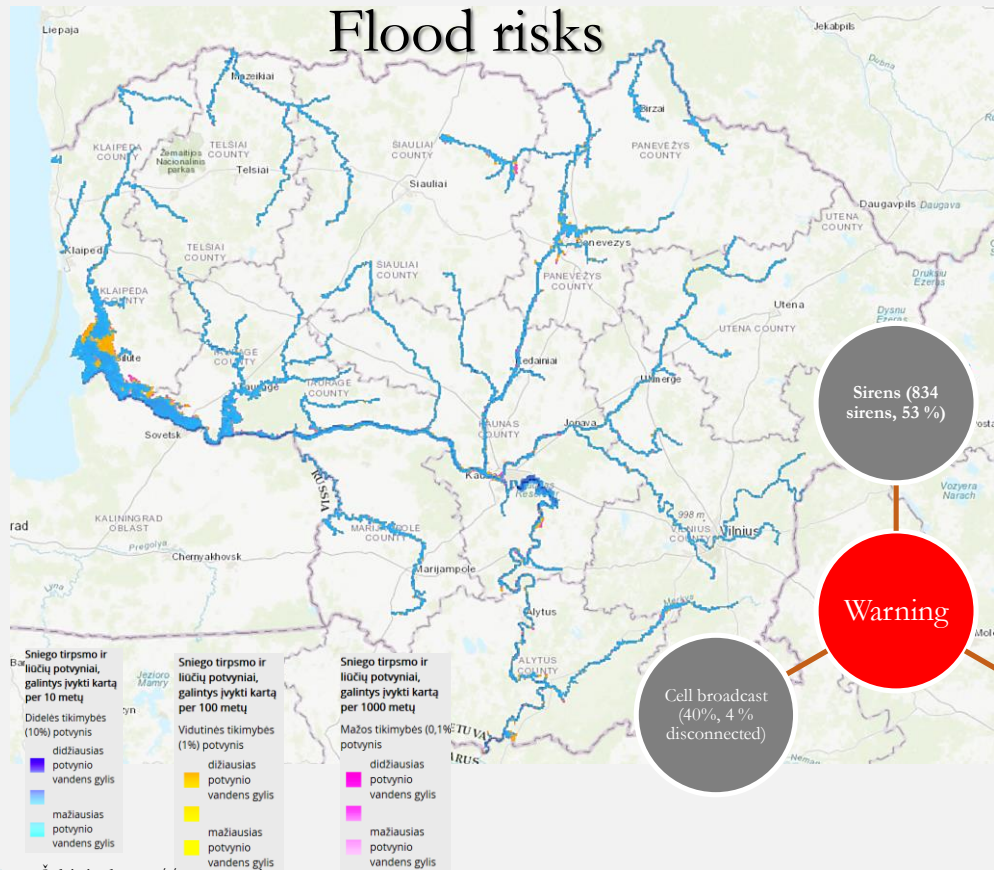
Adoption of the
Action Plan (Flood
and urban flood
protection) plan for the
implementation of Water
management program



Key risks in National Risk Assessment 2018



Flood risks



Šaltinis: <https://www.arcgis.com>

Activities in 2014-2020

Flood risk reduction measures are implemented in the Highest risk territories:

Šilutė, Pagėgiai, Klaipėda, Palanga, Kretinga, Panevėžys, Kėdainiai, Kaunas, Kaišiadorys

New 46 sound sirens with system of management in potentially endangered areas (14 municipalities) (0,64 MEur)



***Intervention
measures***

- **implementation of flood risk reduction measures**
- **implementation of measures to reduce the risk of urban flooding**

2014-2020(23)

- **10.000 population** benefiting from flood protection measures
- 15 M€ CF for flood risk measures
- **6.000 ha surface area** covered by new and/or reconstructed infrastructure for the treatment of collected surface (rain) water
- 79 M€ CF for urban floods

***Needs/Expected
outcomes 2021-2027(30)***

- **8.000 population** benefiting from flood protection measures
- **30.000 ha surface area** covered by new and/or reconstructed infrastructure for treatment of collected storm water



Current situation in rescue system



29 % of fire trucks are older than 20 years



15 % of fire trucks do not possess hydraulic rescue equipment



65 % of rescue units do not possess thermal cameras



42 % of fire ladder trucks are older than 20 years



50 % of fire trucks do not possess floating pumps, which are intended to fire fighting



10 % of residents who are aware of safe behaviour in case of disasters



mobile simulator for search and rescue works
In bad condition



VIDAUS REIKALŲ
MINISTERIJA

Intervention measures

- **Strengthening of rescue systems**
- **Improvement of the hazard warning and strengthen preparedness to respond to disasters**

2014-2020(23)

- New rescue, fire fighting transport and other rescue equipment (3,7 M€ ERDF)
- New 62 rescue modules (16,4 M€ ERDF)
- New 46 sound sirens with system of management in potentially endangered areas (0,64 M€ ERDF)
- -

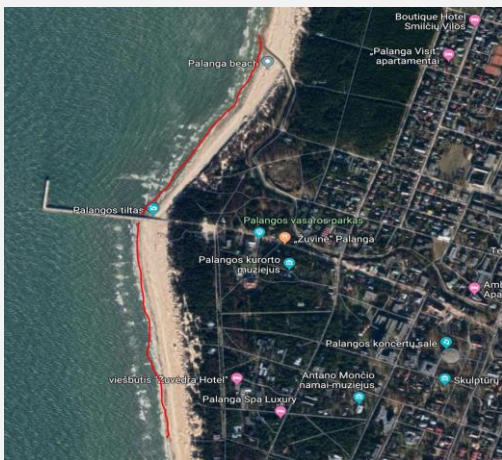
Needs/Expected outcomes 2021-2027(30)

- Reduce the number of fire trucks which are older than 20 years from 29 % to 10 %
- Reduce the number of fire ladder/platforms trucks which are older than 20 years from 42 % to 10 %
- Reduce the number of specialized transport vehicles which are older than 20 years from 43 % iki 10 %
- Purchase 40 new transport vehicles instead of hired (renting) vehicles
- 100 % provision for Fire and Rescue Forces
- Mobile simulator for search and rescue works
- Hazard warning by sound sirens covers 85% of residents and economic entities
- Installed United (Common) Emergency Management Information System
- Internet website for raising public preparedness to respond to disasters (civil protection training, measures for education and training, raising knowing of LT72 platform)



Intervention measures

- **Lithuania Baltic sea Coastline (90,6 km) Management, which aims to reduce the damage caused by climate change and other anthropogenic factors.**



2014-2020(23)

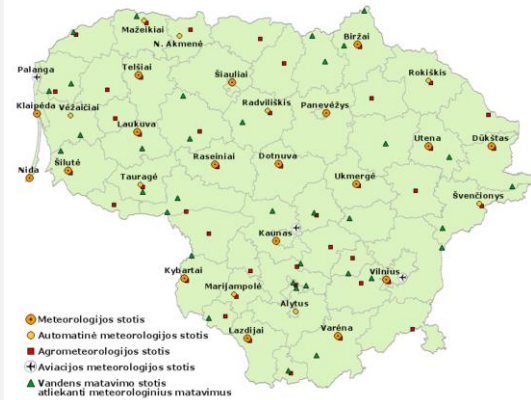
- 400 000 m³ of sand to the stretch of central beaches of Palanga (2 km) 4,6 M€ CF
- Halting of the intense degradation of the Baltic Sea coast on the Curonian Spit, claiming a dune ridge (18 km) 1,9 M€ CF

Needs/Expected outcomes 2021-2027(30)

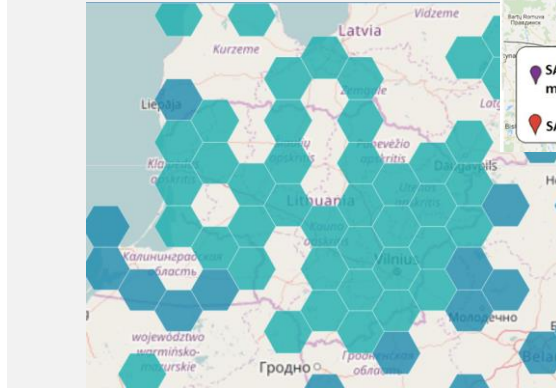
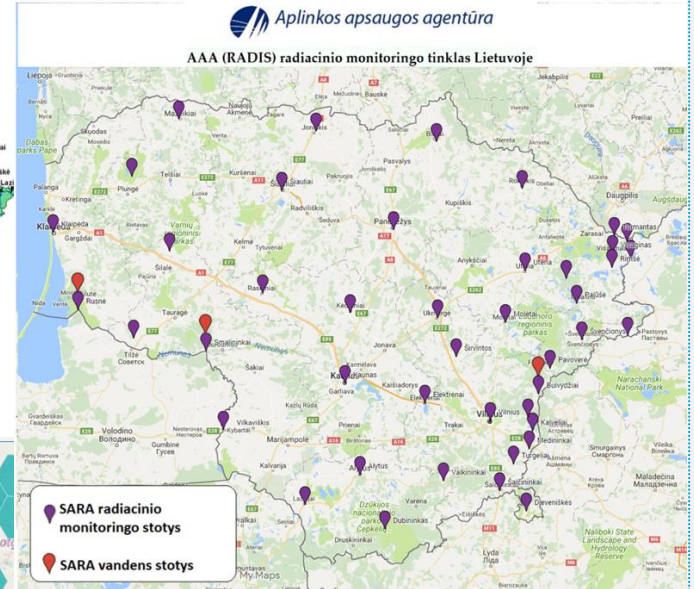
- The Baltic Sea level will rise to 7 cm by 2027
- Destruction of the Lithuanian continental coast will be intensified - beach nourishment with sand, beach dune ridge growth and protection measures is needed (will be identified in Coastal Zone Management Programme for 2021-2030)



Maps of the meteorological, hydrology, agrometeorological and radiation monitoring station network



* Daugiau informacijos apie stotis sužinosite išvedę peles žymeklių ant norimos stoties ženklo.
 Agrometeorologijos stotyse atliekami matavimų sąrašas pateiktas prie agrometeorologijos stočių tinklo žemėlapyje.
 © 2019 © Lietuvos hidrometeorologijos tarnyba bei Aplinkos ministerijos



Intervention measures

- **Optimisation of all kind of capacities necessary for environmental monitoring, assessment and control**

2014-2020(23)

- **199** New or renewed ambient air monitoring and early warning, hydrological and meteorological observation **stations**
- **150** New or renewed equipment kits for environmental monitoring and control
- 23 M€ CF

Needs/Expected outcomes 2021-2027(30)

- **200** new or renewed sets of equipment
- Renewed forest fire warning system
- capacity building of **10.000** specialists in environmental monitoring, control and environmental impact assessment **ESF+**



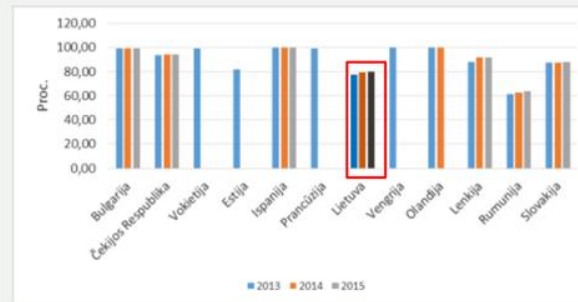
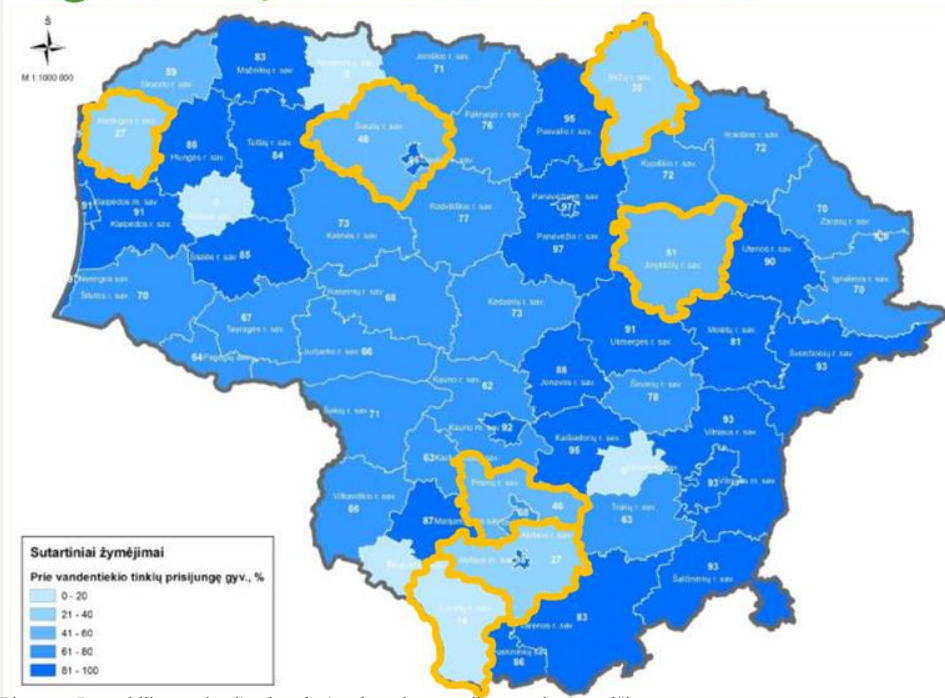
Enabling condition for SO2.5

Updated planning for required investments in water supply and wastewater sectors

Water Management Program and Action plan 2022-2029



Drinking water centrally supply coverage – 81,8% of population



< 15 proc.:

- Lazdijų raj. savivaldybė

< 40 proc.:

- Kretingos raj. savivaldybė
- Biržų raj. savivaldybė
- Alytaus raj. savivaldybė

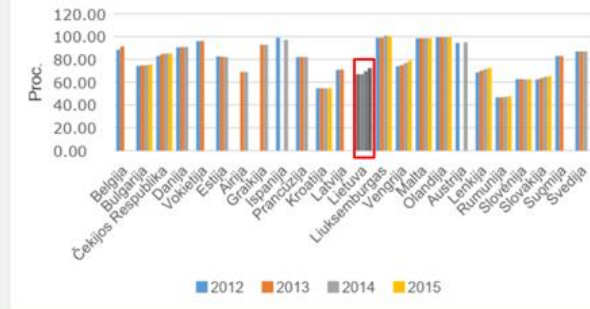
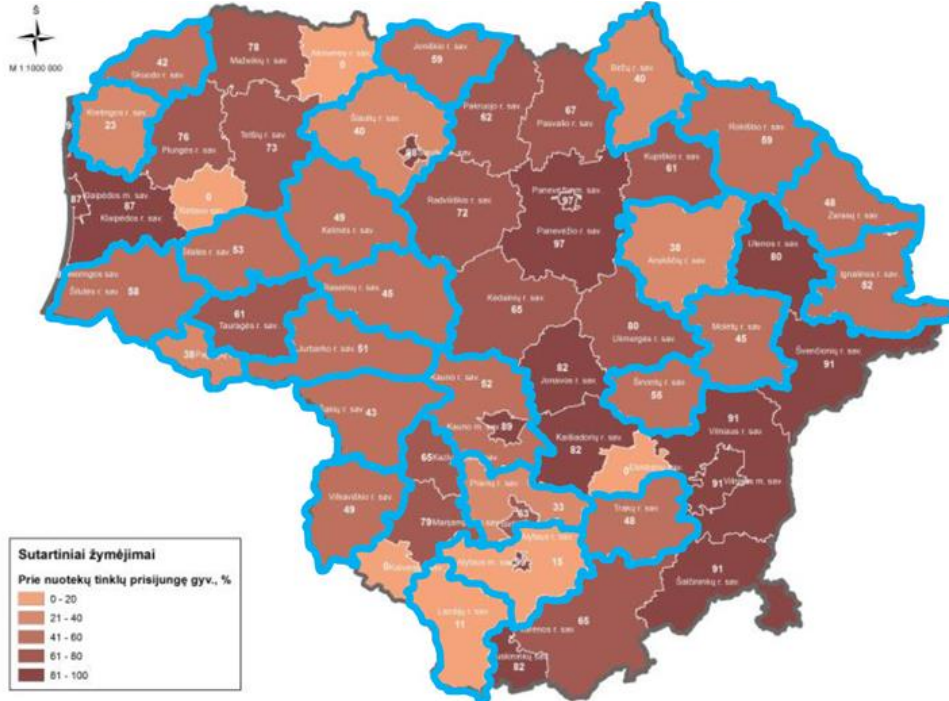
< 60 proc.:

- Šiaulių raj. savivaldybė
- Anykščių raj. savivaldybė
- Prienų raj. savivaldybė
- Skuodo raj. savivaldybė

Šaltinis: Lietuvos Respublikos teritorijos bendrojo plano koncepcijos rengimo medžiaga



Coverage of centrally provided sanitation services – 77,6 of population



< 15 proc.:

- Lazdijų raj. savivaldybė

< 40 proc.:

- Kretingos raj. savivaldybė
- Šiaulių raj. savivaldybė
- Anykščių raj. savivaldybė
- Prienų raj. savivaldybė
- Biržų raj. savivaldybė
- Alytaus raj. savivaldybė
- Pagėgių savivaldybė

< 60 proc.:

- 16 savivaldybių (Šilutės, Rokiškio, Kauno, Vilkaviškio, Raseinių, Jurbarko, Šakių, Šilalės, Kelmės, Joniškio, Molėtų, Širvintų, Zarasų, Ignalinos ir Skuodo rajonų bei Trakų)



Remaining Challenges

- To comply fully with UWTTD in part of connecting remaining population to centralized systems
- Addressing drinking water quality issues, especially in smaller agglomerations and settlements within the public water provision areas
- Only half of public water companies (~30 out of 62) are not loss making and are in position to provide reliable and quality services



SO2.5 promoting sustainable water management ERDF/CF (4/6)

Intervention measures

- **Water supply and wastewater treatment**

Overall goal

- **to provide quality and affordable water and sanitation services to all citizens and ensure good status of water bodies**

2014-2020(23)

- Water management Fund has been established on 2019 and started operations
- Proposals for water sector reform developed by 2020
- All WWTPs will be UWWTD compliant by end of funding period
- 62 000 new population will be connected to wastewater collection networks
- 32 000 new population will be connected to drinking water supply networks
- 301,9 M€ CF

Needs/Expected outcomes 2021-2027(30)

- To provide the quality **drinking water** services to additional **100 000** inhabitants, as per requirements of DWD
- To provide **sanitation services to 200 000** inhabitants in agglomerations smaller than 2000 p.e.- to reduce regional disparities and mitigate pollution affecting the status of water bodies;
- To reform entire water sector in order to improve quality, coverage, operational efficiency and affordability of water and sanitation services;
- Funding via Water Fund by means of soft loans/guarantees to the reformed water companies
- 300 M€ for financial instruments (loans, guarantees or capital investment)



Map of ecological status of rivers, lakes and ponds

Legenda

Upiū ekoloģinās būklēs klasēs

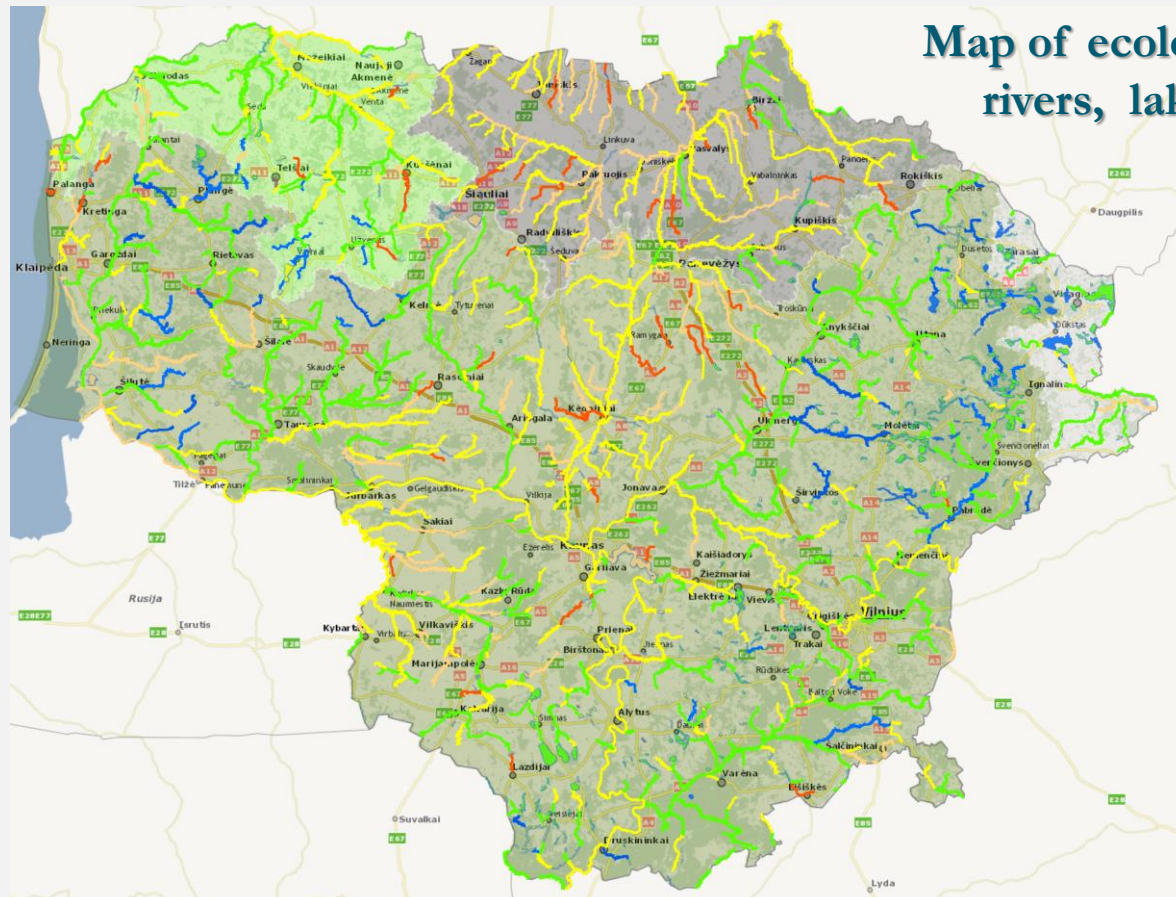
- Labai gera
- Gera
- Vidutinē
- Blogo
- Labai blogo

Ežerū ekoloģinās būklēs klasēs

- ▭ Labai gera
- ▭ Gera
- ▭ Vidutinē
- ▭ Blogo
- ▭ Labai blogo

Upiū baseinū rajoni

- ▭ Nemuno UBR
- ▭ Ventos UBR
- ▭ Lielupēs UBR
- ▭ Daugavas UBR



***Intervention
measures***

- **Management of water resources, monitoring and improvement of the status of the Baltic Sea, the Curonian Lagoon and other water bodies**

2014-2020(23)

- Remediation measures applied to **80 water bodies**
- **53 %** (2015) surface waters (total 1185) in good status
- 11,7 M€ CF

***Needs/Expected
outcomes 2021-2027(30)***

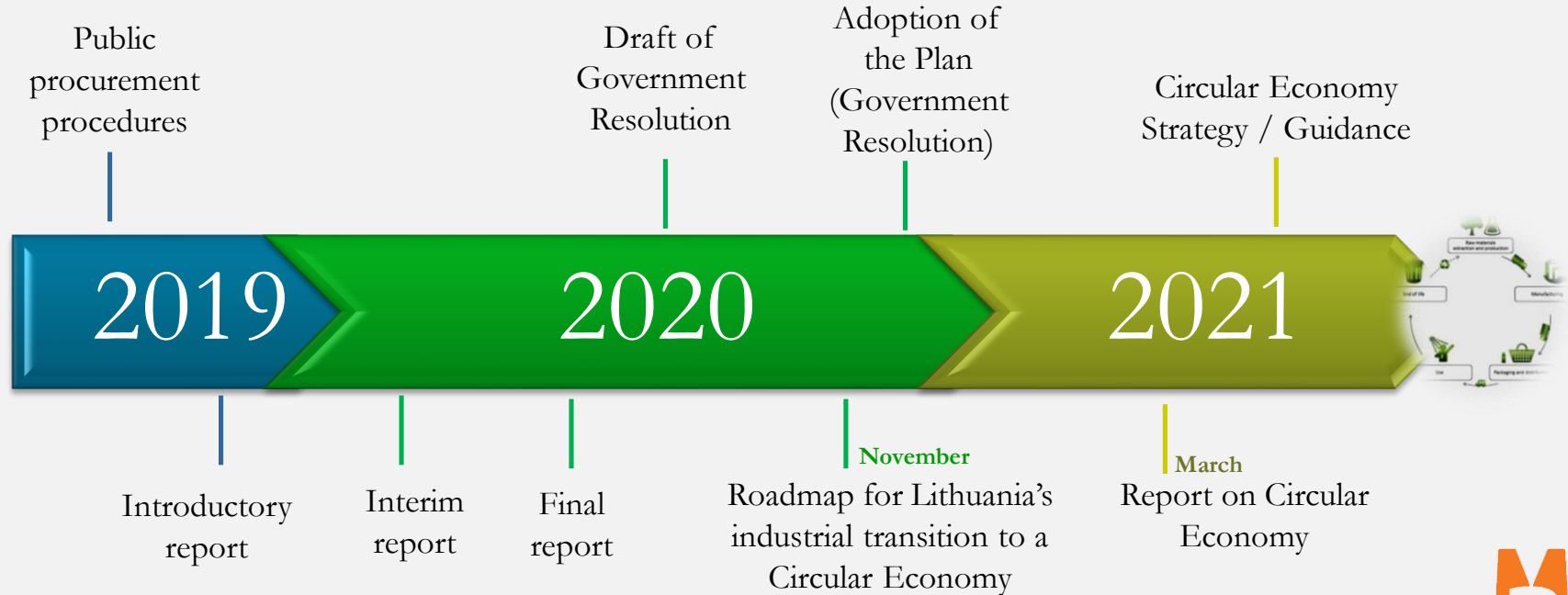
- Remediation measures applied to at least **Min 200 water bodies**
- **100 %** ? surface waters (total 1185) in good status



Enabling condition for SO2.6

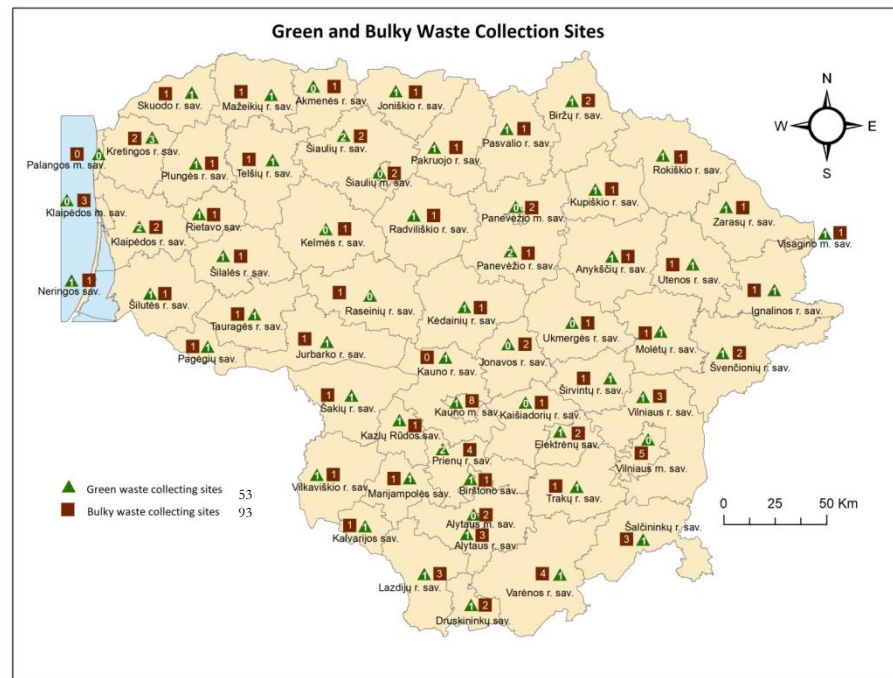
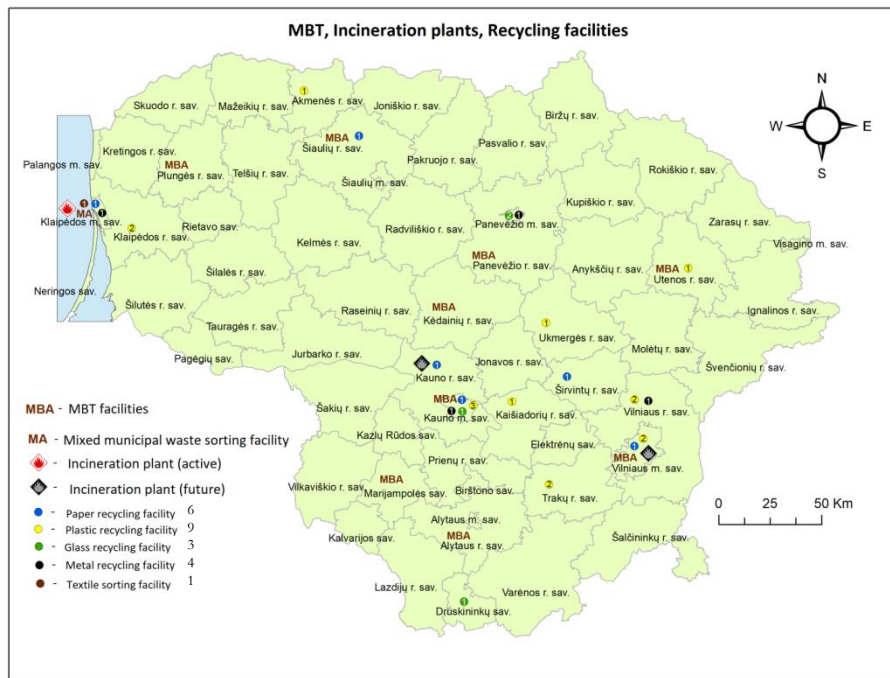
Waste management plan(s) are in place in accordance with Article 28 of Directive 2008/98/EC as amended by Directive EU 2018/851/EC and covering the entire territory of the Member State

The National Waste Prevention and Management Plan



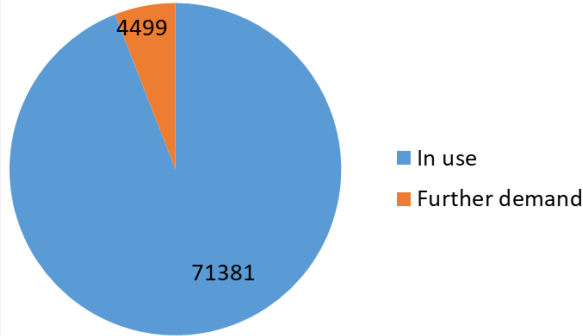
SO2.6 promoting the transition to a circular economy ERDF/CF (1/6)

Waste Management Infrastructure

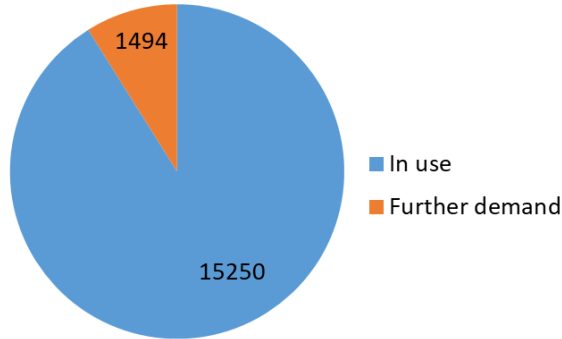


Containers for secondary raw materials

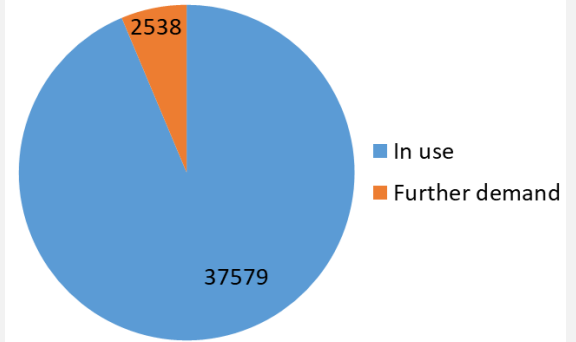
Containers for glass waste



Containers for paper waste



Containers for plastic waste



GLASS



PAPER



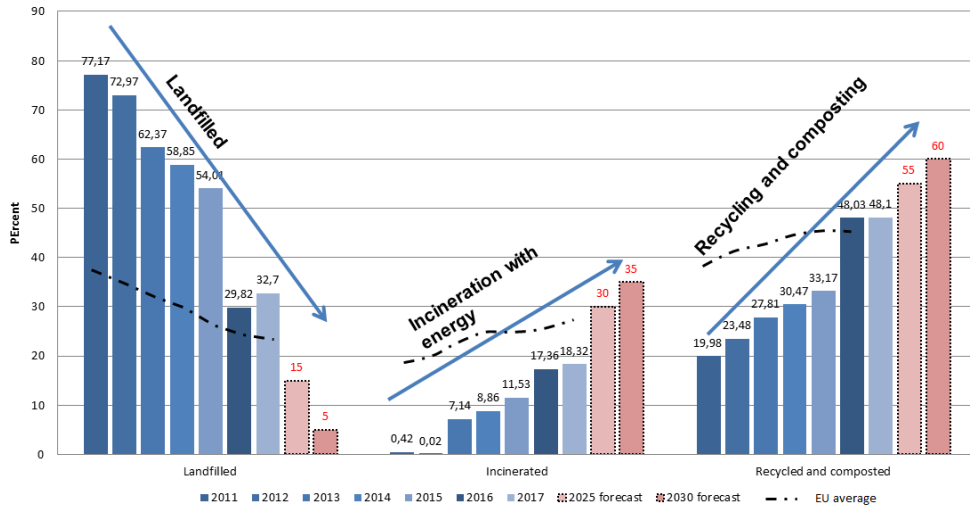
PLASTIC



Current situation and challenges

Generation of Municipal waste, kg per capita		
Year	LT	EU
2012	445	486
2013	433	479
2014	433	478
2015	448	480
2016	444	486
2017	455	486

Municipal waste management



Challenges

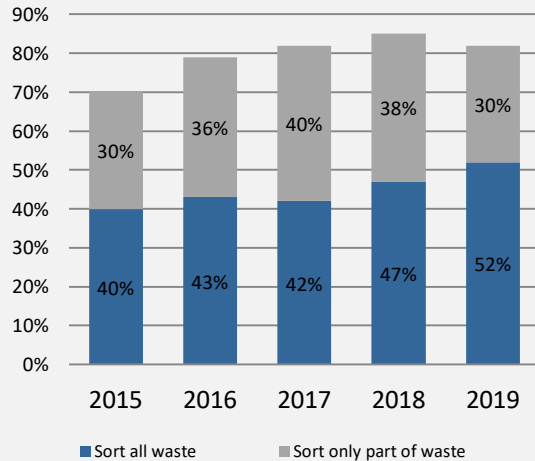
- Reduce waste generation per capita
- Increase preparation for re-use and recycling of municipal waste (60 % by 2030);
- Reduce the amount of municipal waste landfilled (10 % or less of the total amount of municipal waste generated)



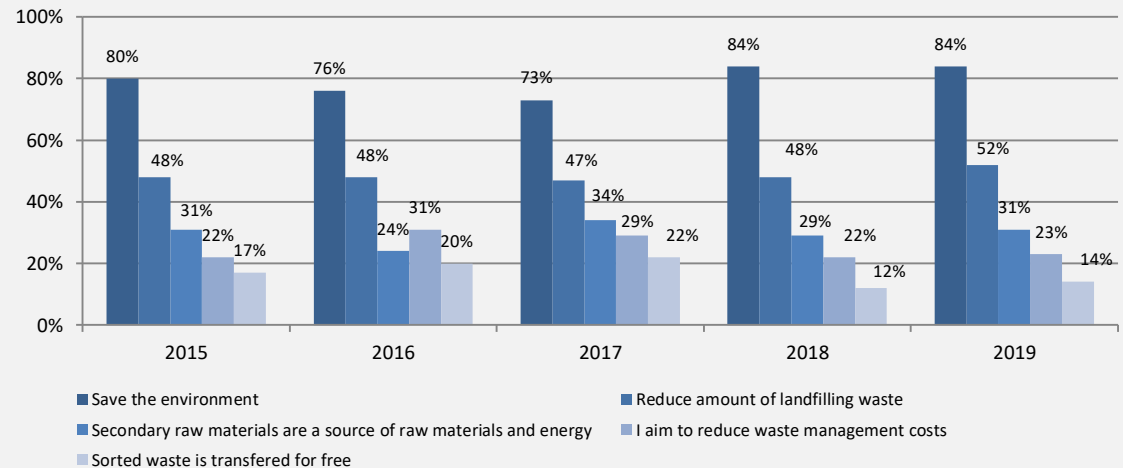
SO2.6 promoting the transition to a circular economy ERDF/CF (4/6)

Raising public awareness, changing behavior, promoting responsible consumption

Household sorting waste at the source *, %



Factors that encourage household sorting *, %

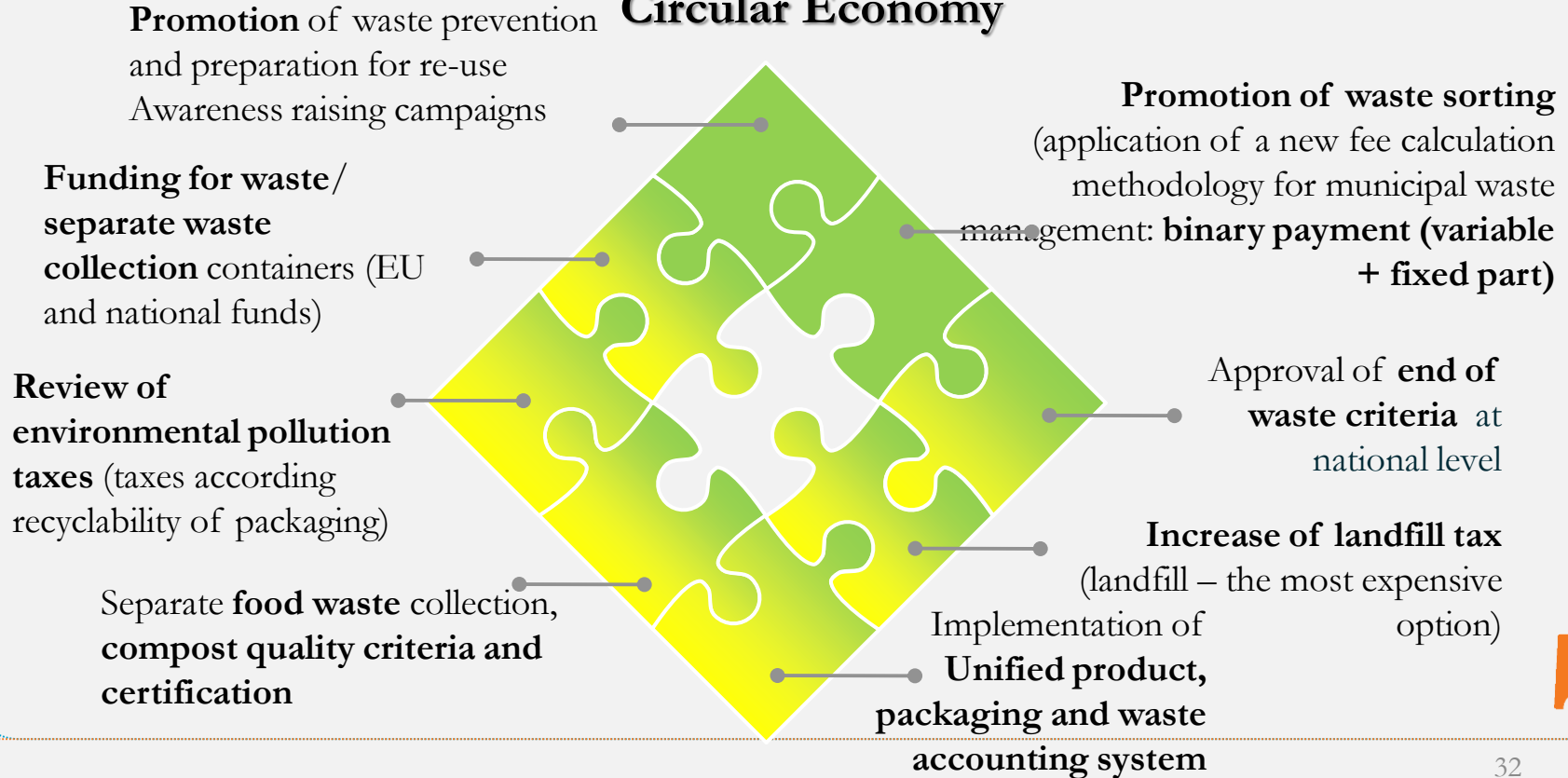


Various social projects, promotions, campaigns, events, initiatives to raise public awareness, waste prevention and proper waste sorting at the source



SO2.6 promoting the transition to a circular economy ERDF/CF (5/6)

Measures/Steps Towards the Shift to the Circular Economy



SO2.6 promoting the transition to a circular economy ERDF/CF (6/6)

Aim: Shifting towards highest steps of the waste hierarchy

Intervention measures

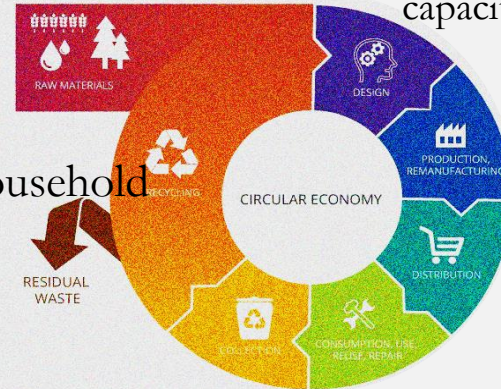
- Investments in separate collection of (paper, metal, plastic, glass, bio-waste, textile waste and hazardous waste produced by households
- Investments in preparation for re-use and recycling
- Waste prevention, raising public awareness

2014-2020(23)

- **170 000 t/year** additional/improved municipal waste separate collection capacity
- **20 000 t/year** additional/improved capacity of food waste treatment
- 91,6 M€ CF
- **52 % of household separate all waste**

Needs/Expected outcomes 2021-2027(30)

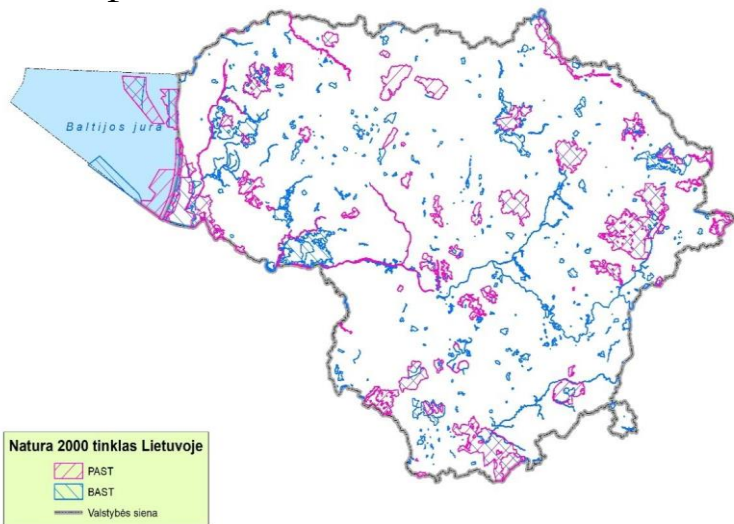
- Waste management targets achieved (2030 / 2035)
- Increased preparation for re-use and recycling of different waste flows, including household hazardous waste
- Increased textile waste recycling capacities
- **90 % of household separating all waste**
- Increased public awareness
- Reduced amount of waste generated



Goal for Biodiversity and Landscape

To halt biodiversity loss, to ensure stable functioning of the Nature Frame and an uninterrupted provision of ecosystem services

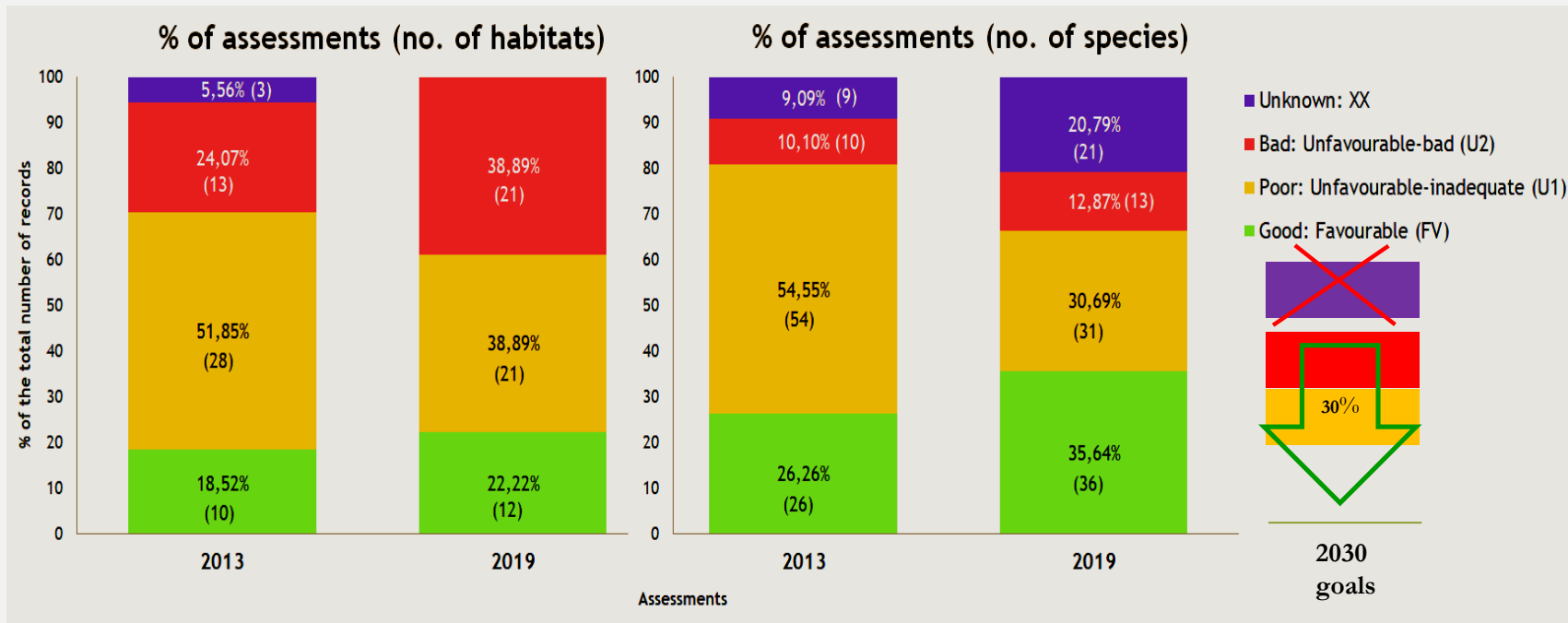
Map of the Natura 2000 network



Nature frame of Lithuania



Conservation status of habitats and species



Intervention measures

- Conservation of native species, habitats and genetic resources, restoration of populations of protected species and control of invasive species
- Strengthening of functions of Nature Frame and ecosystem services, and implementation of nature based solutions in urban areas
- Development of methods for the conservation status surveillance and research

2014-2020(23)

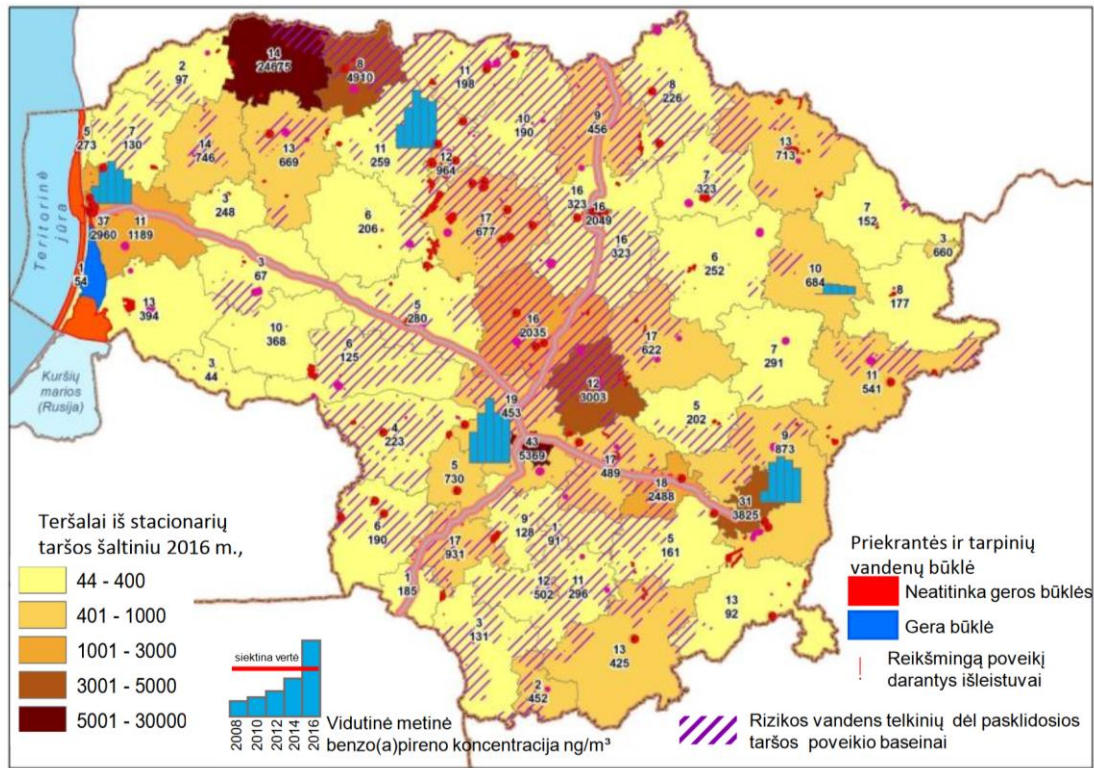
- Surface area of habitats supported by investment in order to maintain or restore favorable conservation status, 1 150 ha
- Management plans for 322 Natura 2000 sites developed
- Preserved, managed or restored landscape units of various levels, 35 landscape units

Needs/Expected outcomes 2021-2027(30)

- Surface area of habitats supported by investment in order to maintain or restore favorable conservation status, up to 37 000 ha
- Actual conservation status of 52 species determined.
- Populations of at least 2 small and fragmented species restored
- Management plans for for at least 150 Natura 2000 sites developed
- Development of green infrastructure in urban areas supported, 320 ha
- Development of innovative methods for control and eradication of invasive alien species



Environmental pollution and condition



- Ambient air pollution is most intensive in the largest cities, where economic activity is highest, as well as in Jonava, Mažeikiai and Akmenė districts
- Road transport is the largest source of nitrogen oxide emissions, with the highest concentrations of this pollutant in urban areas and at the most intense road sections
- Particulate pollution is particularly acute in cities during the cold seasons



Intervention measures

- **Restoration of damaged and contaminated sites**
- **Implementation of municipal air quality management measures**

2014-2020(23)

- **30 ha surface area of remediated land**
- **50 cleaned-up and remediated of past contaminated sites**
- **17,3 M€ CF**
- **30 Street cleaning equipment in 5 towns**

Needs/Expected outcomes 2021-2027(30)

- **50 ha surface area of remediated land**
- **100 cleaned-up and remediated of past contaminated sites**
- **>10 towns population benefiting from measures for air quality**



Improvement of education and training systems necessary for the adaptation of skills and qualifications, the upskilling of all, including the labour force, the creation of new jobs in sectors related to the environment, climate and energy, and the bioeconomy (1/2)

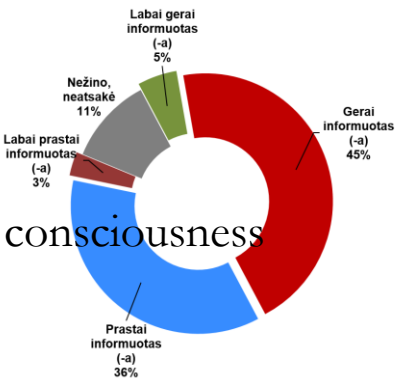
ESF+

Awareness ≠ Consciousness

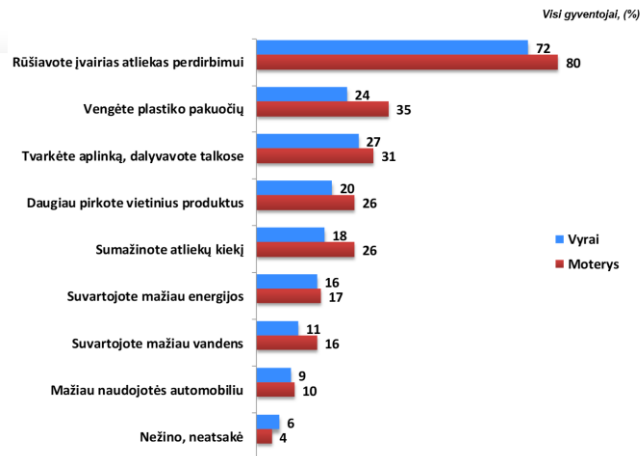
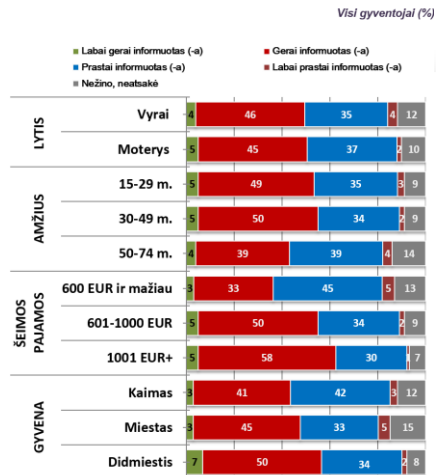
50 proc.

28 proc.

JŪSŲ MANYMU, KIEK JŪS APSKRITAI ESATE INFORMUOTAS (-A) APIE DALYKUS, SUSIJUSIUS SU APLINKA?



KORTELĖJE PATEIKTI BŪDAI, KAIP GYVENTOJAI GALI PRISIDĖTI PRIE APLINKOS APSAUGOS. KĄ IŠ PATEIKTO SĄRAŠO JŪS (JŪSŲ NAMŲ ŪKIS) DARĖTE (DARĖ) PER PASKUTINIUS 6 MĖNESIUS?



BALTIJOS TYRIMAI

The Gallup Organization

Lietuvos gyventojų apklausa, 2018 m. spalio - lapkritis

BALTIJOS TYRIMAI

The Gallup Organization

Lietuvos gyventojų apklausa, 2018 m. spalio - lapkritis



Improvement of education and training systems necessary for the adaptation of skills and qualifications, the upskilling of all, including the labour force, the creation of new jobs in sectors related to the environment, climate and energy, and the bioeconomy (2/2)

ESF+

Intervention measures

- **Implementation of public information, education and awareness-raising measures on different environmental issues**

2014-2020(23)

- **60 % of population are in good environmental awareness**
- **35 % of population contributing to environmental protection (consciousness)**
- **6,6 M€ ERDF**

Needs/Expected outcomes 2021- 2027(30)

- **80 % of population are in good environmental awareness**
- **50 % of population contributing to environmental protection (consciousness)**



Thank you for your patience!

