



**Economic Commission for Europe**

Executive Body for the Convention on Long-range  
Transboundary Air Pollution

**Working Group on Strategies and Review**

**Fifty-ninth session**

Geneva, 18–21 May 2021

Item 4 of the provisional agenda

**Review of sufficiency and effectiveness of the Protocol to Abate Acidification,  
Eutrophication and Ground-level Ozone**

**Draft annotated outline of the report on the review of  
the Protocol to Abate Acidification, Eutrophication  
and Ground-level Ozone\***

**Corrigendum**

**Section III. The correlation table linking documentation to applicable chapter**

*For the existing text substitute*

<i>Documentation</i>	<i>Link</i>	<i>Chapters</i>
<b>General background</b>		
1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone to the Convention on Long-range Transboundary Air Pollution, as amended on 4 May 2012 (ECE/EB.AIR/114)	<a href="https://unece-modl.dotsoft.gr/DAM/env/documents/2013/air/eb/ECE.EB.AIR.114_ENG.pdf">https://unece-modl.dotsoft.gr/DAM/env/documents/2013/air/eb/ECE.EB.AIR.114_ENG.pdf</a>	A, Q f
Scientific assessment of the Convention “Towards Cleaner Air”	<a href="https://unece.org/DAM/env/lrtap/ExecutiveBody/35th_session/CLRTAP_Scientific_Assessment_Report_-_Final_20-5-2016.pdf">https://unece.org/DAM/env/lrtap/ExecutiveBody/35th_session/CLRTAP_Scientific_Assessment_Report_-_Final_20-5-2016.pdf</a>	A
Supplementary information to document ECE/EB.AIR/2017/3 entitled Policy response to the 2016 scientific assessment of the Convention	<a href="https://unece.org/fileadmin/DAM/env/documents/2017/AIR/WGSR/INFORMAL_DOCUMENT_6_PRG_integrated_final.pdf">https://unece.org/fileadmin/DAM/env/documents/2017/AIR/WGSR/INFORMAL_DOCUMENT_6_PRG_integrated_final.pdf</a>	A

\* The present document is being issued without formal editing.



<i>Documentation</i>	<i>Link</i>	<i>Chapters</i>
Decision 2018/5 Long-term strategy for the Convention on Long-range Transboundary Air Pollution for 2020–2030 and beyond	<a href="https://unece.org/fileadmin/DAM/env/documents/2018/Air/EB/correct_numbering_Decision_2018_5.pdf">https://unece.org/fileadmin/DAM/env/documents/2018/Air/EB/correct_numbering_Decision_2018_5.pdf</a>	A, R
Decision 2019/4 The review of the Gothenburg Protocol, as amended in 2012	<a href="https://unece.org/DAM/env/documents/2019/AIR/EB_Decisions/Decision_2019_4.pdf">https://unece.org/DAM/env/documents/2019/AIR/EB_Decisions/Decision_2019_4.pdf</a>	A, B
<b>Legal requirements – ammonia and black carbon – informal documents</b>		
Considerations for ammonia relevant to the future review of the Gothenburg Protocol'	<a href="https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/Ammonia_inf_doc_for_WGSR58_note_from_TFRN_TFIAM_.pdf">https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/Ammonia_inf_doc_for_WGSR58_note_from_TFRN_TFIAM_.pdf</a>	B, G, H, I
Draft guidance document on prioritizing reductions of particulate matter so to also achieve reduction of black carbon	<a href="https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/Informal_doc_no_1_Draft_guidance_on_prioritizing_PM_reductions_201120.pdf">https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/Informal_doc_no_1_Draft_guidance_on_prioritizing_PM_reductions_201120.pdf</a>  Final report: ECE/EB.AIR/WG.5/2021/8, forthcoming	B, G, H, I
<b>The Task Force on Techno-economic Issues and the Task Force on Integrated Assessment Modelling</b>		
Background informal technical document on techniques to reduce <u>methane</u> emissions in Europe from landfill gases, the natural gas supply system and biogas facilities	<a href="https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/TFTEI_methane_background_document-december_2020.pdf">https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/TFTEI_methane_background_document-december_2020.pdf</a>	H, O
Background informal technical document on maritime <u>shipping</u> emissions, reduction techniques and determination of their costs	<a href="https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/TFTEI_informal_doc_on_shipping_emissions-final-december2020.pdf">https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/TFTEI_informal_doc_on_shipping_emissions-final-december2020.pdf</a>	C, H
Background informal technical document on techniques to reduce emissions from <u>aluminium</u> production	<a href="https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/TFTEI_aluminium_background_document-december_2020.pdf">https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/TFTEI_aluminium_background_document-december_2020.pdf</a>	G, I
Background informal technical document on techniques to reduce pollutant emissions from <u>cement</u> production and determination of their costs	<a href="https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/TFTEI_Cement_final_document-december-2020.pdf">https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/TFTEI_Cement_final_document-december-2020.pdf</a>	G, I
Review on <u>black carbon</u> and polycyclic aromatic hydrocarbons emission reductions induced by particulate matter emission abatement techniques	<a href="https://unece.org/sites/default/files/2020-12/Review%20on%20BC%20and%20PAH%20emission%20reductions%20.pdf">https://unece.org/sites/default/files/2020-12/Review%20on%20BC%20and%20PAH%20emission%20reductions%20.pdf</a>	G

<i>Documentation</i>	<i>Link</i>	<i>Chapters</i>
Informal document on costs of inaction on air pollution	<a href="https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/Cost_of_inaction_TFIAM_two_pager.pdf">https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/Cost_of_inaction_TFIAM_two_pager.pdf</a>	O, P
Report for policymakers on costs of inaction	Final report: ECE/EB.AIR/WG.5/2021/6, forthcoming	O, P
Draft guidance document on the reduction of agriculture residue burning	<a href="https://www.unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/TFT/EI_ICCI_Draft_Guidance_Document_on_Open_Agricultural_Burning.docx">https://www.unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/TFT/EI_ICCI_Draft_Guidance_Document_on_Open_Agricultural_Burning.docx</a>  Final document: ECE/EB.AIR/WG.5/2021/5, forthcoming	G
Draft guidance document on prioritizing reductions of particulate matter so to also achieve reduction of black carbon	<a href="https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/Informal_doc_no_1_Draft_guidance_on_prioritizing_PM_reductions_201120.pdf">https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/Informal_doc_no_1_Draft_guidance_on_prioritizing_PM_reductions_201120.pdf</a>  Final report: ECE/EB.AIR/WG.5/2021/8, forthcoming	G, H, I
<b>The Task Force on Integrated Assessment Modelling, including the expert panel on clean air in cities and the Centre for Integrated Assessment Modelling</b>		
Report meetings	<a href="https://iiasa.ac.at/web/home/research/researchPrograms/air/policy/past_meetings.html">https://iiasa.ac.at/web/home/research/researchPrograms/air/policy/past_meetings.html</a>	F, N, O, P
Ammonia Assessment Report - draft November 2020	<a href="https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/Final_Assessment_Report_on_Ammonia_v2_20201126_b.pdf">https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/Final_Assessment_Report_on_Ammonia_v2_20201126_b.pdf</a>  Final Report: ECE/EB.AIR/WG.5/2021/7, forthcoming	G, H, I
<b>The Task Force on Reactive Nitrogen</b>		
Draft Guidance document on integrated sustainable nitrogen management	<a href="https://unece.org/fileadmin/DAM/env/documents/2020/AIR/EB/ECE_EB.AIR_2020_6-2008239E.pdf">https://unece.org/fileadmin/DAM/env/documents/2020/AIR/EB/ECE_EB.AIR_2020_6-2008239E.pdf</a>	G, H, I
<b>The Working Group on Effects, including the Task Force on Health, and the EMEP including the Task Force on Measurements and Modelling, the Meteorological Synthesizing Centre-West, the Meteorological Synthesizing Centre-East</b>		
EMEP Status report 1-2020 (Transboundary particulate matter, photo-oxidants, acidifying and eutrophying components)	<a href="https://emep.int/publ/reports/2020/EMEP_Status_Report_1_2020.pdf">https://emep.int/publ/reports/2020/EMEP_Status_Report_1_2020.pdf</a>	D
EMEP publications from MSC-W	<a href="https://www.emep.int/mscw/mscw_publications.html#2020">https://www.emep.int/mscw/mscw_publications.html#2020</a>	D, E
EMEP publications from MSC-E	<a href="http://en.msceast.org/index.php/publications/reports">http://en.msceast.org/index.php/publications/reports</a>	P

<i>Documentation</i>	<i>Link</i>	<i>Chapters</i>
Progress report on Assessment of PAH pollution levels, key sources and trends: contribution to analysis of the effectiveness of the POPs Protocol Progress Report	<a href="http://en.msceast.org/reports/2_2020_tech.pdf">http://en.msceast.org/reports/2_2020_tech.pdf</a>	P
The current status of air pollution effects on materials and United Nations Educational, Scientific and Cultural Organization world cultural heritage sites in Europe (ECE/EB.AIR/GE.1/2019/20–ECE/EB.AIR/WG.1/2019/13)	<a href="https://unece.org/fileadmin/DAM/env/documents/2019/AIR/EMEP_WGE_Joint_Session/ECE_EB.AIR_GE.1_2019_20-1909811E.pdf">https://unece.org/fileadmin/DAM/env/documents/2019/AIR/EMEP_WGE_Joint_Session/ECE_EB.AIR_GE.1_2019_20-1909811E.pdf</a>	E
Report No 88 Trends in pollution, corrosion and soiling 1987-2019.	<a href="http://www.corr-institute.se/icp-materials/web/page.aspx?refid=18">http://www.corr-institute.se/icp-materials/web/page.aspx?refid=18</a>	E
Regional assessment of the current extent of acidification of surface waters in Europe and North America. 2018	<a href="https://drive.google.com/file/d/1oezPUSfpYXjq7iinxWbJw7wWQkUGe_a/view">https://drive.google.com/file/d/1oezPUSfpYXjq7iinxWbJw7wWQkUGe_a/view</a>	E
Trends in ecosystem and health responses to long-range transported atmospheric pollutants	<a href="https://unece.org/DAM/env/documents/2016/AIR/Publications/Trends_in_ecosystem_and_health_responses_to_long-range_transported_atmospheric_pollutants.pdf">https://unece.org/DAM/env/documents/2016/AIR/Publications/Trends_in_ecosystem_and_health_responses_to_long-range_transported_atmospheric_pollutants.pdf</a>	E
Ozone Pollution: A hidden threat to food security	<a href="https://icpvegetation.ceh.ac.uk/sites/default/files/Ozone%20Pollution%20-%20A%20hidden%20threat%20to%20food%20security.pdf">https://icpvegetation.ceh.ac.uk/sites/default/files/Ozone%20Pollution%20-%20A%20hidden%20threat%20to%20food%20security.pdf</a>	E
European critical loads: database, biodiversity and ecosystems at risk, CCE Final Report 2017, Coordination Centre for Effects, RIVM Report 2017-0155, Hettelingh J-P, Posch M, Slootweg J (eds.) (2017) Bilthoven, Netherlands	<a href="https://www.umweltbundesamt.de/sites/default/files/medien/4038/dokumente/1_cce_sr2017.pdf">https://www.umweltbundesamt.de/sites/default/files/medien/4038/dokumente/1_cce_sr2017.pdf</a>	D
Residential heating with wood and coal: health impacts and policy options in Europe and North America	<a href="https://www.euro.who.int/en/health-topics/environment-and-health/air-quality/publications/2015/residential-heating-with-wood-and-coal-health-impacts-and-policy-options-in-europe-and-north-america">https://www.euro.who.int/en/health-topics/environment-and-health/air-quality/publications/2015/residential-heating-with-wood-and-coal-health-impacts-and-policy-options-in-europe-and-north-america</a>	E
The current extent of surface water acidification in Europe and North America (ECE/EB.AIR/GE.1/2018/20–ECE/EB.AIR/WG.1/2018/13)	<a href="https://unece.org/fileadmin/DAM/env/documents/2018/Air/EMEP/ECE_EB.AIR_GE.1_2018_20-1810846E.pdf">https://unece.org/fileadmin/DAM/env/documents/2018/Air/EMEP/ECE_EB.AIR_GE.1_2018_20-1810846E.pdf</a>	E
<b>The Task Force on Hemispheric Transport of Air Pollution</b>		
Answers to policy-relevant questions	<a href="http://htap.org/q/">http://htap.org/q/</a>	M

<i>Documentation</i>	<i>Link</i>	<i>Chapters</i>
Informal document with answers to 4 Policy-Relevant Questions about Hemispheric Transport Based on HTAP2, AQMEII3, MICS3, and TOAR	<a href="http://staging2.unece.org.net4all.ch/fileadmin/DAM/env/documents/2020/AIR/EMEP_WGE_Joint_Session/Informal_Document_on_HTAP2_Answers_g.pdf">http://staging2.unece.org.net4all.ch/fileadmin/DAM/env/documents/2020/AIR/EMEP_WGE_Joint_Session/Informal_Document_on_HTAP2_Answers_g.pdf</a>	M
<b>The Task Force on Emission Inventories and Projections and the Centre on Emission Inventories and Projections</b>		
2021 submission of emissions and projections	<a href="https://www.ceip.at/status-of-reporting-and-review-results">https://www.ceip.at/status-of-reporting-and-review-results</a>	C
Review of emission inventories	<a href="https://www.ceip.at/review-of-emission-inventories">https://www.ceip.at/review-of-emission-inventories</a>	C
Review of adjustments	<a href="https://www.ceip.at/gothenburg-protocol/review-of-adjustments">https://www.ceip.at/gothenburg-protocol/review-of-adjustments</a>	C, F, J
<b>The Working Group on Strategies and Review</b>		
Informal document on non-technical and structural measures	<a href="https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/Note_on_non-technical_and_structural_measures_-201120.pdf">https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/Note_on_non-technical_and_structural_measures_-201120.pdf</a>	I
WHO review report of the air quality guidelines	Forthcoming	D, E
<b>Existing guidance documents, guidelines and codes</b>		
Code of good practice for wood-burning and small combustion installations (ECE/EB.AIR/2019/5)	<a href="https://unece.org/gothenburg-protocol">https://unece.org/gothenburg-protocol</a>	G, H
Guidelines for estimation and measurement of emissions of volatile organic compounds (ECE/EB.AIR/WG.5/2016/4)	<a href="https://unece.org/gothenburg-protocol">https://unece.org/gothenburg-protocol</a>	G, I
Guidance Document on Emission Control Techniques for Mobile Sources (ECE/EB.AIR/138)	<a href="https://unece.org/gothenburg-protocol">https://unece.org/gothenburg-protocol</a>	G, I
United Nations Economic Commission for Europe Framework Code for Good Agricultural Practice for Reducing Ammonia Emissions (ECE/EB.AIR/129)	<a href="https://unece.org/gothenburg-protocol">https://unece.org/gothenburg-protocol</a>	G, H
Guidance document on health and environmental improvements using new knowledge, methods and data (ECE/EB.AIR/124)	<a href="https://unece.org/gothenburg-protocol">https://unece.org/gothenburg-protocol</a>	G, I
Guidance document on control techniques for emissions of sulphur, nitrogen oxides, volatile organic compounds and particulate matter (including PM10, PM2.5 and BC)	<a href="https://unece.org/gothenburg-protocol">https://unece.org/gothenburg-protocol</a>	G, I

<i>Documentation</i>	<i>Link</i>	<i>Chapters</i>
from stationary sources (ECE/EB.AIR/117)		
Guidance document on economic instruments to reduce emissions of regional air pollutants (ECE/EB.AIR/118)	<a href="https://unece.org/gothenburg-protocol">https://unece.org/gothenburg-protocol</a>	G, I
Guidance document on national nitrogen budgets (ECE/EB.AIR/119)	<a href="https://unece.org/gothenburg-protocol">https://unece.org/gothenburg-protocol</a>	G, I
Guidance document on preventing and abating ammonia emissions from agricultural sources (ECE/EB.AIR/120)	<a href="https://unece.org/gothenburg-protocol">https://unece.org/gothenburg-protocol</a>	G, H, I
<b>Europe (including the European Union, Switzerland, Norway and the United Kingdom of Great Britain and Northern Ireland and other countries)</b>		
EU - The second clean air outlook report (2021)	<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2021%3A3%3AFIN">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2021%3A3%3AFIN</a>	F, P
EU - Report on the progress made on the implementation of the NEC Directive (2020)	<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1593765728744&amp;uri=CELEX:52020DC0266">https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1593765728744&amp;uri=CELEX:52020DC0266</a>	F, P
EU - National Air Pollution Control Programmes from EU MS (NEC Directive)	<a href="https://ec.europa.eu/environment/air/reduction/NAPCP.htm">https://ec.europa.eu/environment/air/reduction/NAPCP.htm</a>	F, P
EU - Strategy to reduce methane emissions (2020)	<a href="https://ec.europa.eu/energy/sites/ener/files/eu_methane_strategy.pdf">https://ec.europa.eu/energy/sites/ener/files/eu_methane_strategy.pdf</a>	
EU - Overview of Union source-based air pollution control legislation for NEC pollutants	<a href="https://ec.europa.eu/environment/air/reduction/legislation.htm">https://ec.europa.eu/environment/air/reduction/legislation.htm</a>	G, H, I
EU - BAT Reference Documents (BREFs)	<a href="https://eippcb.jrc.ec.europa.eu/reference">https://eippcb.jrc.ec.europa.eu/reference</a>	I
EEA - briefing: National Emission reduction Commitments Directive reporting status (2020)	<a href="https://www.eea.europa.eu/publications/national-emission-reduction-commitments-directive">https://www.eea.europa.eu/publications/national-emission-reduction-commitments-directive</a>	F, P
EEA - Report No 09/2020 Air quality in Europe - 2020 report	<a href="https://www.eea.europa.eu/publications/air-quality-in-europe-2020-report">https://www.eea.europa.eu/publications/air-quality-in-europe-2020-report</a>	D
EIONET Central Data Repository	<a href="http://cdr.eionet.europa.eu/">http://cdr.eionet.europa.eu/</a>	C
<b>North America (Canada and the United States of America)</b>		
2018 Canada-United States Air Quality Agreement Progress Report	<a href="https://www.epa.gov/airmarkets/us-canada-air-quality-agreement-progress-reports">https://www.epa.gov/airmarkets/us-canada-air-quality-agreement-progress-reports</a>	L
<b>Eastern Europe, the Caucasus and Central Asia and non-Parties</b>		
Background documentation on past reviews and barriers to implementation and ratification to the Convention's Protocols (informal document for the	<a href="https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/Informal_Doc_EB_40_EECCA_and_reference_documentsrev.pdf">https://unece.org/fileadmin/DAM/env/documents/2020/AIR/WGSR/Informal_Doc_EB_40_EECCA_and_reference_documentsrev.pdf</a>	J, K

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<i>Documentation</i>	<i>Link</i>	<i>Chapters</i>
58 <sup>th</sup> session of the Working Group on Strategies and Review)		
Draft report on the workshop to promote ratification of the protocols to the Convention with a focus on countries in Eastern Europe, the Caucasus and Central Asia (2019)	<a href="https://unece.org/fileadmin/DAM/env/documents/2019/AIR/Capacity_Building/BAT_workshop_2019/Report_on_ECCAWorkshop_2019_5.pdf">https://unece.org/fileadmin/DAM/env/documents/2019/AIR/Capacity_Building/BAT_workshop_2019/Report_on_ECCAWorkshop_2019_5.pdf</a>	J, K
Saltsjöbaden VI workshop - Topic 3 Clean Air in Eastern Europe, the Caucasus and Central Asia (2018)	<a href="https://saltsjobaden6.ivl.se/topics/cleanairfortheeccaregion.4.1369484715f59ce4bab19c5.html">https://saltsjobaden6.ivl.se/topics/cleanairfortheeccaregion.4.1369484715f59ce4bab19c5.html</a>	J, K
Batumi Action for Cleaner Air	<a href="https://unece.org/baca">https://unece.org/baca</a>	J, K
Implementation of the Batumi Action for Cleaner Air: fostering progress towards improved air quality (ECE/CEP/2019/6)	<a href="https://unece.org/fileadmin/DAM/env/documents/2019/AIR/WGSR/E_-_ECE_CEP_2019_6.pdf">https://unece.org/fileadmin/DAM/env/documents/2019/AIR/WGSR/E_-_ECE_CEP_2019_6.pdf</a>	J, K

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