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Review of the 2023 Annual Reporting of a granted Adjustment Denmark

Expert Review Team Summary Note

FINAL REPORT

Report title	Review of the 2023 Annual Reporting of a granted Adjustment
Country	Denmark
Report reference	CEIP/Adjustment RR/2023/ Denmark
Date	05/09/2023
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Expert Review Team

Role	Sectors	Name	Country
Adjustment lead reviewer	All	Kristina Saarinen	FI
Primary expert reviewer	Agriculture 3B/3D	Tim van der Zee	NL
Secondary expert reviewer	Agriculture 3B/3D	Hakam Al-Hanbali	SE
Basic checks (Step 1 and 2)	N/A	Sabine Schindlbacher	CEIP

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1 Introduction

1. As mandated by Executive Body decision 2012/12, applications for adjustments submitted by Parties are subject to expert review. Technical coordination of and support for the 2023 review was provided by the Centre on Emission Inventories and Projections, represented by Ms. Sabine Schindlbacher. The members of the expert review team (ERT) were selected from the experts appointed to the Centre on Emission Inventories and Projections roster of experts by the Parties.
2. The review of adjustments approved prior to 2023 was performed in parallel with the stage 3 review. The ERT for the adjustment review was composed of one lead reviewer, Ms. Kristina Saarinen (Finland) and three sector experts Mr. Tim van der Zee (the Netherlands), Mr. Hakam al Hanbali (Sweden) and Mr. Etienne Mathias (France). Each application was reviewed by two independent sectoral experts during April, May and June 2023.
3. Denmark has submitted an adjustment for NMVOC emissions from 3B1a Manure management - Dairy cattle originally approved in 2022. The adjustment has been justified with the explanation that these sources were unknown when the emission reduction commitments were set. The full adjustment review report of the adjustment application submitted in 2022 is available at <https://www.ceip.at/gothenburg-protocol/review-of-adjustments>. This document summarizes the outcome of the review performed in 2023.

2 Summary Information

Table 1: Summary Information on the Submitted Application

Reasons for adjustment application (Decision 2012/3, para 6)	Emission source categories are identified that were not accounted for at the time when emission reduction commitments were set
Adjustment Application has been originally approved in	2022
Pollutant for which adjustment is applied for	NMVOC
Sector/Pollutant for which adjustment is applied for	3B1a
Year(s) for which inventory adjustment is applied	2005, 2020 and 2021
Date of the submission	21-02-2022
Date of submission of supporting documentation	15-03-2023
Additional information was provided during the review in response to requests from the ERT	NA
Denmark does not comply with its NMVOC emission reduction commitments listed in Annex II of the Gothenburg Protocol	Yes
Denmark provided information on the impact of the adjustment to its emission inventory, and the extent to which it would reduce the current exceedance and possibly bring the Party into compliance with its emission reduction commitments for the years 2005-2021 for NMVOC.	Yes
Denmark included information on when it will meet its emission ceiling for NMVOC in the supporting documentation	Yes

3 Summary of the assessment of the ERT

4. NMVOC emissions from 3B1a Manure management - Dairy cattle

The reviewers conducted an assessment of the adjustment of NMVOC emissions from 3B1a Manure management - Dairy cattle for Denmark, originally approved in 2022. The adjustment has been recalculated in 2023 and the corresponding values present small changes compared to the latest approved version (2022). Specifically, a 0.1 per cent decrease for 2005, and a 0.06 per cent decrease for 2020. Denmark explained that changes in the proportion of NH₃ emissions from housing and storage affect the NMVOC emission. The emissions were estimated using the methodology previously approved by ERT.

The impact of the adjustment on the NMVOC emission inventory of Denmark for the years 2005-2021 in ktonnes is detailed in Table 2.

Table 2: Impact of adjustments on the NMVOC emission inventory of Denmark for the years 2005-2021 in ktonnes

	Unit	2005	2020	2021
ERC	% of 2005		35%	35%
ERC unadjusted	(kt)		99.84	99.84
NT for Compliance unadjusted	(kt)	153.60	106.47	106.62
Gap to ERC unadjusted	(%)		-6.6%	-6.8%
ERC adjusted	(kt)		86.82	86.82
Adjusted NT for Compliance	(kt)	133.57	82.54	82.17
Gap to ERC adjusted	(%)		4.9%	5.3%
Impact of adjustment on NT for Compliance	(kt)	-20.03	-23.94	-24.45

4 Conclusions and Recommendations of the ERT

5. The reviewers concluded that there had been no change in the methodology that would alter the original approval of the adjustment application and that the application met all of the requirements set out in Executive Body decision 2012/12 and in the Technical Guidance; hence, it is **recommended that the adjustment continue to be accepted.**

5 Information Provided by the Party

6. Table 3 lists the information provided by the Party in its adjustment application. The information provided by Denmark can be downloaded from the CEIP website¹.

Table 3: Information Provided by the Party

Filename	Short description of content
Denmark_Adjustment_summary_2023	MS Excel file with detailed data underlying the proposed adjustment application for: Manure Management dairy cattle (3B1a)
Denmarks_Informative_Inventory_Report_2023.pdf	IIR 2023, pdf-document ; here especially: Chapter 12. Adjustments.
Denmark_NFR_Report_2023_CEIP	Excel file
Denmarks_Informative_Inventory_Report_2023_Annex_3D_Agriculture.xlsx	Excel file

7. The ERT found all necessary information in the documents provided by Denmark, there was no need for further information.

¹ <https://www.ceip.at/gothenburg-protocol/review-of-adjustments>

References

Data submitted by Parties applying for an adjustment:

<https://www.ceip.at/gothenburg-protocol/review-of-adjustments>

https://webdab01.umweltbundesamt.at/cgi-bin/adj_v2.pl

Decision 2012/3 (ECE/EB.AIR/111/Add.1): Adjustments under the Gothenburg Protocol to emission reduction commitments or to inventories for the purposes of comparing total national emissions with them.

https://www.ceip.at/fileadmin/inhalte/ceip/4_adjustments/decisions/ece_eb.air_111_add.1_eng_decision_3.pdf

Decision 2012/4: Provisional Application of Amendment to the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone

https://www.ceip.at/fileadmin/inhalte/ceip/4_adjustments/decisions/ece_eb.air_111_add.1_eng_decision_4.pdf

Decision 2012/12 (ECE/EB.AIR/113/Add.1): Guidance for adjustments under the 1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone to emission reduction commitments or to inventories for the purposes of comparing total national emissions with them.

https://www.ceip.at/fileadmin/inhalte/ceip/4_adjustments/decisions/decision_2012_12.pdf

Decision 2014/1 (ECE/EB.AIR/127/Add.1): Improving the guidance for adjustments under the 1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone to emission reduction commitments or to inventories for the purposes of comparing total national emissions with them.

https://www.ceip.at/fileadmin/inhalte/ceip/4_adjustments/decisions/decision_2014_1.pdf

ECE/EB.AIR/125: 2014 Reporting Guidelines (ECE/EB.AIR/125) for Estimating and Reporting Emission Data under CLRTAP

https://www.ceip.at/fileadmin/inhalte/ceip/1_reporting_guidelines2014/ece.eb.air.125_advance_version_reporting_guidelines_2014.pdf

ECE/EB.AIR/130: Technical Guidance for Parties Making Adjustment Applications and for the Expert Review of Adjustment Applications, 14 April 2015

https://www.ceip.at/fileadmin/inhalte/ceip/4_adjustments/ece_eb_air_130_av_for_the_web.pdf

EMEP/EEA 2019: EMEP/EEA Air Pollutant Emission Inventory Guidebook 2019

<https://www.eea.europa.eu/publications/emep-eea-guidebook-2019>

The 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone

http://www.unece.org/env/lrtap/multi_h1.html

TFEIP 2022: Technical Guidance for Emissions Inventory Adjustments under the Amended Gothenburg Protocol: Inventory adjustments in the context of ERCs

<https://www.ceip.at/gothenburg-protocol/adjustments>