

# Slovakia

Submitted on 11 March 2020

## Summary of main findings

Metric	Value	Further information																								
<b>Overall goal of the LTS</b>	Climate neutrality by 2050	<ul style="list-style-type: none"> <li>The goal does not specify whether it includes all main greenhouse gases.</li> <li>The goal does not specify which sectors are included.</li> <li>Remaining emissions in 2050 can be compensated by natural sinks.</li> <li>The goal includes an increase share of nuclear energy in the energy mix.</li> </ul>																								
<b>Scenarios presented in the LTS</b>	<ul style="list-style-type: none"> <li>The LTS presents two scenarios up to 2050:               <ul style="list-style-type: none"> <li>With existing measures (WEM), based on developments under existing policy measures;</li> <li>With additional measures (WAM), where additional measures are taken beyond those in the WEM scenario.</li> </ul> </li> <li>The LTS specifies that measures used in WEM and WAM models are not sufficient to meet the climate neutrality target in 2050<sup>1</sup>. Possible additional measures are proposed.</li> </ul>																									
<b>GHG reductions</b>	<p><b>Modelling results:</b> GHG emission reductions by 2050 compared to 1990 (excluding removals): -80% (i.e. under WAM scenario)</p> <p><b>Targets:</b> No indicative milestones for 2040 and 2050.</p>	<p><b>Emission projections by sectors:</b></p> <table border="1"> <thead> <tr> <th>Mio.tCO<sub>2</sub> eq</th> <th>2030</th> <th>2040</th> </tr> </thead> <tbody> <tr> <td><b>Power</b></td> <td>4.44</td> <td>4.21</td> </tr> <tr> <td><b>Industry</b></td> <td>12.89</td> <td>9.90</td> </tr> <tr> <td><b>Transport</b></td> <td>7.10</td> <td>6.15</td> </tr> <tr> <td><b>Buildings</b></td> <td>2.11</td> <td>1.62</td> </tr> <tr> <td><b>Agriculture</b></td> <td>2.42</td> <td>2.57</td> </tr> <tr> <td><b>Waste</b></td> <td>1.00</td> <td>0.75</td> </tr> <tr> <td><b>LULUCF</b></td> <td>-4.53</td> <td>-4.36</td> </tr> </tbody> </table> <p><i>Notes: (1) Under the WAM scenario. (2) Power includes only GHG emissions from fuels combusted by the fuel extraction or energy-producing industries. (3) Industry includes GHG emissions from both combustion of fuels in industry and industrial processes. (4) Buildings includes emissions from residential and commercial/institutional, calculated as the difference between 1.A.4 Other sectors (Energy sector) and agriculture emissions. (5) Waste: values based on graphs. (6) No projections beyond 2040.</i></p>	Mio.tCO <sub>2</sub> eq	2030	2040	<b>Power</b>	4.44	4.21	<b>Industry</b>	12.89	9.90	<b>Transport</b>	7.10	6.15	<b>Buildings</b>	2.11	1.62	<b>Agriculture</b>	2.42	2.57	<b>Waste</b>	1.00	0.75	<b>LULUCF</b>	-4.53	-4.36
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<b>Renewable Energy Sources</b>	n.a.	<p><b>Main drivers and features:</b></p> <ul style="list-style-type: none"> <li>No information available beyond 2030.</li> <li>According to the plan, biomass has the largest energy potential among renewable in Slovakia.</li> <li>The LTS mentions additional RES measures to achieve climate neutrality by 2050, such as: i) Develop sustainable use, legally binding, criteria for all renewable energy sources; ii) Use existing gas infrastructure for renewables; iii) Introduce sustainability criteria for forest biomass.</li> </ul>																								

<sup>1</sup> The LTS indicates that, by 2050, there would still be at least 14 MtCO<sub>2</sub>eq. Without counting removals in LULUCF and after counting removals, it would be at least 7 MtCO<sub>2</sub>eq.

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<b>Energy Efficiency</b>	n.a.	<p><b>Main drivers and features:</b></p> <ul style="list-style-type: none"> <li>No information available beyond 2030.</li> <li>The LTS mentions additional measures on EE to achieve climate neutrality by 2050, such as: i) Increase the energy savings in buildings from 30% to 60%; ii) Increase the rate of renovation of public buildings and residential; iii) Extend the energy efficiency monitoring by the Slovak Innovation and Energy Agency.</li> </ul>
<b>Estimated investment needs</b>	<p>Total investment needs will exceed € 200 billion over the period 2020-2050</p> <p>(i.e. defined as the additional investment to WEM scenario required to achieve the decarbonisation goals under the WAM scenario)</p>	<ul style="list-style-type: none"> <li>Average additional annual expenditure amount to 4.2% of GDP over the same period.</li> <li>In 2030 households will need to invest an extra € 1 billion per year for thermal insulation, the purchase of more energy-efficient electrical appliances or the use of renewable energy sources. In 2050 it will be up to € 8 billion.</li> </ul>
<b>Socio-economic impacts of transition</b>	<p>GDP in 2050: 3% increase in WAM vs. WEM scenario.</p> <p>Employment in 2050: 0.9% decrease in WAM vs. WEM scenario.</p>	<ul style="list-style-type: none"> <li>In 2025-2035 GDP growth is expected to be 0.5 - 1.0% higher in WAM compared to WEM scenario, and 3-4% higher in the 2040-2050 period.</li> <li>The LTS recognises that not all employees from the declining industries will be able to relocate.</li> <li>Job losses will also cause salaries to decrease, which is expected to increase approaching 2050.</li> </ul>
<b>Adaptation Policies and Measures</b>	Yes	<ul style="list-style-type: none"> <li>The LTS refers to two policy adaptation plans, namely the National Adaptation Strategy on Adverse Impacts of Climate Change and the National Action Plan.</li> </ul>
<b>Public consultation</b>	Limited	<ul style="list-style-type: none"> <li>A public consultation took place in 2018. However, the LTS does not provide a feedback summary.</li> </ul>
<b>Legal status of the LTS and targets</b>	Unspecified	<ul style="list-style-type: none"> <li>There is currently no law that includes the LTS. 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 Slovakia, aiming to be climate neutral by 2050, although it is not clearly specified which sectors are covered.
- In general, the strategy is developed with some degree of detail and projections have been completed up to 2050, although projections by sectors end in 2040.
- The LTS includes most of the mandatory contents. Gaps in mandatory elements are:
  - GHG and CO<sub>2</sub> intensity of GDP;
  - Emission reductions for buildings;
  - Emission reductions for Energy, Industry, Transport, Agriculture and Waste only to 2040.
- The LTS includes some of the non-mandatory contents (e.g. adaptation policies and measures, overview of policies in the industrial sector, decarbonisation options for transport and agriculture). However, there is no information on the estimated likely share of renewable energy, and energy consumption by 2050, general description of main drivers for energy use, emission sources by transport type. Links to agricultural and rural development policies are also missing.