

## **Regulations Regarding Reduction and Recording of the Total Emission of Air Polluting Substances**

*Issued pursuant to  
Section 16.<sup>1</sup>, Paragraph two and Section 16.<sup>2</sup>, Paragraphs one and two of the law On  
Pollution*

### **I. General Provisions**

1. The Regulation prescribes:

- 1.1. the Latvian targets of reducing anthropogenic emissions of air polluting substances;
- 1.2. the content of the action plan for the reduction of emissions of air polluting substances, and also the procedures by which the action plan shall be developed and the reports on the performance thereof shall be provided;
- 1.3. the procedures for the establishment and maintenance of the national system for the preparation of calculations and projections of the total national emission of air polluting substances and the procedures for the assessment of impact of air pollution on ecosystems, and also the requirements for the information to be provided to the public and the European Commission.

2. The following terms are used in the Regulation:

- 2.1. anthropogenic emissions – atmospheric emissions of polluting substances associated with human activities;
- 2.2. particulate matter PM<sub>2.5</sub> – particles with an aerodynamic diameter equal to or less than 2.5 micrometres (µm);
- 2.3. activity data – data regarding activities that cause emissions in a specific period of time, e.g. data regarding the use of fuel in the energy sector (including transport), the quantity of steel produced, the quantity of mineral fertilisers used, the number of livestock, or the volume of waste generated;
- 2.4. black carbon – carbonaceous particulate matter that absorbs light;
- 2.5. air quality standards – air quality limit values, target values and the national exposure reduction target for particulate matter PM<sub>2.5</sub> set in the laws and regulations regarding air quality;
- 2.6. unit of geographical distribution – a field of 0.1 geographic longitude x 0.1 geographic latitude adopted in mapping of critical loads, and also monitoring of emissions and depositions of air polluting substances in accordance with the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe established within the framework of the 1979 Geneva Convention on Long-Range Transboundary Air Pollution (hereinafter – the Geneva Convention);
- 2.7. non-methane volatile organic compounds – all organic compounds except for methane) that are capable of producing photochemical oxidants by reaction with nitrogen oxides in the presence of sunlight;

2.8. landing and take-off cycle – the cycle that includes taxi in and out, take-off, climb out, approach, landing and all other aircraft activities that take place below the altitude of 3 000 feet;

2.9. sulphur dioxide (hereinafter – SO<sub>2</sub>) – all sulphur compounds expressed as sulphur dioxide, including sulphur trioxide, sulphuric acid, and reduced sulphur compounds (e.g. hydrogen sulphide, mercaptans, and dimethyl sulphides);

2.10. nitrogen oxides (hereinafter – NO<sub>x</sub>) – nitric oxide and nitrogen dioxide, expressed as nitrogen dioxide;

2.11. international maritime traffic – journeys at sea and in coastal waters by waterborne vessels of all flags, except for fishing vessels, that depart from the territory of one country and arrive in the territory of another country.

## **II. Emission Reduction Targets and Measures for Achieving Them**

3. The anthropogenic emission reduction targets are indicated in Annex 1 to this Regulation.

4. In order to achieve the anthropogenic emission reduction targets referred to in Annex 1 to this Regulation, the emission reduction targets of the air polluting substances listed in Table 2 of Annex 1 to this Regulation for the period between 2020 and 2029 and for 2030 and onwards (hereinafter – the emission reduction targets), and also the intermediate emission reduction target determined for 2025 shall be complied with in Latvia starting from 1 January 2020.

5. Upon determining compliance with the emission reduction targets and the intermediate emission reduction target determined for 2025, the following emissions shall not be taken into consideration:

5.1. emissions created by aircraft outside the landing and take-off cycle;

5.2. emissions created by international maritime traffic;

5.3. emissions of NO<sub>x</sub> and non-methane volatile organic compounds created by manure management and agricultural soils that fall under categories 3B (manure management) and 3D (agricultural soils) defined in the newest approved reporting guidelines and calculation methodologies (hereinafter – the emission reporting and calculation guidelines) of the Executive Body of the Geneva Convention. *Valsts sabiedrība ar ierobežotu atbildību "Latvijas Vides, ģeoloģijas un meteoroloģijas centrs"* [State limited liability company Latvian Environment, Geology and Meteorology Centre] (hereinafter – the Centre) shall publish the emission reporting and calculation guidelines on its website.

6. In order to ensure achievement of the emission reduction targets, the Ministry of Environmental Protection and Regional Development shall, in cooperation with the Ministry of Agriculture, the Ministry of Economics, the Ministry of Transport, the Ministry of Finance, the Ministry of Health, and also other authorities, if the decisions taken by them have direct or indirect effect on the emission of air polluting substances, develop an action plan for the reduction of air pollution (hereinafter – the action plan) and coordinate the implementation of the action plan.

7. The Ministry of Environmental Protection and Regional Development shall update the action plan at least once every four years. If according to the report referred to in Sub-paragraphs 29.1 and 29.2 of this Regulation the emission reduction targets are not achieved or there is a risk that they will not be achieved, the action plan shall be reviewed within 18 months after submission of the abovementioned reports in accordance with Paragraph 38 of this Regulation.

8. The Ministry of Environmental Protection and Regional Development shall, by 1 April 2019, submit to the European Commission the developed action plan approved in the Cabinet, and

also inform the European Commission of all updates of the action plan within two months after they are adopted. The Ministry of Environmental Protection and Regional Development shall prepare and submit to the European Commission a report on the action plan, the measures included in it and their implementation.

9. The action plan shall include at least the following information:

9.1. the State policy and legal framework in the field of air quality and pollution according to which the plan has been developed, including:

9.1.1. the policy priorities of reducing air pollution and their relationship to priorities set in other relevant policy areas, including climate change and, where appropriate, agriculture, industry, and transport;

9.1.2. the responsibilities attributed to State and local authorities;

9.1.3. the progress made by the implemented policy and measures in reducing emissions and improving air quality, and also the achieved degree of compliance with the emission reduction targets and the air quality standards and long-term objectives set in the laws and regulations regarding air quality;

9.1.4. the projected further evolution and compliance with the air pollution emissions reduction targets and the air quality standards and long-term objectives set in the laws and regulations regarding air quality, assuming no change to already adopted policy and measures;

9.2. the potential policy and measures the implementation of which is considered in order to comply with the emission reduction targets and intermediate targets and to further improve the air quality, and also analysis of such solutions (also the method of analysis). The individual or combined impacts of the potential policy and measures on emission reductions, air quality and the environment and the uncertainties associated with these impacts, and also assessment of cost-effectiveness of each measure;

9.3. the measures and policy planned to be adopted to achieve the emission reduction targets and intermediate targets, including a timetable for adoption, implementation, and review of each planned measure, the funding necessary for implementing each measure, the sources thereof and the authorities responsible for implementing the measures;

9.4. if Paragraph 4 of this Regulation is applied, an explanation of the reasons why the indicative emission levels for 2025 cannot be met without measures entailing disproportionate costs;

9.5. if any of the derogations referred to in Chapter III of this Regulations is applied, information on application of the derogations and any environmental impact caused by this;

9.6. an assessment of how the selected policy and measures ensure coherence with plans and programmes set up in other relevant policy areas;

9.7. if the action plan is updated in accordance with Paragraph 7 of this Regulation, the following information shall be provided:

9.7.1. an assessment of the progress made by implementing the measures included in the action plan, and also information on the achieved reduction of emissions and the reduction of concentrations of pollution;

9.7.2. information on any significant changes in relation to the planned policy, measures included in the plan, funding necessary for implementing each measure, sources of funding for the measures or the implementation timetable, and also assessments related to the development of the action plan (e.g. various calculations of emissions and emission projections, assessment of the cost-effectiveness of measures).

10. When developing the action plan, the following requirements shall be conformed to:

10.1. it shall be assessed to what extent the emission sources located in Latvia influence air quality in the territory of Latvia and in those European Union Member States that have a land border with Latvia. If necessary, data and the methodology developed in accordance with

the Protocol to the Geneva Convention on long-term financing of the cooperative programme for the monitoring and evaluation of the long-range transmission of air pollutants in Europe shall be used;

10.2. account shall be taken of the need to reduce air polluting substance emissions to achieve compliance with the air quality standards in Latvia and, where applicable, in those European Union Member States that have a land border with Latvia;

10.3. account shall be taken of black carbon emissions from various sources of pollution and priority measures to reduce black carbon emissions shall be selected when selecting measures to ensure achievement of the emission reduction targets in relation to particulate matter PM<sub>2.5</sub>;

10.4. coherence with the other relevant development planning documents developed in conformity with the requirements laid down in the laws and regulations of Latvia and the directly applicable legal acts of the European Union in the fields of climate change, waste management, energy, transport, agriculture, and industrial production shall be ensured;

10.5. when selecting the measures to reduce the emissions created by the agricultural sector, the impact of the potential measures on micro and small farms shall be assessed. Enterprises that comply with the definition provided in Annex 1 to Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty shall be considered to be micro and small enterprises. On the basis of the results obtained, micro and small farms may be exempted from taking of the measures included in the action plan if this does not have a negative impact on achieving the emission reduction targets;

10.6. if the conformity referred to in Paragraph 4 of this Regulation with the intermediate emission reduction target determined for 2025 is not ensured, the action plan shall reflect the projected trajectory according to which it is planned to reduce the emissions and the reasons why it is not possible to comply with the intermediate target determined for 2025, and why linear reduction of emissions is not possible in the period between 2020 and 2030.

11. The Ministry of Environmental Protection and Regional Development shall include in the action plan information on national-level measures that contribute to reduction of the ozone level if a target value or long-term objective set for ozone in the laws and regulations regarding air quality is exceeded in any zone or agglomeration. Measures for elimination of the exceedance of the target value and long-term objective set for ozone the benefits from implementation of which exceed costs shall be included in the action plan.

12. The Ministry of Environmental Protection and Regional Development shall inform the public of the possibilities for participation in accordance with the Environmental Protection Law and the laws and regulations regarding the procedures for public participation in the development planning process, and also shall involve the public as early as possible in the process of developing the draft action plan and shall inform of the changes therein. The action plan shall be coordinated with the authorities indicated in Section 16.<sup>2</sup>, Paragraph two of the law On Pollution, which have specific environment-related obligations in the field of air pollution, quality, and management at all levels and which have been appointed as the responsible institutions in the implementation of individual measures included in the plan. The opinions of the public and the relevant authorities shall be assessed before adopting the decision to approve the action plan.

13. If the measures included in the action plan can have a negative impact on European Union Member States that have a land border with Latvia, the Ministry of Environmental Protection and Regional Development shall perform cross-border consultations with these neighbouring states.

14. In order to monitor taking of the measures included in the action plan and progress in achieving the emission reduction targets, the Ministry of Environmental Protection and Regional Development shall establish and, where necessary, convene a working group on monitoring the performance of the action plan, involving in the working group representatives from the authorities responsible for the implementation of the measures included in the plan.

15. In accordance with the laws and regulations regarding protection of water and soil from nitrate pollution caused by agricultural activity, the Ministry of Agriculture shall update the conditions of good agricultural practice developed on the basis of the Framework Code for Good Agricultural Practice for Reducing Ammonia Emissions of 2014 developed by the United Nations Economic Commission for Europe, covering at least the following items:

- 15.1. nitrogen management, taking into account the whole nitrogen cycle;
- 15.2. livestock feeding strategies;
- 15.3. low-emission manure spreading techniques;
- 15.4. low-emission manure storage systems;
- 15.5. low-emission animal housing systems;
- 15.6. possibilities for limiting ammonia (hereinafter – NH<sub>3</sub>) emissions from the use of mineral fertilisers.

16. The Ministry of Environmental Protection and Regional Development shall, within two weeks after approval of the action plan or amendments thereto in the Cabinet, publish them on its website.

### **III. Derogations from the Set Emission Reduction Targets**

17. If it is technically or economically impossible to comply with the intermediate emission reduction target determined for 2025, the following conditions shall be met:

17.1. the emissions of such air polluting substances for which the performance of the intermediate emission reduction target determined for 2025 cannot be ensured shall progressively decrease in the period between 2025 and 2030 and follow the linear reduction trajectory or the decrease in the linear emission level between the emission reduction targets determined for 2020 and 2030;

17.2. non-compliance with the intermediate emission reduction target determined for 2025 shall not affect the achievement of the emission reduction targets determined for 2030;

17.3. corresponding explanations are provided in the action plan referred to in Paragraph 6 of this Regulation and in the report referred to in Sub-paragraph 29.5 of this Regulation.

18. The Centre shall, in cooperation with the authorities referred to in Paragraph 33 of this Regulation and in conformity with the requirements referred to in Chapter IV of Annex 3 to this Regulation, prepare an adjusted report on total national emissions by 20 January of the year of submission of the emissions report, if the following conditions are met:

18.1. according to the report referred to in Sub-paragraph 29.1 of this Regulation, the total emissions of Latvia for any air polluting substance exceed the emission reduction target;

18.2. the exceedance of emissions has been caused by new categories of emission sources, significantly different emission factors, or significantly different calculation methodologies compared to those used on the day of determining the emission reduction targets – 4 May 2012.

19. If, according to the report referred to in Sub-paragraph 29.1 of this Regulation, Latvia cannot comply with the emission reduction targets in the particular year due to an exceptionally cold winter (a winter when air temperature is lower than the long-term average annual air

temperature) or an exceptionally dry summer (a summer when the amount of precipitation is lower than the long-term average annual amount of precipitation), the Centre shall assess conformity with the emission reduction targets by comparing with the total national emissions which have been calculated, taking into account the average emissions for three consecutive years – the year in question when there is an exceptionally cold winter or an exceptionally dry summer, the year preceding that year, and the year following it. In such case the calculated average value of emissions for the three years shall not exceed the emission reduction target.

20. If in the particular year one or more emission reduction targets are set at a more stringent level than the cost-effective reduction referred to in the European Commission Communication No. 16 (January 2015; prepared within the framework of review of the European Commission's Thematic Strategy on Air Pollution of 21 September 2005), and it is not possible to comply with the relevant emission reduction targets after having implemented all cost-effective measures, then it shall be possible, for a maximum of five years, to compensate the non-performance of the emission reduction target of a particular substance by an equivalent emission reduction of another air polluting substance.

21. Latvia may derogate from performing an emission reduction target for a maximum of three years, if non-compliance with the emission reduction target set for the relevant polluting substance results from a sudden and exceptional interruption or loss of capacity in the power or heat supply or production system which could not have reasonably been foreseen, and provided that the following conditions are met:

21.1. all reasonable efforts, including the implementation of new measures and new policies, have been made to ensure compliance with the emission reduction targets, and also taking of the necessary measures will be continued to keep the period of non-compliance as short as possible;

21.2. the implementation of measures and policies in addition to the measures referred to in Sub-paragraph 21.1 of this Regulation would lead to disproportionate costs, substantially jeopardise national energy security, or pose a substantial risk of energy poverty to a significant part of the population.

22. If, in accordance with the laws and regulations regarding the procedures for preventing, limiting and controlling emissions of air polluting substances created by combustion plants, the State Environmental Service has received information from the operator on sudden and exceptional interruption or loss of capacity which affect the operation of large combustion plants (plants with rated thermal input exceeding 50 MW), it shall inform the Ministry of Environmental Protection and Regional Development thereof within five working days after receiving the relevant information.

23. After receiving the information referred to in Paragraph 22 of this Regulation, the Ministry of Environmental Protection and Regional Development shall, in cooperation with the Centre, assess whether it is possible to apply the derogation referred to in Paragraph 21 of this Regulation in the particular case.

24. The Centre shall inform the Ministry of Environmental Protection and Regional Development by 20 January of the year of submission of the report on total national emissions, if any of the situations referred to in Paragraphs 18, 19, and 20 of this Regulation is detected. The Centre shall also submit all the necessary documents and information to be prepared in accordance with Chapter IV of Annex 3 to this Regulation.

25. Within two weeks after receiving the information referred to in Paragraph 24 of this Regulation, the Ministry of Environmental Protection and Regional Development shall, in

consultation with ministries of other sectors, take a decision on the need to apply derogations and shall notify the Centre thereof.

26. If, in accordance with Paragraph 25 of this Regulation, it is decided to apply the derogations referred to in this Chapter, the Ministry of Environmental Protection and Regional Development shall inform the European Commission thereof by 15 February of the year of submission of the report on total national emissions. The abovementioned information shall include a reference to the relevant polluting substances, sectors, and, if possible, the extent to which this will affect the national emission inventories prepared.

27. If information on the application of a derogation is provided to the European Commission in accordance with Paragraph 26 of this Regulation, the Centre shall include in the informative inventory report of the respective year prepared in accordance with Sub-paragraph 29.5 of this Regulation information which proves that the use of the abovementioned derogation complies with the relevant conditions which are referred to in this Chapter and Chapter IV of Annex 3 depending on the derogation used.

#### **IV. National System for the Preparation of Calculations and Projections of the Total National Air Polluting Substance Emissions**

28. The total atmospheric emissions of the air polluting substances and groups of substances referred to in Annex 2 to this Regulation shall be determined, taking into account all air polluting substance emissions in the territory of Latvia and its exclusive economic zone.

29. The Centre shall, within the time limits referred to in Annex 2 to this Regulation and in cooperation with the authorities referred to in Paragraph 33 of this Regulation, prepare and regularly update:

29.1. the report on total national emissions (including an adjusted report on emissions, if a derogation is used in accordance with Paragraph 17 of this Regulation);

29.2. emission projections for 2020, 2025, 2030 and, if possible, 2040 and 2050;

29.3. emission maps in which data on air polluting substance emissions are shown by units of geographical distribution;

29.4. the report on emissions from large point sources;

29.5. the informative inventory report which provides a description of the calculations made in the reports referred to in Sub-paragraphs 29.1, 29.2, 29.3, and 29.4 of this Regulation, *inter alia*, indicates trends of emissions included, main sources of emissions, activity data used in calculations, and calculation methodologies used, and also other information referred to in Chapter II of Annex 3 to this Regulation.

30. The Centre and the authorities referred to in Paragraph 34 of this Regulation shall prepare the information referred to in Paragraph 29 of this Regulation in accordance with the requirements referred to in Annexes 2 and 3 to this Regulation, and also in conformity with the emission reporting and calculation guidelines.

31. When developing the reports referred to in Sub-paragraphs 29.1, 29.2, and 29.5 of this Regulation, data submitted to the relevant authorities in accordance with the laws and regulations regarding the establishment and maintenance of the national system for the greenhouse gas inventories and preparation of projections, and also data prepared in accordance with Paragraphs 32, 33, and 34 of this Regulation shall be used.

32. The Central Statistical Bureau, *valsts akciju sabiedrība "Latvijas Valsts ceļi"* [State stock company Latvian State Roads], and the State Fire and Rescue Service shall prepare the data

referred to in Annex 4 to this Regulation for the previous year. The Central Statistical Bureau and the State Fire and Rescue Service shall, by 1 November of each year, place the information referred to in Annex 4 to this Regulation on the website of its authority, and the State stock company Latvian State Roads shall submit it to the Centre within the set time limit. Data on the number of dwellings which use installations that consume firewood (by indicating the average age of the installations) and the quantity of pesticides used for one hectare under agricultural crops shall be prepared and placed on the website of the relevant authority once every five years.

33. In order to ensure the preparation of the report referred to in Sub-paragraph 29.1 of this Regulation within the time limits referred to in Annex 2 to this Regulation:

33.1. every year, the State scientific institute “Institute of Physical Energetics” shall prepare data on emissions created by the transport sector according to the categories determined in the emission reporting and calculation guidelines, and the descriptions of emission calculations referred to in Sub-paragraph 29.5 of this Regulation;

33.2. every year, Latvia University of Life Sciences and Technologies shall prepare data on emissions created by the agricultural sector according to the categories determined in the emission reporting and calculation guidelines, and the descriptions of emission calculations referred to in Sub-paragraph 29.5 of this Regulation;

33.3. every year, the Latvian State Forest Research Institute “Silava” shall prepare data on emissions created by grassland fires, burning of biomass in forest, and natural forest fires according to the categories determined in the emission reporting and calculation guidelines, and the descriptions of emission calculations referred to in Sub-paragraph 29.5 of this Regulation;

33.4. every year, the Centre shall prepare data on emissions created by the waste, industrial and energy sector (except for transport) according to the categories determined in the emission reporting and calculation guidelines, and the descriptions of emission calculations referred to in Sub-paragraph 29.5 of this Regulation.

34. In order to ensure the preparation of the reports referred to in Sub-paragraph 29.2 of this Regulation:

34.1. starting from 2019, every second year, the State scientific institute “Institute of Physical Energetics” shall prepare projections of emissions created by the energy, transport and industrial sectors (except for the use of solvents) for 2020, 2025, 2030 and, if possible, 2040 and 2050 according to the categories determined in the emission reporting and calculation guidelines, and the descriptions of calculations of emission projections referred to in Sub-paragraph 29.5 of this Regulation;

34.2. starting from 2019, every second year, Latvia University of Life Sciences and Technologies shall prepare projections of emissions created by the agricultural sector for 2020, 2025, 2030 and, if possible, 2040 and 2050 according to the categories determined in the emission reporting and calculation guidelines, and the descriptions of calculations of emission projections referred to in Sub-paragraph 29.5 of this Regulation;

34.3. starting from 2019, every second year, the Centre shall prepare projections of emissions created by the waste and solvent use sector for 2020, 2025, 2030 and, if possible, 2040 and 2050 according to the categories determined in the emission reporting and calculation guidelines, and the descriptions of calculations of emission projections referred to in Sub-paragraph 29.5 of this Regulation.

35. The State scientific institute “Institute of Physical Energetics”, Latvia University of Life Sciences and Technologies, and the Latvian State Forest Research Institute “Silava” shall, by 15 January of the year of submission of the respective report, submit data of emission calculations and emission projections prepared in accordance with Paragraphs 33 and 34 of this Regulation to the Centre.



36. The State scientific institute “Institute of Physical Energetics”, Latvia University of Life Sciences and Technologies, and the Latvian State Forest Research Institute “Silava” shall enter and regularly update the data of emission calculations and emission projections referred to in Paragraphs 33 and 34 of this Regulation in a database for calculating carbon dioxide removal and emissions of air polluting substances causing climate change.

37. The Centre shall submit the reports referred to in Sub-paragraphs 29.1, 29.2, and 29.5 of this Regulation to the Ministry of Environmental Protection and Regional Development by 14 February of the year of submission of the respective report. The Ministry of Environmental Protection and Regional Development in cooperation with the Ministry of Agriculture, the Ministry of Transport, and the Ministry of Economics shall review and coordinate the prepared report by 1 March of the year of submission of the respective report.

38. After coordination, in accordance with Paragraph 37 of this Regulation, the Centre shall place the information and reports referred to in Paragraph 29 of this Regulation electronically in the central data repository of the European Environment Agency, and also send it electronically to the Centre on Emission Inventories and Projections (CEIP) of the Cooperative Programme for the Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP) and to the Geneva Convention Secretariat, in conformity with the time periods referred to in Annex 2 to this Regulation.

39. The Centre shall, within two weeks after submission of the information referred to in Paragraph 29 of this Regulation to the authorities referred to in Paragraph 38 of this Regulation, publish the information on its website, thus providing information to the public, environmental protection and healthcare authorities, mass media, and interested associations on the total national air polluting substance emissions. A short summary of the emission trends and projections, the main sources of pollution, and the progress of Latvia in achieving the emission reduction targets shall also be provided to the public.

40. The Centre shall participate in the assessment of the reports referred to in Paragraph 29 of this Regulation organised by the European Commission and international organisations, *inter alia*, in cooperation with the authorities referred to in Paragraph 33 of this Regulation, provide answers to the questions of the European Commission and international organisations.

## **V. Monitoring of the Impact Created by Air Pollution**

41. In order to assess the negative impact of air pollution caused on ecosystems, the Ministry of Environmental Protection and Regional Development shall, on the basis of the assessment given by the Latvian State Forest Research Institute “Silava” and the Centre, create a monitoring network which is representative in relation to the ecosystems present in Latvia and is cost-effective, and also determine the parameters to be determined at the measurement sites included in the monitoring network.

42. Information on the monitoring network created by the Centre, the parameters to be determined, the regularity of determination thereof, and the methodology used shall be included in the Air and Climate Change Monitoring Programme approved by the Minister for Environmental Protection and Regional Development.

43. Monitoring of the impact of forests (including monitoring of forest soils) shall be performed by the Latvian State Forest Research Institute “Silava” in accordance with the laws and regulations regarding national forest monitoring. The Latvian State Forest Research Institute

“Silava” shall submit the data prepared in accordance with the laws and regulations regarding national forest monitoring to the Centre upon request.

44. The Centre shall assess the impact of air pollution on vegetation and freshwater ecosystems according to the Air and Climate Change Monitoring Programme approved by the Minister for Environmental Protection and Regional Development, and also the Water Monitoring Programme.

45. The Centre shall submit the following information to the European Commission and the European Environment Agency:

45.1. in 2018 and every four years thereafter, by 1 July of the respective year – information on the locations of the monitoring sites and the associated indicators used for monitoring the impact of air pollution;

45.2. by 1 July 2019 and every four years thereafter, by 1 July of the respective year – data on the impact of air pollution on ecosystems typical of Latvia determined at the monitoring sites referred to in Sub-paragraph 45.1 of this Regulation.

46. The Centre shall publish the information referred to in Paragraph 45 of this Regulation on its website within two weeks after submission to the European Commission and the European Environment Agency.

## **VI. Closing Provision**

47. Cabinet Regulation No. 419 of 31 May 2011, Regulations Regarding the Maximum Permissible Emission into the Air in the State (*Latvijas Vēstnesis*, 2011, No. 86), is repealed.

## **Informative Reference to the European Union Directives**

The Regulation contains legal norms arising from:

1) Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016 on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC;

2) Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants;

3) Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe.

Prime Minister

Māris Kučinskis

Minister for Environmental Protection and Regional Development

Kaspars Gerhards

## Anthropogenic Emission Reduction Targets

Table 1

### Emission reduction targets to be implemented by 31 December 2019

Substance	SO <sub>2</sub>	NO <sub>x</sub>	Non-methane volatile organic compounds	NH <sub>3</sub>
Maximum permitted emissions for the time period until 31 December 2019 (thous. t)	101	61	136	44

Table 2

### Emission reduction targets to be implemented from 1 January 2020

No.	Air polluting substance	Emission reduction target for the entire period from 2020 until 2029	Intermediate emission reduction target for 2025	Emission reduction target from 2030 onwards
1.	SO <sub>2</sub>	8 %	27 %	46 %
2.	NO <sub>x</sub>	32 %	33 %	34 %
3.	Non-methane volatile organic compounds	27 %	33 %	38 %
4.	NH <sub>3</sub>	1 %	1 %	1 %
5.	Particulate matter PM <sub>2.5</sub>	16 %	30 %	43 %

Note. \* Emission reduction targets are determined as a percentage reduction compared to the emissions of 2005.

Minister for Environmental Protection and Regional Development

Kaspars Gerhards

## Requirements and Time Limits for the Preparation of Emission Reports and Projections

No.	Information to be prepared	Polluting substances	Time series	Frequency of the preparation of the report	Reporting date
1.	Report on Total National Emissions <sup>(1)(2)</sup>	- SO <sub>2</sub> , NO <sub>x</sub> , non-methane volatile organic compounds, NH <sub>3</sub> , CO; - heavy metals (cadmium, mercury, and lead); - persistent organic polluting substances (jointly – polycyclic aromatic hydrocarbons, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-c,d)pyrene, dioxins/furans, polychlorinated biphenyls, hexachlorobenzene)	For the time period from 1990 until the reporting year minus 2 years (X – 2)	Annually	15 February <sup>(4)</sup>
		- PM <sub>2.5</sub> , PM <sub>10</sub> <sup>(3)</sup> and, if data is available, black carbon and other suspended particulate matter	For the time period from 2000 until the reporting year minus 2 years (X – 2)		
		- if data is available, heavy metals (arsenic, chromium, copper, nickel, selenium and zinc and their compounds)	For the time period from 1990 until the reporting year minus 2 years (X – 2)		
2.	Emission projections for 2020, 2030, and 2050 <sup>(1)</sup>	- SO <sub>2</sub> , NO <sub>x</sub> , NH <sub>3</sub> , non-methane volatile organic compounds, PM <sub>2.5</sub> and, if data is	For the 2020, 2025, and 2030 projection year and, if possible, for the 2040 and	Every two years, starting from 2017	15 March

		available – black carbon	2050 projection year		
3.	Maps in which data on air polluting substance emissions are shown by units of geographical distribution <sup>(1)</sup>	<ul style="list-style-type: none"> <li>- SO<sub>2</sub>, NO<sub>x</sub>, non-methane volatile organic compounds, NH<sub>3</sub>, CO, PM<sub>2.5</sub> and PM<sub>10</sub>;</li> <li>- heavy metals (cadmium, mercury, and lead);</li> <li>- persistent organic polluting substances (jointly – polycyclic aromatic hydrocarbons, hexachlorobenzene, polychlorinated biphenyls, dioxins/furans);</li> <li>- black carbon, if data is available</li> </ul>	For the reporting year minus 2 years (X – 2)	Every four years, starting from 2017	1 May <sup>(4)</sup>
4.	The report on emissions from large point sources <sup>(1)</sup>	<ul style="list-style-type: none"> <li>- SO<sub>2</sub>, NO<sub>x</sub>, non-methane volatile organic compounds, NH<sub>3</sub>, CO, PM<sub>2.5</sub> and PM<sub>10</sub>;</li> <li>- heavy metals (cadmium, mercury, and lead);</li> <li>- persistent organic polluting substances (jointly – polycyclic aromatic hydrocarbons, hexachlorobenzene, polychlorinated biphenyls, dioxins/furans);</li> <li>- black carbon, if data is available</li> </ul>	For the reporting year minus 2 years (X – 2)	Every four years, starting from 2017	1 May <sup>(4)</sup>
5.	Informative Inventory Report	<ul style="list-style-type: none"> <li>- SO<sub>2</sub>, NO<sub>x</sub>, non-methane volatile organic compounds, NH<sub>3</sub>, CO, PM<sub>2.5</sub> and PM<sub>10</sub>;</li> <li>- heavy metals (cadmium, mercury, and lead) and black carbon;</li> <li>- persistent organic polluting substances</li> </ul>	For the time period from 1990 (for total suspended particulate matter – from 2000) until the reporting year minus 2 years (X – 2) depending on	Annually	15 March

		(jointly – polycyclic aromatic hydrocarbons, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-c,d)pyrene, dioxins/furans, polychlorinated biphenyls, hexachlorobenzene); - if data is available, heavy metals (arsenic, chromium, copper, nickel, selenium and zinc and their compounds) and total suspended particulate matter	the polluting substance		
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Notes.

<sup>(1)</sup> Emissions shall be indicated according to the emission source categories determined according to the emission reporting and calculation guidelines.

<sup>(2)</sup> Natural emissions shall be reported according to the methods determined in the emission reporting and calculation guidelines. These shall not be included in the total national emissions and shall be reported separately.

<sup>(3)</sup> PM<sub>10</sub> – particulate matter with an aerodynamic diameter equal to or less than 10 micrometres (µm).

<sup>(4)</sup> If the submitted data is incorrect, the data shall be re-submitted within no more than four weeks, with an explanation of the changes made.

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## **Requirements for the Preparation of Emission Reports and Projections**

### **I. Report on Total National Emissions**

1. When preparing an emission report, the following requirements shall be followed:
  - 1.1. in order to facilitate further checks of the reported information, transparent information is ensured on the data used in calculations, assumptions, and calculation methods used;
  - 1.2. precise sectoral breakdown of air polluting substance emissions is ensured. Credible calculations are included that are neither over-estimated nor under-estimated, and inaccuracies of activity data and emission factors are reduced as far as possible;
  - 1.3. internal consistency of time series in all elements and parameters in the entire time period of historical years and future should be ensured for emission calculations, and also coordination of key input parameters and assumptions of the data used for emission calculations is also ensured among various sectors;
  - 1.4. it is ensured that emission calculations can be compared to other reporting formats. Common assumptions and units of measurement are used in emission calculations;
  - 1.5. it is ensured that emission calculations are performed for all emission sources and for all years referred to in the emission reporting and calculation guidelines. Emission calculations shall cover the entire territory of Latvia and its exclusive economic zone.
2. Emissions from the main categories of sources shall be calculated according to the methods defined in the emission reporting and calculation guidelines, trying to use methods of the second level or higher (more detailed). Other scientifically justified and compatible methods may also be used if the abovementioned methods provide more accurate calculations than the standard methods indicated in the emission reporting and calculation guidelines.
3. When calculating emissions of the transport sector, the energy balance prepared by the Central Statistical Bureau submitted to the Statistical Office of the European Union shall be taken into consideration.
4. Road transport emissions shall be calculated on the basis of information on sold fuels. In addition, calculations may be performed on the basis of data on fuels consumed or kilometres travelled in Latvia.
5. Emissions shall be indicated according to the emission source categories and in units determined in the emission reporting and calculation guidelines.

### **II. Informative Inventory Report**

6. The informative inventory report shall be prepared according the emission reporting and calculation guidelines, by using the inventory report template provided in the guidelines.
7. The inventory report shall include, as a minimum, the following information:
  - 7.1. an executive summary;

- 7.2. a description of the institutional arrangements for the preparation of the report on total national emissions;
- 7.3. a description of the national key categories of emission sources;
- 7.4. descriptions, references, and sources of information of the specific methodologies, assumptions, emission factors, and activity data, and also the justification for their selection;
- 7.5. information on uncertainties, quality assurance, and verification;
- 7.6. recalculations and planned improvements;
- 7.7. information referred to in Chapter III of this Annex and a description of the prepared calculations of emission projections and the assumptions made;
- 7.8. information on the prepared emissions maps and the report on emissions from large point sources developed in accordance with Sub-paragraphs 29.3 and 29.4 of Cabinet Regulation No. 614 of 2 October 2018, Regulations Regarding Reduction and Recording of the Total Emission of Air Polluting Substances (hereinafter – the Regulation);
- 7.9. if necessary, information on using the derogations referred to in Paragraph 17, 18, 19, or 20 of this Regulation;
- 7.10. if, in accordance with Paragraph 17 of this Regulation, compliance with the intermediate emission reduction target determined for 2025 is not ensured for an air polluting substance – information on the reasons why it is not possible to ensure compliance with the intermediate emission reduction target determined for 2025, and also on measures that will be used to move the emissions towards the reduction targets.

### **III. Emission Projections**

8. Emission projections should be transparent, consistent, comparable, complete, and accurate and they should include at least the following elements:

- 8.1. clear identification of the adopted and planned policies and measures included in the projections;
- 8.2. where appropriate, the results of sensitivity analysis performed for the projections;
- 8.3. a description of methodologies, models, underlying assumptions, and key input and output parameters.

9. Projections of emissions shall be estimated and aggregated according to the relevant source sectors. A ‘with measures’ (adopted measures) projection and, where relevant, a ‘with additional measures’ (planned measures) projection for each polluting substance according to the guidance provided in the emission reporting and calculation guidelines shall be indicated.

10. The assumptions used in emission projections should be consistent with the assumptions made when preparing the annual greenhouse gas emissions inventory and greenhouse gas emission projections in accordance with the laws and regulations regarding the establishment and maintenance of the national system for the greenhouse gas inventories and preparation of projections.

### **IV. Adjusted Emission Reports Prepared in Accordance with Paragraph 18 of this Regulation**

11. The proposal addressed to the European Commission prepared in accordance with Paragraph 18 of this Regulation shall include at least the following supporting documentation:

- 11.1. evidence that the relevant emission reduction targets are exceeded;
- 11.2. evidence of the extent to which the adjustment to the emission inventory reduces the exceedance and contributes to compliance with the concerned emission reduction target;
- 11.3. an estimation of whether and when the concerned emission reduction targets are expected to be attained based on emission projections without the adjustment;



11.4. evidence that the adjustment of emission data is consistent with one or several of the following three circumstances (if necessary, reference can be made to relevant previous adjustments):

11.4.1. in the case of new emission source categories:

11.4.1.1. evidence that the new emission source category is acknowledged in scientific literature and/or the emission reporting and calculation guidelines;

11.4.1.2. evidence that this source category was not included in the relevant historical national emission inventory at the time when the emission reduction targets were set;

11.4.1.3. evidence that emissions from a new source category do not allow meeting the emission reduction targets (the evidence shall be supported by a detailed description of the methodology, data on emissions and emission factors used to arrive at that conclusion);

11.4.2. in the case of significantly different emission factors used for determining emissions from specific source categories:

11.4.2.1. a description of the original emission factors, including detailed information on the scientific basis upon which the emission factor was derived;

11.4.2.2. evidence that the original emission factors were used at the time when the emission reduction targets were set;

11.4.2.3. a description of the updated emission factors, including detailed information on the scientific basis upon which the emission factor was derived;

11.4.2.4. a comparison of emission estimates made using the original and the updated emission factors, demonstrating that the change in emission factors does not allow meeting the emission reduction targets;

11.4.2.5. the rationale for deciding whether the changes in emission factors are significant;

11.4.3. in the case of significantly different methodologies used for determining emissions from specific source categories:

11.4.3.1. a description of the original methodology used, including detailed information on the scientific basis upon which the emission factor was derived;

11.4.3.2. evidence that the original methodology was used for determining the emission reductions at the time when these reductions were set;

11.4.3.3. a description of the updated methodology used, including a detailed description of the scientific basis or reference upon which it has been derived;

11.4.3.4. a comparison of emission estimates made using the original and updated methodologies demonstrating that the change in methodology does not allow meeting the emission reduction targets;

11.4.3.5. the rationale for deciding whether the changes in methodology are significant.

12. The adjusted emissions shall be recalculated to ensure consistency, to the extent possible, of the time series for every year when the adjustments are applied.

13. As from 2025, if the emission factors or methodologies used for determining emissions from specific source categories are significantly different from those emission factors or methodologies which were used in the implementation of norms or standards under European Union source-based air pollution control legislation\*, emission adjustments can be made if the following additional conditions are met:

13.1. the actions and inspections performed to implement the European Union source-based air pollution control legislation are assessed and it is demonstrated that the significantly different emission factors do not arise from the implementation or enforcement of such legislation in Latvia;

13.2. the European Commission is informed of the significant difference in the emission factors.

Note. \* The legal acts of the European Union legal in the fields of energy, transport, agriculture, and industrial production the purpose of which is to reduce air polluting substance emissions by performing reduction measures at the source of the emissions.

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### **Emission Data Necessary for the Preparation of Calculations of Emissions**

No.	Data to be prepared	Responsible authorities/data sources	Data production frequency
1.	Material flow accounts – inland extraction of on-metallic minerals (thous. t) in the previous year	Central Statistical Bureau	Every year
2.	Number of issued construction permits and expected area according to building types in statistical regions and republic cities in the previous year	Central Statistical Bureau	Every year
3.	Number of dwellings which use installations that consume firewood, and the average age of the installations (% of the number of dwellings that consume firewood, years, type of installation, type of firewood) during the previous five years	Central Statistical Bureau	Once every five years from 2020
4.	Pesticides used for one hectare under agricultural crops (active substances, kg) during the previous five years	Central Statistical Bureau	Once every five years from 2020
5.	Fires in facilities in the State in the previous year	State Fire and Rescue Service	Every year
6.	Length (km) and average width (m) of main state, local and regional roads constructed in the previous year	<i>valsts akciju sabiedrība "Latvijas Valsts ceļi"</i> [State stock company Latvian State Roads]	Every year

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