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Review of the implementation of the 2020-2021 workplan: compliance

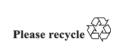
Twenty-fourth report of the Implementation Committee*

Submitted by the Implementation Committee

Summary

In accordance with the structure and functions of the Implementation Committee under the Convention on Long-range Transboundary Air Pollution, the Committee is required to report at least once a year on its activities to the Executive Body for the Convention (ECE/EB.AIR/113/Add.1, decision 2012/25, annex, para. 9).

The twenty-fourth report of the Implementation Committee contains information on the Committee's activities in 2021 with regard to compliance by individual Parties to the Protocols to the Convention with their emission reduction and reporting obligations, summarizing the work carried out at the Committee's forty-sixth and forty-seventh sessions (Geneva (online), 5–6 May 2021 and 14–16 September 2021, respectively). The report was prepared by the Implementation Committee with support of the Convention secretariat.





^{*} The present document is being issued without formal editing.

I. Introduction

- 1. At its fortieth session (Geneva, 18 December 2020), the Executive Body for the United Nations Economic Commission for Europe (ECE) Convention on Long-range Transboundary Air Pollution elected Canada (Ms. Catherine Bloodworth) and Estonia (Mr. Marek Maasikmets) and re-elected Austria (Mr. Manfred Ritter), Belgium (Ms. Wendy Altobello), Croatia (Ms. Kristina Tekić), Norway (Ms. Alice Gaustad), Serbia (Mr. Nebojša Redžić), Spain (Ms. María José Alonso Moya) and Sweden (Ms. Petra Hagström) as members of the Implementation Committee. It re-elected Mr. Manfred Ritter as Chair of the Implementation Committee.
- 2. The forty-sixth and forty-seventh sessions of the Implementation Committee (Geneva (online), 5–6 May 2021 and 14–16 September 2021, respectively) were serviced by the Convention secretariat.

II. Compliance with emission reduction obligations

A. Follow-up to Executive Body decisions

1. Protocol on Heavy Metals

Follow-up to Executive Body decision 2018/2 concerning compliance by Liechtenstein with the Protocol on Heavy Metals (ref. 6/17 (Cd))

Background

- 3. In decision 2018/2, the Executive Body urged the Party to fulfil its obligations under the Protocol on Heavy Metals as soon as possible. It requested Liechtenstein to provide the Implementation Committee, through the secretariat, by 28 February 2019, with:
- (a) Information on any additional measures that could be taken to reduce emissions of cadmium and a quantitative assessment of their effects;
- (b) A timetable specifying the year by which Liechtenstein expected to be in compliance.
- 4. The Executive Body invited the Party to participate in one of the Committee's meetings in 2019 to elaborate on the information provided and requested the Implementation Committee to review the progress and timetable of Liechtenstein, and to report to the Executive Body thereon at its thirty-ninth session (Geneva, 9–13 December 2019).
- 5. The Implementation Committee considered the case at its forty-second (Stockholm, 7–9 May 2019) and forty-third (Geneva, 10–12 September 2019) sessions. It noted the response from Liechtenstein of 7 August 2019. In its response, the Party reminded the Committee of the main sources of cadmium emissions and indicated that further clarifications, including those on the base year emissions, would be included in its submission in 2020. Liechtenstein hoped to have further information by mid-2020 that could be presented to the Committee at its forty-fifth session (Geneva (online), 15–18 September 2020).
- 6. The Committee decided to continue to consider the case at its forty-fifth session and requested the secretariat to send a letter to Liechtenstein acknowledging that further information is expected by mid-2020 and to remind the Party to provide information in accordance with decision 2018/2. The secretariat sent a letter on 11 October 2019 inviting Liechtenstein to provide requested information by 31 July 2020.
- 7. At its forty-fifth session, the Implementation Committee noted that no response had been received from Liechtenstein. It decided to continue to review the case at its forty-sixth session and requested the secretariat to send a letter to the Minister of Home Affairs, Education and Environment of Liechtenstein asking her to provide information by 15 March 2021 on:

- (a) The list of specific measures Liechtenstein intended to take to fulfil its emission reduction obligations; and
- (b) A timetable specifying the year by which the country expected to be in compliance.
- 8. The letter by the ECE Executive Secretary was sent to the Minister on 5 November 2020. In its response dated 15 March 2021, Liechtenstein referred to its previous letters of 2019 and 2018 pointing to wood combustion in small and medium sized combustion plants as the main source. The wood energy consumption increased more than five times between 1998 and 2018. In its letter Liechtenstein expressed that the division of the increased wood energy consumption into the categories 1A4ai (commercial) and 1A4bi (residential) might be wrong and that it plans to review the distribution of wood energy consumption and the emission factors for wood burning appliances in its submission in 2022. Liechtenstein mentioned in its letter the revision of the clean air act as among its measures to reduce emissions. It was not able to provide a timetable for reaching compliance.
- 9. According to the reported data, emissions of cadmium in 2019 were 0.0037 Mg, which exceeded the base year level of 0,0016 Mg by 128 per cent.

10. The Implementation Committee considered the case at its forty-seventh session. It noted that reported cadmium emissions in 2019 were exceeding the base year level. In light of Liechtenstein's plan to review wood distribution between sectors and emission factors in its 2022 submission the Committee agreed to continue to review the case of exceedance of cadmium emissions in 2022.

2. Protocol on Persistent Organic Pollutants

Follow-up to Executive Body decision 2018/2 concerning compliance by Liechtenstein with the Protocol on Persistent Organic Pollutants (ref. 4/17 (PAH, HCB))

Background

- 11. In decision 2018/2, the Executive Body urged Liechtenstein to fulfil its obligations under the Protocol on Persistent Organic Pollutants as soon as possible. It requested Liechtenstein to provide the Implementation Committee, through the secretariat, by 28 February 2019, with:
- (a) Information on any additional measures that could be taken to reduce emissions of polycyclic aromatic hydrocarbons (PAHs) and hexacholorbenzene (HCB) and a quantitative assessment of their effects;
- (b) A timetable specifying the year by which Liechtenstein expected to be in compliance.
- 12. The Executive Body invited the Party to participate in one of the Committee's meetings in 2019 to elaborate on the information provided and requested the Implementation Committee to review the progress and timetable of Liechtenstein, and to report to the Executive Body thereon at its thirty-ninth session.
- 13. The Implementation Committee considered the case at its forty-second and forty-third sessions. It noted the response from Liechtenstein of 7 August 2019, in which it referred to its letter of 16 August 2018 clarifying that the main source of emissions was residential wood combustion promoted by the national energy and greenhouse gases mitigation strategy and that visual inspections and information campaigns to promote low emission firing were among implemented measures and that no additional measures were foreseen. Liechtenstein also stated that further clarifications, including those on the base year emissions, would be included in its submission in 2020 and expressed the hope that it would have further information by mid-2020 that could be presented to the Committee at its meeting in September 2020.

- 14. The Committee decided to continue to consider the case at its forty-fifth session and requested the secretariat to send a letter to Liechtenstein acknowledging that further information was expected by mid-2020 and to remind the Party to provide information in accordance with decision 2018/2. The secretariat sent a letter on 11 October 2019 inviting Liechtenstein to provide requested information by 31 July 2020.
- 15. At its forty-fifth session, the Committee noted that Liechtenstein had not responded to the latest letter sent by the secretariat. The Committee agreed to continue to review the case of exceedance of PAH and HCB emissions at its forty-sixth session and requested the secretariat to send a letter to the Minister of Home Affairs, Education and Environment of Liechtenstein, asking her to provide information by 15 March 2021 on:
- (a) The list of specific measures Liechtenstein intended to take to fulfil its emission reduction obligations; and
- (b) A timetable specifying the year by which the country expected to be in compliance.
- 16. The letter by the ECE Executive Secretary was sent to the Minister on 5 November 2020. In its response dated 15 March 2021, Liechtenstein referred to its previous letters of 2019 and 2018 pointing to wood combustion as the main source of emissions of PAH and HCB and the fivefold growth of its share in energy production between 1998 and 2018. In its letter Liechtenstein expressed that the division of the increased wood energy consumption into the categories 1A4ai (commercial) and 1A4bi (residential) might be wrong and that it plans to review the distribution of wood energy consumption and the emission factors for wood burning appliances in its submission in 2022. Liechtenstein mentioned in its letter the revision of the clean air act as among its measures to reduce emissions. It was not able to provide a timetable for reaching compliance.
- 17. According to the reported data, emissions of PAH in 2019 were 0.015 Mg, which was below the base year level of 0,016 Mg, and emissions of HCB in 2019 were 0.00074 kg which exceeded the base year level of 0,00049 kg by 51 per cent.

18. The Committee considered the case at its forty-sixth session. It noted that reported PAH emissions in 2019 were below the base year level and that Liechtenstein was in compliance with its emission reduction obligation for PAH. The Committee also noted that emissions of HCB were still exceeding the base year level. In light of Liechtenstein's plan to review wood distribution between sectors and emission factors in its 2022 submission, the Committee agreed to continue to review the case of exceedance of HCB emissions in 2022.

B. Follow-up on submissions and referrals initiated by the secretariat during the period 2016–2020 that are still under consideration

1. Protocol concerning the Control of Emissions of Nitrogen Oxides and their Transboundary Fluxes

Follow-up to the referral by the secretariat concerning compliance by Albania with the Protocol concerning the Control of Emissions of Nitrogen Oxides and their Transboundary Fluxes (ref. 1/17 (NOx))

Background

19. The submission of emission data for nitrogen oxides (NO_x) received from Albania in 2017 indicated an exceedance of the base year emission level by approximately 48 per cent. The Committee considered the case of compliance of Albania with its obligations under article 2 (1) of the Protocol on NO_x at its thirty-ninth (Geneva, 5–7 September 2017), fortieth (Madrid, 16–18 May 2018) and forty-first (Geneva, 11–14 September 2018) sessions. A representative of Albania participated in the Committee's forty-first session and provided information regarding the Party's ongoing work on improving its emission inventory and measures it intended to implement to reduce NO_x emissions.

- 20. The Committee noted that the Party was undertaking improvements to its institutional arrangements to ensure better continuity in their inventory preparations, which was expected to improve the quality of the emission inventories. It also noted that a project had been initiated to improve the estimate of the base year emissions of NO_x , which was expected to give a better reflection of actual emissions in 1987. The revised base year emission data would be included in the Party's reporting in 2019. Furthermore, the Committee took note of several measures that Albania was planning to implement to reduce nitrogen oxides emissions, in particular those from the road traffic sector.
- 21. The Committee continued to consider the case at its forty-second and forty-third sessions. At its forty-third session, the Committee considered the draft report for the Stage 3 in-depth review of emission inventories of Albania. The Committee decided to continue to review the case at its forty-fourth session (Geneva (online), 13-14 May 2020) and requested the secretariat to send a letter to Albania asking it to provide the following information by 28 February 2020:
- (a) An update on the planned improvements of the inventory to better reflect emissions at the base year;
- (b) A list of specific measures Albania intended to take to reduce its emissions in order to fulfil its emission reduction obligations;
- (c) A timetable specifying the year by which the country expected to be in compliance.
- 22. The Committee considered the case at its forty-fourth and forty-fifth sessions. It noted that Albania had not submitted its emission data in 2020 and had not responded to the letter by the secretariat. The Committee requested the secretariat to remind Albania of the request made in 2019 and to invite the Party to participate in the forty-sixth session of the Committee. The Committee decided to continue to review the case at its forty-sixth session. The secretariat sent a letter to Albania on 30 October 2020 reminding the Party to submit the requested data by 15 March 2021 and inviting it to participate in the forty-sixth session of the Committee. Albania did not submit a response.

23. The Committee considered the case at its forty-sixth session. It noted that Albania had not responded to the letter by the secretariat. The Committee also noted that Albania had submitted emissions data showing that emissions of NOx in Albania in 2019 were 5.6 Gg, which was below the reduction target of 22 Gg. The Committee concluded that Albania was in compliance with its obligations under the Protocol concerning the Control of Emissions of Nitrogen Oxides and their Transboundary Fluxes and that there was no reason to continue reviewing the case.

2. Protocol on Persistent Organic Pollutants

(a) Follow-up to the referral by the secretariat concerning compliance by Luxembourg with the Protocol on Persistent Organic Pollutants (ref. 7/16 (HCB))

Background

24. The 2016 submissions of HCB emission data received from Luxembourg indicated an exceedance of the base year emission level by 1 per cent. This information seemed to suggest that Luxembourg was in non-compliance with its obligations under article 3 (5) (a) of the Protocol on Persistent Organic Pollutants. The Committee considered the referral at its thirty-eighth, thirty-ninth, fortieth and forty-first, forty-second and forty-third sessions. According to the data submitted in 2018, emissions of HCB in Luxembourg in 2016 exceeded the base year level by 34 per cent. The Committee noted the response provided by Luxembourg, where it suggested excluding emissions from secondary iron and steel production and road transportation from compliance checking based on the fact that these were new sources and that, in the case of road transportation, the estimation was based on a non-reliable emission factor.

- 25. The Committee addressed the issue to the Co-Chair of the Task Force on Emissions Inventories and Projections, who provided insights into the inventory preparation in relation to the issues raised by Luxembourg. He pointed out that the information in the EMEP/EEA Guidebook was provided as guidance, and that it was not best practice to omit known emission sources. He further pointed out that there were approaches outlined in the Guidebook for estimating emissions when there was a lack of data or information in the Guidebook. In light of the above, the Committee decided to continue to review the case. It invited the secretariat to send a letter to Luxembourg, informing the Party of these considerations and of the possibility to contact the Task Force for further guidance.
- 26. At its forty-third session, the Committee acknowledged the recalculation the Party had made and noted the resulting decrease of the exceedance. It requested the secretariat to send a letter to Luxembourg asking it for information to be provided by 31 July 2020 on specific measures to fulfil the emission reduction obligations and a timetable specifying the year by which Luxembourg expected to be in compliance.
- 27. The Implementation Committee considered the case at its forty-fifth session. The Committee noted the increase in emissions of HCB in 2018 and that there was no response received from Luxembourg. It asked the secretariat to send a letter to the Minister of Environment, Climate and Sustainable Development of Luxembourg as a reminder to provide the Committee with the previously requested information. It decided to continue to review the case at its forty-sixth session.
- 28. The letter by the ECE Executive Secretary addressing the Minister was sent on 5 November 2020. Luxemburg responded on 13 November pointing to the need to update the EMEP/EEA Guidebook, so that it would either provide an HCB emission factor for each technology, or explicitly state that no HCB emissions occurred for a given technology. The Party noted that it would continue to report HCB emissions for transparency reasons, but it would subtract them for compliance checking. Luxembourg noted that, based on the 2020 reported data and by subtracting HCB emissions from secondary iron and steel production from the national total emissions, it would be in compliance with its obligations.

- 29. The Implementation Committee considered the case at its forty-sixth and forty-seventh session. Luxembourg participated in the forty-seventh session at the Committee's invitation and informed the Committee that the two electric arc furnace plants, which account for 70 per cent of the HCB emissions in Luxembourg, applied the best available techniques for that source category. Waste incineration for electricity and heat production was another source of HCB and could be looked into to see if measures could reduce emissions. Luxembourg reiterated the need to update the EMEP/EEA Guidebook.
- 30. The Committee was grateful to Luxembourg for its participation in the forty-seventh session and for the information it provided. The Committee valued the efforts of Luxembourg to report emissions from secondary iron and steel production, thereby setting an example with regard to respecting the reporting obligations under the Protocol on POPs and encouraged it to continue to do so. The Committee decided to continue to review the case in 2022.

(b) Follow-up to the referral by the secretariat concerning compliance by Finland with the Protocol on Persistent Organic Pollutants (ref. 1/19 (PAH))

Background

31. The 2019 submission of emission data received from Finland indicated that there was an exceedance of the base year level for PAH by approximately 36 per cent. The base year level of PAH emissions was 7.47 tons, whereas in 2017 emissions reached 10.15 tons. This information seemed to suggest that Finland was in non-compliance with its obligations under article 3 (5) (a) of the Protocol on Persistent Organic Pollutants. In its response to the secretariat, Finland submitted information on the sources of emissions, which mainly included residential wood combustion. The Party clarified that the emission inventory for residential combustion took into account different types of technologies and equipment used

and also changes in the use of technologies. The emission factors were based on measurements. Finland also provided information on measures implemented to reduce PAH emissions.

- 32. The Committee considered the referral at its forty-second session. It noted the information provided by Finland. The Committee requested the secretariat to send a letter to Finland requesting the Party to provide by 28 February 2020:
- (a) A list of specific measures Finland intended to take to fulfil its emission reduction obligations under the Protocol;
- (b) The quantitative and projected effects of further and more effective measures to reduce its PAH emissions up to and including the year of predicted compliance;
 - (c) A timetable specifying the year by which it expected to be in compliance.
- 33. At its forty-fourth session, the Committee noted the response provided by Finland on 28 February 2020, in which the Party indicated the increased use of wood for residential heating as the reason for exceedance and three categories of measures included in its National Air Pollution Control Programme. The Committee further noted that quantitative effects of the described measures had not been projected yet and that Finland was unable to specify a timetable for reaching compliance. It decided to continue to review the case in 2021.

Deliberations

- 34. The Committee continued to consider the case at its forty-sixth and forty-seventh sessions. According to the latest submission, emissions of PAH in Finland in 2019 reached 22.3 tons, which exceeded the base year level of 20.3 tons by approximately 10 per cent.
- 35. A representative of Finland participated in the Committee's forty-seventh session. He provided information on specific measures, quantitative and projected effects of further measures and a timetable specifying the year of reaching compliance in accordance with the National Air Pollution Control Program. He pointed to increased wood burning and sauna stoves as main reasons for PAH emission exceedance. He noted that Finland would improve its statistics on wood consumption. Ongoing process and projects were explained in the presentation with regard to the development of the measures in the National Air Pollution Control Program. He informed the Committee that Finland expected to be in compliance in the 2022 reporting based on an updated inventory.
- 36. The Committee appreciated the efforts of Finland to fulfil the emission reduction obligations and commitments and a timetable specifying the year by which Finland expected to be in compliance. The Committee decided to continue to review the case in 2023.

(c) Referral by the secretariat concerning compliance by Spain with the Protocol on Persistent Organic Pollutants (ref. 4/20 (PAH))

Background

- 37. The 2020 submission of emission data for PAH received from Spain indicated that there was an exceedance of the base year emission levels by approximately 2 per cent. In 1990, which is the base year for Spain, the emissions of PAH were 138 tons; while in 2018 they reached 140.9 tons. This information seemed to suggest that Spain was in noncompliance with its obligations under article 3 paragraph 5 of the Protocol on POPs. The secretariat informed Spain about its intention to refer the issue to the Implementation Committee unless the Party could provide information to resolve the issue by showing that it was in fact in compliance with the Protocol. In its response, Spain pointed to open burning of waste and stationary residential combustion as the main sources of PAH emissions in the country. It outlined measures planned to reduce emissions from these sources and estimated reduction in emissions of PM_{2.5}, which was expected to reduce PAH emissions. The secretariat subsequently informed Spain of the referral of the case to the Implementation Committee.
- 38. The Committee considered the referral at its forty-fifth session. The Committee noted the information provided by Spain on its efforts to comply with its obligations under the

Protocol and measures foreseen in the National Air Pollution Control Programme. It requested the Party to provide to the secretariat by 15 March 2021 information on:

- (a) List of specific measures Spain intended to take to fulfil its emission reduction obligations;
 - (b) The quantitative and projected effects of these measures;
- (c) A timetable specifying the year by which the Party expected to be in compliance. The Committee decided to continue to review the case in 2021.

Deliberations

39. The Committee continued to consider the case at its forty-sixth session. It took note of the response by Spain providing comprehensive information on measures already undertaken and plans to comply with the obligations under the Protocol. The Committee noted that, as a result of Spain having applied the emissions factors from the EMEP/EEA 2019 Guidebook as modified on 6 November 2020, the emissions of PAH had been reduced by more than 50 per cent. It had particularly affected the previously main source category for Spain's PAH emissions, 5C2 Open burning of waste. The emissions from this category had been reduced from 70 tons to almost zero, while the source category of "Other" had increased substantially. Recalculations of emissions using the 2019 Guidebook also affected the base year emissions level of 1990 bringing it to 88.3 tons. The Committee noted that in 2019 PAH emissions were 63.6 tons and that Spain in its response also provided projections, indicating that the PAH emissions would continue to decrease in the future. The Committee concluded that there was no reason to continue reviewing the case.

3. Protocol on Heavy Metals

(a) Referral by the secretariat concerning compliance by the Netherlands with the Protocol on Heavy Metals (ref. 1/20 (Cd))

Background

- 40. The 2020 submission of emission data for cadmium received from the Netherlands indicated that there was an exceedance of the base year emission levels by approximately 12 per cent. In 1990, which is the base year for the Netherlands, the emissions of cadmium were 2.08 tons, while in 2018 they reached 2.3 tons. This information seemed to suggest that the Netherlands was in non-compliance with its obligations under article 3, paragraph 1 of the Protocol on Heavy Metals.
- 41. The Committee considered the referral at its forty-fifth session. It requested the Party to provide to the secretariat by 15 March 2021 information on:
- (a) List of specific measures the Netherlands intended to take to fulfil its emission reduction obligations;
 - (b) The quantitative and projected effects of these measures;
- (c) A timetable specifying the year by which the Party expected to be in compliance.
- 42. The Committee decided to continue to review the case at its forty-sixth session.

Deliberations

43. The Committee continued to consider the case at its forty-sixth session. The Committee took note of the response by the Netherlands where it explained that the increase had been caused by a change in the calculation method. The Committee noted that according to the emission data submitted in 2021, emissions of cadmium in the Netherlands in 2019 amounted to 2.6 Mg, which was below the base year level of 3.87 Mg by 32 per cent. Therefore, the Committee concluded that there was no reason to continue reviewing the case.

(b) Referral by the secretariat concerning compliance by Slovakia with the Protocol on Heavy Metals (ref. 2/20 (Cd))

Background

- 44. The emission data for cadmium received from Slovakia in 2020 indicated that there was an exceedance of the base year emission levels by approximately 10 per cent. In 1990, which is the base year for Slovakia, the emissions of cadmium were 1.52 tons, while in 2018 they reached 1.7 tons. This information seemed to suggest that Slovakia was in non-compliance with its obligations under article 3, paragraph 1 of the Protocol on Heavy Metals. The secretariat informed the Party in a letter about its intention to refer the issue to the Implementation Committee unless the Party could provide information to resolve the issue by showing that it was in fact in compliance with the Protocol. Slovakia explained that the increase in copper production caused the exceedance in emissions of cadmium. The Party noted that methodological improvements of emission inventories for heavy metals were foreseen for the next reporting round. These would take into account the implemented abatement technologies. The secretariat informed the Party of the referral of the case to the Implementation Committee.
- 45. The Committee considered the referral at its forty-fifth session. It noted the information provided by Slovakia and decided to continue to review the case at its forty-sixth session.

Deliberations

46. The Committee continued to consider the case at its forty-sixth session. It noted that Slovakia had provided emission data in 2021, where emissions of cadmium in 2019 amounted to 0.9 ton, which was below the base year level of 1.59 tons by 45 per cent. Slovakia had explained that the emission reduction was due to a methodology revision, where the emission abatement technologies were considered, which was not the case for the previous submission. The Committee concluded that there was no reason to continue reviewing the case.

C. New referrals initiated in 2021

1. The Protocol on Further Reduction of Sulphur Emissions

Referral by the secretariat concerning compliance by North Macedonia with the Protocol on Further Reduction of Sulphur Emissions (ref. 1/21 (SOx))

Background

47. The latest submission of emission data for sulphur oxides received from North Macedonia indicate that there was an exceedance of the base year emission levels by approximately 5 per cent: the indicated target is 110 kilotons, while in 2019 the reported emissions reached 115.7 kilotons. This information seems to suggest that North Macedonia is in non-compliance with its obligations under article 2, paragraph 2 of the Protocol on Further Reduction of Sulphur Emissions. The secretariat informed the Party of its intention to refer the issue to the Implementation Committee unless the Party could provide information to resolve the issue by showing that it was in fact in compliance with the Protocol. The secretariat then informed the Party of the referral of the case to the Implementation Committee. North Macedonia responded pointing to electricity and heat production as the main source of sulphur emissions and REK Bitola power plant with the largest share in it. The increase in emissions could be linked to the quality of measurements and/or the sulphur content in the coal and fuel. North Macedonia provided information on the planned measures to reduce emissions of sulphur.

Deliberations

48. The Committee considered the referral at its forty-seventh session. It noted that North Macedonia had responded and comprehensively commented on possible reasons for the increase in emissions for 2019 and the measures it intended to implement to reduce the sulphur emissions. The Committee noted that, while the emissions were decreasing from

- 103.5 Gg in 2011 to 55.7 Gg in 2017, the emissions increased to 60.7 Gg in 2018 and to 115.7 Gg in 2019. According to the letter from North Macedonia, the reasons for that could be the quality of the emission measurements and the content of sulphur in the coal and fuel oil that were burned. North Macedonia indicated that the emissions were expected to remain high for the inventory year 2020 as well.
- 49. North Macedonia stated that the public electricity and heat production sector was the main source of emissions, contributing 93 per cent to its total sulphur emissions, with one coal power plant for electricity production being the major contributor. It informed in its letter that a national emission reduction plan under the Large Combustion Plants Directive¹ had been prepared and approved by the Government. Emission reduction measures included wet desulfurization, flushing coal, and replacing coal with renewable energy sources. It further informed that measures to reduce sulphur emissions were being planned for the plant during the coming five years.
- 50. The Committee recalled that it had considered the case of North Macedonia's compliance with the 1985 Sulphur Protocol (ref.1/14) since 2014. It further noted that the sulphur emissions in 2019 were above the 2010 ceiling of the Gothenburg Protocol. The Committee noted the information from North Macedonia indicating that sulphur emissions may remain high in 2020. The Committee decided to continue to review the case in 2023.

2. The Protocol on Persistent Organic Pollutants

Referral by the secretariat concerning compliance by Serbia with the Protocol on Persistent Organic Pollutants (ref. 2/21 (PAH, PCDD/F))

Background

- 51. The latest submission of emission data for PAH and dioxins/furans (PCDD/F) received from Serbia indicated that there was an exceedance of the base year emission level for dioxins/furans by approximately 1 per cent and for PAH by approximately 0.3 per cent: in 1990, which is the base year for Serbia, emissions of PCDD/F were 595 g, while in 2019 they reached 602.4 g, and emissions of PAH in 1990 were 465.3 tonnes, whereas in 2019 they reached 466.6 tonnes. This information seems to suggest that Serbia is in non-compliance with its obligations under article 3, paragraph 5(a) of the Protocol on Persistent Organic Pollutants.
- 52. The secretariat informed Serbia of its intention to refer the issue to the Implementation Committee unless it could provide information to resolve the issue by showing that it was in fact in compliance with the Protocol on POPs. Serbia noted in its response that no calculation errors had been made. Serbia further noted that it would re-evaluate the full time series for PAH and dioxins/furans for the submission of emission data in 2022 and determine the reason for an increase in their emission. The secretariat informed the Party of the referral of the case to the Implementation Committee.

Deliberations

53. The Committee considered the referral at its forty-seventh session. A representative of Serbia informed the Committee about further steps in order to re-evaluate the full time series for PAH and PCDD/F for the submission of emission data in 2022 and to determine the reason for an increase in their emission for the year 2019. The Committee was grateful to Serbia for its participation in the forty-seventh session and for the information provided. The Committee decided to review the case in 2022.

III. Compliance with reporting obligations

54. In line with item 3.1 of the 2020–2021 workplan for the implementation of the Convention, the Committee evaluated compliance by Parties with their emission data reporting obligations on the basis of information provided by the secretariat and responses

¹ Directive 2001/80/EC of the European Union.

by Parties. The information on reporting compiled by the Centre on Emission Inventories and Projections and provided by the secretariat is presented in informal document No.3² and covers data reported up to 8 September 2021.

A. Follow-up to Executive Body decisions

Follow-up to decision 2013/19 concerning compliance by the Republic of Moldova with its obligation to report gridded emission data

- 55. In decision 2013/19, paragraph 4 (c), the Executive Body urged the Republic of Moldova to provide its missing gridded data for 2005 and 2010 under the Protocols on Persistent Organic Pollutants and Heavy Metals. The secretariat informed the Committee that, as of 8 September 2021, the Republic of Moldova had not provided its missing gridded data under either Protocol.
- 56. The Committee recalled the information provided by the Party in 2019 and its previous consideration of the case and further encouraged the Republic of Moldova to continue efforts to develop its gridded data. The Committee agreed to continue to review the case in 2022.

B. Referrals concerning reporting of emission data

1. Referrals initiated in 2015–2017 still under consideration

57. At its thirty-sixth, thirty-seventh, thirty-ninth, forty-first, forty-third, forty-fifth and forty-seventh sessions, the Committee considered referrals submitted by the secretariat in 2015–2017.

Liechtenstein

58. The Committee considered the referrals by the secretariat concerning compliance by Liechtenstein with its obligations to report its gridded data under the 1994 Sulphur Protocol, the Protocol on Volatile Organic Compounds, the Protocol on Persistent Organic Pollutants and the Protocol on Heavy Metals (R10/17, R16/17, R22/17, R34/17). The Party had not provided its missing data. The Committee agreed to continue to review the case in 2022.

Montenegro

59. The Committee considered the referrals by the secretariat concerning compliance by Montenegro with its reporting obligations under the Protocol on Heavy Metals and the Protocol on Persistent Organic Pollutants (gridded data) (R23/17 and R35/17). The Party had not provided its missing data. The Committee agreed to continue to review the case in 2022.

North Macedonia

60. The Committee considered the referral by the secretariat concerning compliance by North Macedonia with its reporting obligations under the Gothenburg Protocol (R12/15) with missing projections for 2020 for NH₃, as well as projections for 2025 and 2030 for all pollutants. The Party had not provided its missing data. The Committee agreed to continue to review the case in 2022.

Republic of Moldova

61. The Committee considered the referrals by the secretariat concerning compliance by the Republic of Moldova with its obligations under the Protocol on Heavy Metals and the Protocol on Persistent Organic Pollutants to report gridded data (R25/17, R37/17). The Party had not provided its missing data. The Committee agreed to continue to review the case in 2022.

² Available from the web page for the Executive Body's forty-first session https://unece.org/info/Environmental-Policy/Air-Pollution/events/350953.

Serbia

62. The Committee considered the referrals by the secretariat concerning compliance by Serbia with its obligations under the Protocol on Heavy Metals and the Protocol on Persistent Organic Pollutants to report gridded data (R27/17, R39/17). The Party had not provided its missing data. The Committee noted the information provided by Serbia in its letter dated 21 July 2021 and agreed to continue to review the case in 2022.

2. Referral initiated in 2021 under the Protocols to the Convention

- 63. At its forty-seventh session, the Committee also considered the following referrals by the secretariat concerning compliance of Parties with their obligation to report 2019 gridded data:
- (a) Referral by the secretariat concerning compliance by Liechtenstein with its reporting obligations under the Protocol on Further Reduction of Sulphur Emissions, the Protocol on Volatile Organic Compounds, the Protocol on POPs, and the Protocol on Heavy Metals (R2/21);
- (b) Referral by the secretariat concerning compliance by Montenegro with its reporting obligations under the Protocol on POPs and the Protocol on Heavy Metals (R6/21);
- (c) Referral by the secretariat concerning compliance by the Republic of Moldova with its reporting obligations under the Protocol on POPs and the Protocol on Heavy Metals (R7/21);
- (d) Referral by the secretariat concerning compliance by Romania with its reporting obligations under the Protocol on POPs, the Protocol on Heavy Metals and the Gothenburg Protocol (R8/21);
- (e) Referral by the secretariat concerning compliance by Serbia with its reporting obligations under the Protocol on POPs and the Protocol on Heavy Metals (R9/21).
- 64. The Committee agreed to continue to review the above-mentioned cases in 2022.

IV. Other business

65. The Committee provisionally decided to hold its forty-eighth and forty-ninth sessions on 3-5 May 2022 and 29-31 August 2022, respectively.

12