## Lithuania Submitted on 23 July 2021<sup>1</sup> Summary of main findings

Metric	Value	Further information	n		
Overall goal of the LTS	Climate neutrality by 2050	• The goal includes all the main greenhouse gases.			
		<ul> <li>The goal covers all sectors, with the exclusion of international maritime and aviation.</li> </ul>			
		<ul> <li>Up to 20% reductions from the LULUCF sector and carbon capture and use (CCU) technologies.<sup>2</sup></li> </ul>			
		<ul> <li>Shifting economic sectors towards innovative, low-emission and environmentally friendly technologies and renewable energy sources.</li> </ul>			
Scenarios presented in the LTS	<ul> <li>The LTS does not provide information on the modelling scenarios or assumptions for reaching the climate neutrality goal.</li> </ul>				
		Emission reduction	n reductions by sector:		
	Modelling results: GHG emission reductions by 2050 compared to 1990 (including removals): -100% Targets: The LTS includes indicative milestones for 2040 and 2050.	% compared to 2005 GHG emissions	2030	2050	
		Power	-26%	Abandon fossil fuels by 2040	
		Industry	-19%	Abandon fossil fuels by 2040	
		Transport	-14%	-90%	
		Buildings	n.a.	n.a.	
GHG reductions		Agriculture	-11%	Abandon fossil fuels by 2040	
GHG reductions		Waste	-65%	n.a.	
		LULUCF	-6.5 Mt CO2eq	n.a.	
		Notes: (1) The power and industry sectors consist of companies not covered by the EU ETS (e.g. small combustion plants up to 20 MW) and the sectors using it (households, public, services, construction, fisheries, forestry, etc.). (2) For sectors participating in the EU ETS, the LTS targets by 2030 a 50% reduction of GHG emissions compared to 2005; stop using fossil fuel in energy sector by 2040 and achieve by 2050 a 100% reduction in industrial GHG emissions compared to 2005 by using environmentally safe carbon capture technologies.			
Renewable Energy Sources	Modelling results:	Main drivers and features:			
	Share of renewables in gross final energy consumption in 2050: 90%	<ul> <li>Indicative RES share by sectors in 2050: 90% in transport, 100% in district heating; 100% in electricity generation.</li> </ul>			
		<ul> <li>By 2050, 100% of rail powered by RES trains on local routes.</li> </ul>			
Energy Efficiency	n.a.	Main drivers and features:			
		• By 2050, to achieve at least a final and primary energy intensity 2.4 times lower than 2017.			
		<ul> <li>Energy efficiency implementation measures includes: modernisation of buildings, zero-energy buildings, high-efficiency home heating and</li> </ul>			

<sup>&</sup>lt;sup>1</sup> This is an update of the LTS submitted on 14 January 2020. However, the update appears significantly different from the previous submission both in terms of the structure and content (e.g. aims, milestones and decarbonisation pathways are significantly different for most aspects and sectors), while some aspects of the second submission provide even less information.  $^2$  The emission removals by 2050 does not specify the proportion covered by LULUCF.

Metric	Value	Value Further information			
			cooling, development of clean electrified vehicles, high-energy industrial and household appliances.		
Estimated investment needs	n.a.		<ul> <li>No detailed information is provided for the total estimated investment needs.</li> <li>The LTS mentions funding policy foreseen for research, experimental development and innovation. Planned spending 2% of GDP on R&amp;D&amp;I activities by 2030, increasing to 4% of GDP by 2040.</li> </ul>		
Socio-economic impacts of transition	n.a.		<ul> <li>Impact on GDP based on the NECP (i.e. 1.72% and 0.23% increase in GDP over the period 2021-2030 and 2031-2040, respectively) compared to no measures.</li> <li>The implementation of the measures in the NECP is expected to increase employment in Lithuania on average by 1.56% over the period 2021-2030.</li> <li>The LTS estimates that the proposed measures will improve air quality (e.g. reducing emissions footprint of urbanised areas by one third by 2030).</li> </ul>		
Adaptation Policies and Measures	Yes	The LTS describes policies and measures for adaptation to climate change.			
Public consultation	No	<ul> <li>The LTS does not provide information about public consultation.</li> </ul>			
Legal status of the LTS and targets	No	<ul> <li>The LTS has been adopted by the Lithuanian Parliament by the Resolution No. XIV-490 of 30 June 2021 on Approval of a National Climate Change Governance Agenda.</li> <li>The LTS does not specify if the goal of achieving climate neutrality by 2050 is legally binding.</li> </ul>			

## **Overall completeness of the LTS**

- The LTS defines a clear goal for Lithuania, aiming to be climate neutral by 2050.
- In general, the strategy is developed with some details and projections have been completed up to 2050, although not for all sectors.
- The LTS includes most of the mandatory contents. Gaps in mandatory elements are:
  - a) Public consultation;
  - b) GHG and CO2 intensity of GDP;
  - c) Emission reductions in power, buildings, agriculture (by 2050) and waste (by 2050)
  - d) Estimated investment needs;
  - e) Socio-economic impact assessment.
- The LTS includes most of the non-mandatory contents (e.g. adaptation policies and measures, likely share of renewable energy, emission reductions by transport type, etc.). However, the executive summary is missing and there is no or little information on the estimated likely energy consumption by 2050, energy emission trajectories, expected emission reductions for industrial sectors and energy demands and Agriculture and LULUCF expected emissions by sources and by individual GHGs. Strategies related to research, development and innovation are somewhat included but information are very general and timescale for adoption and implementation is not provided.