

Sweden

Submitted on 19 December 2019

Summary of main findings

Metric	Value	Further information																								
Overall goal of the LTS	Climate neutrality by 2045	<ul style="list-style-type: none"> The goal includes all main greenhouse gases¹. The goal covers all sectors, excluding international maritime and aviation. Remaining emissions in 2045 can be compensated by natural and technical sinks. The use of international credits is also mentioned. 																								
Scenarios presented in the LTS	<ul style="list-style-type: none"> The LTS does not present the scenarios used to generate projections and targets for the climate neutrality's goal. Annex I states that scenarios were developed by a government's task-force led by the Swedish Environmental Protection Agency, involving five national authorities, universities and consultants in energy modelling. 																									
GHG reductions	<p>Modelling results: GHG emission reductions by 2045 compared to 1990 (excluding removals): -85%</p> <p>Targets: It includes intermediate milestones for non-ETS sectors.</p>	<p>Emission projections by sectors:</p> <table border="1"> <thead> <tr> <th>Mio.tCO₂ eq</th> <th>2030</th> <th>2050</th> </tr> </thead> <tbody> <tr> <td>Power</td> <td>18.5</td> <td>17.9</td> </tr> <tr> <td>Industry</td> <td>7.3</td> <td>7.2</td> </tr> <tr> <td>Transport</td> <td>13.4</td> <td>14.2</td> </tr> <tr> <td>Buildings</td> <td>n.a.</td> <td>n.a.</td> </tr> <tr> <td>Agriculture</td> <td>6.2</td> <td>5.9</td> </tr> <tr> <td>Waste</td> <td>0.7</td> <td>0.5</td> </tr> <tr> <td>LULUCF</td> <td>-40.6</td> <td>-42.2</td> </tr> </tbody> </table> <p><i>Notes: (1) Values reflect GHG emissions under an existing-measures baseline scenario. No emission projections are provided for the climate neutral scenarios.</i></p>	Mio.tCO ₂ eq	2030	2050	Power	18.5	17.9	Industry	7.3	7.2	Transport	13.4	14.2	Buildings	n.a.	n.a.	Agriculture	6.2	5.9	Waste	0.7	0.5	LULUCF	-40.6	-42.2
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Renewable Energy Sources	n.a	<p>Main drivers and features:</p> <ul style="list-style-type: none"> Electricity production from 100% renewable sources by 2040. The largest renewable energy contributions originate from biofuels, followed by hydropower. Renewable share in transport is increasing the most. Focus on renewable sustainable fuel. 																								
Energy Efficiency	<p>Intensity of final energy consumption²: -50% (by 2030 compared to 2005)</p>	<p>Main drivers and features:</p> <ul style="list-style-type: none"> The LTS refers to 'Energy efficiency networks', regional business networks that provides support to SMEs in their efforts to reduce energy consumption. Sector strategies aim to establish a dialogue between industry and authorities on appropriate indicative objectives and measures in each sector in order to contribute cost-effectively to the target of 50 % more efficient energy use by 2030. Strategies to improve energy efficiency of buildings are generally mentioned (i.e. no quantitative targets). 																								

¹ It excludes nitrogen trifluoride (NF3) gases.

² This indicator measures final energy consumption of all end-use sectors for all energy uses, divided by GDP.

Metric	Value	Further information
Estimated investment needs	n.a.	<ul style="list-style-type: none"> No information is provided.
Socio-economic impacts of transition	n.a.	<ul style="list-style-type: none"> The LTS refers to an external study where the impact on GDP of achieving climate neutrality by 2045 is estimated to be small (+/- 1%). Impact on employment noted in qualitative terms. For example, forestry programmes are noted as increasing jobs in Sweden.
Adaptation Policies and Measures	Yes	<ul style="list-style-type: none"> The LTS refers to the Sweden's first National Strategy on climate adaptation, adopted in March 2018. A full chapter is provided on adaptation.
Public consultation	Limited	<ul style="list-style-type: none"> A consultation was sent to 200 referral bodies and was concluded in June 2016. The LTS does not include a summary of this consultation. A link to the study is provided.
Legal status of the LTS and targets	Yes	<ul style="list-style-type: none"> The national climate targets (2020, 2030, 2040, 2045) and framework were agreed by Parliament in June 2017.

Overall completeness of the LTS

- The LTS defines a clear goal for Sweden, aiming to be climate neutral by 2045.
- In general, the strategy is developed in detail and projections have been completed up to 2050, although the strategy is outlined more in qualitative terms.
- The LTS includes most of the mandatory contents. Gaps in mandatory elements are:
 - GHG and CO₂ intensity of GDP;
 - Emission trajectories by sector under the climate-neutral scenarios;
 - Estimated investment needs;
 - Socio-economic impact assessment.
- The LTS includes some of the non-mandatory contents (e.g. adaptation policies and measures, transport decarbonisation options). However, there is limited or no information on the estimated likely share of renewable energy and on energy efficiency. Moreover, there is no information on the main drivers for energy use in the power sector and it includes very basic information on research and development.