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## Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol

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# Annual compilation and accounting report for Annex B Parties under the Kyoto Protocol for 2023

Note by the secretariat

Addendum

Compilation and accounting information by Party

#### Summary

This document contains detailed information on the initial accounting parameters for the second commitment period of the Kyoto Protocol for Parties included in Annex I with commitments inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol. It also contains annual information, based on the latest 2022 annual submissions, on anthropogenic greenhouse gas emissions in 2020 from source categories included in Annex A to the Kyoto Protocol and on greenhouse gas emissions and removals in 2020 from land use, land-use change and forestry activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and any other elected activities under Article 3, paragraph 4, of the Kyoto Protocol, as well as information, based on the 2023 annual submissions, on holdings and transactions of Kyoto Protocol units as at 31 December 2021 and 31 December 2022. This document contains values reported by Parties as at 31 August 2023.



## FCCC/KP/CMP/2023/4/Add.1

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## Abbreviations and acronyms

AAU assigned amount unit

Annex A source source category included in Annex A to the Kyoto Protocol

Annex B Party Party included in Annex I¹ with a commitment inscribed in the

third column of Annex B in the Doha Amendment to the Kyoto

Protocol

 $\begin{array}{ll} \text{CER} & \text{certified emission reduction} \\ \text{CO}_2 \text{ eq} & \text{carbon dioxide equivalent} \\ \text{ERU} & \text{emission reduction unit} \\ \text{EU} & \text{European Union} \end{array}$ 

FMRL forest management reference level

GHG greenhouse gas
IE included elsewhere

initial review report report on the review of the report to facilitate the calculation of

the assigned amount for the second commitment period of the

Kyoto Protocol

ICER long-term certified emission reduction LULUCF land use, land-use change and forestry

NA not applicable
NE not estimated
NO not occurring

QELRC quantified emission limitation or reduction commitment

RMU removal unit

tCER temporary certified emission reduction

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<sup>&</sup>lt;sup>1</sup> Defined in Article 1, para. 7, of the Kyoto Protocol.

#### I. Introduction

- 1. Document FCCC/KP/CMP/2023/4 provides an overview of the latest information available as at 31 August 2023 on annual accounting parameters for the second commitment period of the Kyoto Protocol for Annex B Parties; transactions and holdings of Kyoto Protocol units reported in 2022; and GHG emissions and removals for 2020, based on the latest 2022 annual submissions, which have been reviewed.
- 2. This document includes the following, more detailed, information, available as at 31 August 2023, for individual Annex B Parties:
- (a) Key initial accounting parameters for the second commitment period of the Kyoto Protocol;<sup>2</sup>
- (b) Total GHG emissions from Annex A sources reported for 2020, including indirect carbon dioxide emissions, where reported;<sup>3</sup>
- (c) GHG emissions and removals in the base year and 2020 from LULUCF activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and any other elected activities under Article 3, paragraph 4, of the Kyoto Protocol;<sup>4</sup>
- (d) Transactions and holdings of Kyoto Protocol units as at 31 December 2021 and 31 December 2022.
- 3. The total GHG emissions from Annex A sources and GHG emissions and removals from LULUCF activities submitted in 2022 and the information in the reports to facilitate the calculation of the assigned amount for the second commitment period of the Kyoto Protocol have been recorded in the compilation and accounting database. The information submitted in 2023 on transactions and holdings of Kyoto Protocol units will be recorded in the database after the completion of the associated review processes and the resolution of any questions of implementation.
- 4. This document also contains relevant information reported in accordance with decision 2/CMP.8, paragraph 4, and decision 3/CMP.11, paragraph 14, and other information reported by Parties included in Annex I that do not have commitments inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol.
- 5. The information referred to in paragraphs 2 and 4 above is based on initial review reports and annual submissions of GHG inventories and accounting information submitted by Parties, which are available on the UNFCCC website.<sup>5</sup>

#### II. Australia

- 6. Australia met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 11 July 2009.
- 7. Tables 1–5 provide detailed information on Australia's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

## Table 1 Key initial accounting parameters under the Kyoto Protocol for Australia

Parameter	Value	Unit
Total base-vear emissions <sup>a</sup>	566 786 410	t CO2 ea

<sup>&</sup>lt;sup>2</sup> The accounting parameters presented in this document are based on the final values available in the initial review reports published as at 31 August 2023.

<sup>&</sup>lt;sup>3</sup> Based on the latest 2022 annual submissions, which have been reviewed.

<sup>&</sup>lt;sup>4</sup> Based on the latest 2022 annual submissions, which have been reviewed.

https://unfccc.int/process/transparency-and-reporting/reporting-and-review-under-the-kyoto-protocol/second-commitment-period/initial-reports, https://unfccc.int/process-and-meetings/transparency-and-reporting/reporting-and-review-under-the-convention/national-inventory-submissions-2022 and https://unfccc.int/ghg-inventories-annex-i-parties/2023.

Parameter	Value	Unit
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	99.5	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period	4 511 619 826	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period,		
multiplied by eight	-237 336 202	t CO2 eq
Limitation on the additions to Australia's assigned amount resulting from forest		
management under Article 3, paragraph 4, of the Kyoto Protocol	117 214 453	t CO2 eq

 $<sup>^</sup>a$  The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 148,163,361 t CO<sub>2</sub> eq.

Table 2 Australia's emissions and removals of greenhouse gases in 2020 (t  $CO_2 \, eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		528 149 457
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		9 084 121
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		255 391 598
FMRL (t CO <sub>2</sub> eq/year)		4 700 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-13 873 687
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	42 365 430	-7 061 229

Table 3
Australia's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	4 511 619 826	NO	NO	23 081 798	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	24 191 188	22 822	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	4 511 619 826	NO	NO	47 272 986	22 822	NO

Table 4 **Australia's total quantities of Kyoto Protocol units by account type at the end of 2022** 

Us 26 NO	ERUs NO	RMUs NO	CERs	tCERs	lCERs
	NO	NO	24.054.674		
10			24 054 674	NO	NO
	NO	NO	NO	NO	NO
10	NO	NO	NO	NO	NO
10					
Ю	NO	NO	NO		
10	NO	NO	NO		
10	NO	NO	40 097 430	22 822	NO
1О	NO	NO	NO	NO	NO
10					
10					
				NO	
					NO
					NO
					NO
10	NO	NO	NO	NO	
10	NO	NO	NO		
10	NO	NO	NO		NO
10	NO	NO	NO		NO
1	0	O NO O NO	O NO NO	O NO NO NO	O NO NO NO NO O NO NO NO NO NO NO NO NO

Table 5 **Australia's total transactions of Kyoto Protocol units in 2022** 

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	28 978 090	NO	NO
Total transactions	NO	NO	NO	28 978 090	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	15 906 242	NO	NO
External transactions	NO	NO	NO	12 098 972	NO	NO
Total transactions	NO	NO	NO	28 005 214	NO	NO

## III. Austria

8. Austria met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 5 April 2008.

9. Tables 6–10 provide detailed information on Austria's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 6 **Key initial accounting parameters under the Kyoto Protocol for Austria** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	78 855 136	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup><math>b</math></sup>	405 712 317	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Austria's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	22 079 438	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 7 Austria's emissions and removals of greenhouse gases in 2020 (t  $CO_2$  eq)

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		73 592 017
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol $$		-1 733 252
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-431 414
FMRL (t CO <sub>2</sub> eq/year)		-6 516 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		5 773 943
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

 ${\bf Table~8} \\ {\bf Austria's~total~quantities~of~Kyoto~Protocol~units~by~account~type~at~the~end~of~2021} \\$ 

Account type	AAUs	ERUs	RMUs	CERs	tCERs	<i>lCERs</i>
Party holding accounts	405 712 317	NO	NO	2 343 258	NO	NO
Entity holding accounts	NO	NO	NO	286 394	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	4 935					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	523 909	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	405 717 252	NO	NO	3 153 561	NO	NO

Table 9 **Austria's total quantities of Kyoto Protocol units by account type at the end of 2022** 

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	405 712 317	NO	NO	2 343 570	NO	NO
Entity holding accounts	NO	NO	NO	163 396	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	4 935					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	596 580	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	405 717 252	NO	NO	3 103 546	NO	NO

Table 10 **Austria's total transactions of Kyoto Protocol units in 2022** 

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	903 181	NO	NO
Total transactions	NO	NO	NO	903 181	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	72 671	NO	NO

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	<i>lCERs</i>
External transactions	NO	NO	NO	953 508	NO	NO
Total transactions	NO	NO	NO	1 026 179	NO	NO

#### IV. Belarus

- As at 31 August 2023, Belarus had not deposited its instrument of acceptance of the Doha Amendment.<sup>6</sup>
- 11. As at 31 August 2023, Belarus had not yet submitted its report to facilitate the calculation of the assigned amount for the second commitment period of the Kyoto Protocol.
- 12. Table 11 provides information on Belarus's GHG emissions from Annex A sources.

Table 11

#### Belarus's emissions and removals of greenhouse gases in 2020

(t CO<sub>2</sub> eq)

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		88 802 059

*Note*: As at 31 August 2023, Belarus had not yet submitted annual information on its GHG emissions and removals in 2020 from LULUCF activities under Article 3, paras. 3–4, of the Kyoto Protocol.

## V. Belgium

- 13. Belgium met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 22 April 2008.
- 14. Tables 12–16 provide detailed information on Belgium's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 12 **Key initial accounting parameters under the Kyoto Protocol for Belgium** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	147 811 094	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period $^b$	584 228 513	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Belgium's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	41 387 106	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

<sup>&</sup>lt;sup>6</sup> Belarus did not have a QELRC in the first commitment period of the Kyoto Protocol.

Table 13 Belgium's emissions and removals of greenhouse gases in 2020  $(t\ \text{CO}_2\ \text{eq})$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		106 433 259
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		446 930
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		$-1\ 578\ 428$
FMRL (t CO <sub>2</sub> eq/year)		-2 499 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		1 010 170
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Table 14 **Belgium's total quantities of Kyoto Protocol units by account type at the end of 2021** 

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	584 228 513	NO	NO	NO	NO	NO
Entity holding accounts	NO	1 392 288	NO	18 116 082	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	1 875 593	NO	40 250	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	584 228 513	3 267 881	NO	18 156 332	NO	NO

Table 15 **Belgium's total quantities of Kyoto Protocol units by account type at the end of 2022** 

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	584 228 513	NO	NO	NO	NO	NO
Entity holding accounts	NO	1 391 102	NO	18 135 015	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	1 706 252					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	1 876 779	NO	40 250	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	585 934 765	3 267 881	NO	18 175 265	NO	NO

Table 16 **Belgium's total transactions of Kyoto Protocol units in 2022** 

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	18 933	NO	NO
Total transactions	NO	NO	NO	18 933	NO	NO
Subtractions						
Internal transactions	NO	1 186	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	1 186	NO	NO	NO	NO

## VI. Bulgaria

- 15. Bulgaria met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 4 February 2011.
- 16. Tables 17–21 provide detailed information on Bulgaria's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 17 **Key initial accounting parameters under the Kyoto Protocol for Bulgaria** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	114 105 323	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment $period^b$	222 945 983	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period,		
multiplied by eight <sup>c</sup>	NA	_

Parameter	Value	Unit
Limitation on the additions to Bulgaria's assigned amount resulting from forest		
management under Article 3, paragraph 4, of the Kyoto Protocol	31 949 490	t CO2 eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 18 Bulgaria's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		49 185 624
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol $$		-1 207 753
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-9 173 876
FMRL (t CO <sub>2</sub> eq/year)		-7 950 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-2 941 666
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Table 19 **Bulgaria's total quantities of Kyoto Protocol units by account type at the end of 2021** 

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	222 945 983	NO	NO	NO	NO	NO
Entity holding accounts	NO	620 328	NO	83 593	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	222 945 983	620 328	NO	83 593	NO	NO

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

 $<sup>^{</sup>c}$  This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Table 20 Bulgaria's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	222 899 292	1 664 593	NO	829 837	NO	NO
Entity holding accounts	NO	620 328	NO	83 593	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	257 149 715					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	46 691	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	480 095 698	2 284 921	NO	913 430	NO	NO

Table 21 **Bulgaria's total transactions of Kyoto Protocol units in 2022** 

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	46 691	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	46 691	NO	NO	NO	NO	NO

## VII. Croatia

- 17. Croatia met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 8 February 2012.
- 18. Tables 22–26 provide detailed information on Croatia's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 22 **Key initial accounting parameters under the Kyoto Protocol for Croatia** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	31 204 631	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment $period^b$	162 271 086	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Croatia's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	8 737 296	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 23 **Croatia's emissions and removals of greenhouse gases in 2020** (t CO<sub>2</sub> eq)

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		23 758 399
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol $$		-379 730
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-6 730 930
FMRL (t CO <sub>2</sub> eq/year)		-6 289 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		96 570
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Table 24 Croatia's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	162 271 086	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	162 271 086	NO	NO	NO	NO	NO

Table 25 Croatia's total quantities of Kyoto Protocol units by account type at the end of 2022

•	·	•	•			
Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	162 271 086	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	162 271 086	NO	NO	NO	NO	NO

Table 26 Croatia's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

## VIII. Cyprus

- 19. Upon the entry into force of the Doha Amendment, the assigned amount for Cyprus was recorded in the compilation and accounting database, and as at 31 December 2020, its eligibility to participate in the flexibility mechanisms under the Kyoto Protocol had been established.<sup>7</sup>
- 20. Tables 27–31 provide detailed information on Cyprus's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 27 **Key initial accounting parameters under the Kyoto Protocol for Cyprus** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	5 627 236	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment $period^b$	47 450 128	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Cyprus's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	1 575 626	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 28 Cyprus's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		8 878 439
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol $$		-7 092
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-137 579
FMRL (t CO <sub>2</sub> eq/year)		$-157\ 000$
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		77 862
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Cyprus's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	47 450 128	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		

<sup>&</sup>lt;sup>7</sup> See decision 11/CMP.1, annex, paras. 2–3, in conjunction with decisions 1/CMP.8; 9/CMP.1, annex, paras. 21–22; and 3/CMP.1, annex, paras. 31–32.

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> Cyprus did not have a QELRC in the first commitment period of the Kyoto Protocol.

Account type	AAUs	ERUs	RMUs	CERs	tCERs	<i>lCERs</i>
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
Total	47 450 128	NO	NO	NO	NO	NO

Table 30 **Cyprus's total quantities of Kyoto Protocol units by account type at the end of 2022** 

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	47 450 128	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
Total	47 450 128	NO	NO	NO	NO	NO

Table 31

Cyprus's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Transaction type	AAUs	LKUS	MMUS	CERS	icens	iCERS
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

#### IX. Czechia

- 21. Czechia met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 24 February 2008.
- 22. Tables 32–36 provide detailed information on Czechia's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 32 **Key initial accounting parameters under the Kyoto Protocol for Czechia** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	198 316 406	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment $period^b$	520 515 203	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Czechia's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	55 528 593	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 33 **Czechia's emissions and removals of greenhouse gases in 2020** (t CO<sub>2</sub> eq)

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		113 338 547
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-464 150
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		13 826 022
FMRL (t CO <sub>2</sub> eq/year)		-4 686 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-225 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Table 34
Czechia's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	520 515 203	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	8 149	NO	NO

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	520 515 203	NO	NO	8 149	NO	NO

Table 35 Czechia's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	520 515 203	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Total	520 515 203	NO	NO	NO	NO	NO

Table 36
Czechia's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	8 149	NO	NO
Total transactions	NO	NO	NO	8 149	NO	NO

#### X. Denmark

- 23. Denmark met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 20 April 2008.
- 24. Tables 37–41 provide detailed information on Denmark's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 37 **Key initial accounting parameters under the Kyoto Protocol for Denmark** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	70 801 910	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment $period^b$	269 377 890	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Denmark's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	19 822 068	t CO <sub>2</sub> eq

 $<sup>^</sup>a$  The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 8,807 t CO<sub>2</sub> eq.

Table 38 Denmark's emissions and removals of greenhouse gases in 2020 (t  $CO_2$  eq)

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		41 745 749
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		239 686
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-945 422

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Parameter	Base year	2020
FMRL (t CO <sub>2</sub> eq/year)		409 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-82 617
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	7 915 839	5 011 364

Table 39 **Denmark's total quantities of Kyoto Protocol units by account type at the end of 2021** 

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	269 377 890	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	2 485 793	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	295 556	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	269 377 890	NO	NO	2 781 349	NO	NO

Table 40 **Denmark's total quantities of Kyoto Protocol units by account type at the end of 2022** 

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	269 377 890	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	85 793	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	295 556	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	269 377 890	NO	NO	381 349	NO	NO

Table 41 **Denmark's total transactions of Kyoto Protocol units in 2022** 

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	2 400 000	NO	NO
Total transactions	NO	NO	NO	2 400 000	NO	NO

## XI. Estonia

- 25. Estonia met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 15 April 2008.
- 26. Tables 42–46 provide detailed information on Estonia's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 42 **Key initial accounting parameters under the Kyoto Protocol for Estonia** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	39 996 697	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment $period^b$	51 056 976	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Estonia's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	11 199 075	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Table 43 Estonia's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		11 555 809
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		295 274
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-22 979
FMRL (t CO <sub>2</sub> eq/year)		-2 741 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		2 164 102
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Table 44
Estonia's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	51 056 976	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	51 056 976	NO	NO	NO	NO	NO

Table 45
Estonia's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	51 056 976	2 127 093	NO	424 474	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	8 862 661					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	59 919 637	2 127 093	NO	424 474	NO	NO

Table 46 **Estonia's total transactions of Kyoto Protocol units in 2022** 

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

## XII. European Union

- 27. The EU met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 18 April 2008.
- 28. Tables 47–51 provide detailed information on the initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units of the EU.

Table 47 **Key initial accounting parameters under the Kyoto Protocol for the European Union** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	5 875 692 700	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period $^b$	15 813 089 338	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight	-1 063 645 030	t CO <sub>2</sub> eq

Parameter	Value	Unit
Limitation on the additions to the assigned amount of the EU resulting from forest		
management under Article 3, paragraph 4, of the Kyoto Protocol	1 643 637 017	t CO2 eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 5,560,495 t CO<sub>2</sub> eq.

Table 48 European Union's emissions and removals of greenhouse gases in 2020  $(t\ \text{CO}_2\ \text{eq})$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		3 708 504 751
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-18 601 444
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-299 589 399
FMRL (t CO <sub>2</sub> eq/year)		-306 736 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		18 789 952
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	81 604 206	55 802 450

Table 49 **European Union's total quantities of Kyoto Protocol units by account type at the end of 2021** 

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	15 813 089 338	NO	NO	138 474 785	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	21 711 387	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	15 813 089 338	NO	NO	160 186 172	NO	NO

 $<sup>^</sup>b$  The assigned amount of the EU (15,813,089,338 t  $\rm CO_2$  eq) is the difference between (1) the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom, equalling 80 per cent of its base-year emissions as inscribed in the third column of the table in Annex B in the Doha Amendment to the Kyoto Protocol, multiplied by eight (37,604,433,280 t  $\rm CO_2$  eq) and (2) the sum of the individual assigned amounts of the 27 member States, Iceland and the United Kingdom (21,791,343,942 t  $\rm CO_2$  eq) determined in line with the terms of the joint fulfilment agreement.

Table 50 **European Union's total quantities of Kyoto Protocol units by account type at the end of 2022** 

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	15 754 045 219	NO	NO	130 449 286	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	2 124 109 368					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	23 234 278	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	17 878 154 587	NO	NO	153 683 564	NO	NO

Table 51 **European Union's total transactions of Kyoto Protocol units in 2022** 

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	5 629 817	NO	NO
Total transactions	NO	NO	NO	5 629 817	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	1 522 891	NO	NO
External transactions	59 044 119	NO	NO	12 132 425	NO	NO
Total transactions	59 044 119	NO	NO	13 655 316	NO	NO

## XIII. Finland

- 29. Finland met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 22 April 2008.
- 30. Tables 52–56 provide detailed information on Finland's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 52 **Key initial accounting parameters under the Kyoto Protocol for Finland** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	71 350 147	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment $period^b$	240 544 599	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Finland's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	19 978 041	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 53 Finland's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		47 782 251
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		2 809 177
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-34 799 603
FMRL (t CO <sub>2</sub> eq/year)		$-20\ 466\ 000$
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-9 198 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Table 54
Finland's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	240 544 599	2 912 592	NO	9 953 407	NO	NO
Entity holding accounts	NO	4 625	NO	124 087	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	55 860	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

	240 544 599	2 917 217	NO	10 133 354	NO	NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for expiry	NO	NO	NO	NO		
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER cancellation account for non- submission of certification report						NO
Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs

Table 55 **Finland's total quantities of Kyoto Protocol units by account type at the end of 2022** 

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	240 544 599	2 912 592	NO	9 986 208	NO	NO
Entity holding accounts	NO	NO	NO	1 799 534	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	4 625	NO	57 029	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	240 544 599	2 917 217	NO	11 842 771	NO	NO

Table 56 Finland's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	2 509 418	NO	NO
Total transactions	NO	NO	NO	2 509 418	NO	NO
Subtractions						
Internal transactions	NO	4 625	NO	1 169	NO	NO
External transactions	NO	NO	NO	800 001	NO	NO
Total transactions	NO	4 625	NO	801 170	NO	NO

#### XIV. France

- 31. France met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 21 April 2008.
- 32. Tables 57–61 provide detailed information on France's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 57 **Key initial accounting parameters under the Kyoto Protocol for France** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	548 055 757	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period $^b$	3 014 714 832	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to France's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	153 455 612	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 58 France's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		392 962 569
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol $$		-2 028 956
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-19 728 313
FMRL (t CO <sub>2</sub> eq/year)		-67 410 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		23 318 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NO	IE, NE, NO

Table 59
France's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	<i>lCERs</i>
Party holding accounts	3 014 714 832	NO	NO	51	NO	NO
Entity holding accounts	NO	3 969	NO	6 863 030	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	187 377 092					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	1 117 737	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	3 202 091 924	3 969	NO	7 980 818	NO	NO

Table 60 France's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	3 014 714 832	NO	NO	51	NO	NO
Entity holding accounts	NO	3 969	NO	5 265 582	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	187 377 092					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	6 570 400	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	3 202 091 924	3 969	NO	11 836 033	NO	NO

Table 61 France's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
External transactions	NO	NO	NO	4 810 785	NO	NO
Total transactions	NO	NO	NO	4 810 785	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	5 452 663	NO	NO
External transactions	NO	NO	NO	955 570	NO	NO
Total transactions	NO	NO	NO	6 408 233	NO	NO

## XV. Germany

- 33. Germany met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 27 April 2008.
- 34. Tables 62–66 provide detailed information on Germany's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 62 **Key initial accounting parameters under the Kyoto Protocol for Germany** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	1 253 599 336	t CO2 eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period $^b$	3 592 699 888	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	=
Limitation on the additions to Germany's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	351 007 813	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 63 Germany's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		728 737 654
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		549 047
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-54 098 446
FMRL (t CO <sub>2</sub> eq/year)		-22 418 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		6 330 666
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	41 260 237	37 017 398

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Table 64 **Germany's total quantities of Kyoto Protocol units by account type at the end of 2021** 

:						
Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	3 592 699 888	NO	NO	4 269 200	NO	NO
Entity holding accounts	NO	28 412	NO	8 793 527	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	12 317 018	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	3 592 699 888	28 412	NO	25 379 745	NO	NO

Table 65 **Germany's total quantities of Kyoto Protocol units by account type at the end of 2022** 

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	3 592 699 888	NO	NO	4 752 950	NO	NO
Entity holding accounts	NO	26 800	NO	18 133 648	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	1 612	NO	19 118 402	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	3 592 699 888	28 412	NO	42 005 000	NO	NO

Table 66
Germany's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	20 797 283	NO	NO
Total transactions	NO	NO	NO	20 797 283	NO	NO
Subtractions						
Internal transactions	NO	1 612	NO	6 801 384	NO	NO
External transactions	NO	NO	NO	4 172 028	NO	NO
Total transactions	NO	1 612	NO	10 973 412	NO	NO

#### XVI. Greece

- 35. Greece met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 14 November 2008.
- 36. Tables 67–71 provide detailed information on Greece's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 67 **Key initial accounting parameters under the Kyoto Protocol for Greece** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	107 564 136	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period $^b$	480 791 166	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Greece's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	30 117 958	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 68 Greece's emissions and removals of greenhouse gases in 2020  $(t CO_2 eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		74 941 227

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Parameter	Base year	2020
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-33 056
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-2 016 700
FMRL (t CO <sub>2</sub> eq/year)		-1830000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		210 402
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Table 69 **Greece's total quantities of Kyoto Protocol units by account type at the end of 2021** 

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	480 791 166	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	480 791 166	NO	NO	NO	NO	NO

Table 70
Greece's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	480 791 166	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	75 000	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	480 791 166	NO	NO	75 000	NO	NO

Table 71 **Greece's total transactions of Kyoto Protocol units in 2022** 

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						-
Internal transactions		NO	NO			
External transactions	NO	NO	NO	75 000	NO	NO
Total transactions	NO	NO	NO	75 000	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

## XVII. Hungary

- 37. Hungary met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 30 December 2007.
- 38. Tables 72–76 provide detailed information on Hungary's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 72 **Key initial accounting parameters under the Kyoto Protocol for Hungary** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	109 574 819	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment $period^b$	434 486 280	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Hungary's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	30 680 949	t CO <sub>2</sub> eq

- <sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.
- <sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.
- $^{c}$  This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Table 73 Hungary's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		62 818 386
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol $$		-861 808
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-5 309 013
FMRL (t CO <sub>2</sub> eq/year)		$-1\ 000\ 000$
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-333 706
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Table 74 **Hungary's total quantities of Kyoto Protocol units by account type at the end of 2021** 

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	434 486 280	3 872 627	NO	5 329 060	NO	NO
Entity holding accounts	NO	1 267	NO	6 216	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	166 996 521					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	3 000	NO	1 400	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	601 482 801	3 876 894	NO	5 336 676	NO	NO

Table 75 **Hungary's total quantities of Kyoto Protocol units by account type at the end of 2022** 

Account type	AAUs	ERUs	RMUs	CERs	tCERs	<i>lCERs</i>
Party holding accounts	434 486 280	3 872 627	NO	5 329 060	NO	NO
Entity holding accounts	NO	1 267	NO	6 216	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	166 996 521					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	3 000	NO	1 400	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	601 482 801	3 876 894	NO	5 336 676	NO	NO

Table 76 **Hungary's total transactions of Kyoto Protocol units in 2022** 

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

## XVIII. Iceland

- 39. Iceland met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 11 May 2008.
- 40. Tables 77–81 provide detailed information on Iceland's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 77 **Key initial accounting parameters under the Kyoto Protocol for Iceland** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	3 633 558	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period $^b$	15 327 217	t CO2 eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Iceland's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	1 017 396	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 78 Iceland's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		4 509 640
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-336 772
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-172 646
FMRL (t CO <sub>2</sub> eq/year)		$-154\ 000$
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-1755
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	-387 516	-681 132

Table 79
Iceland's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	15 327 217	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of						
storage						NO

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Total	15 327 217	NO	NO	NO	NO	NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for expiry	NO	NO	NO	NO		
tCER replacement account for expiry	NO	NO	NO	NO_	NO	
ICER cancellation account for non- submission of certification report						NO
Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs

Table 80 Iceland's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	15 327 217	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	15 327 217	NO	NO	NO	NO	NO

Table 81 **Iceland's total transactions of Kyoto Protocol units in 2022** 

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

#### XIX. Ireland

- 41. Ireland met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 19 April 2008.
- 42. Tables 82–86 provide detailed information on Ireland's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 82 **Key initial accounting parameters under the Kyoto Protocol for Ireland** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	56 425 830	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment $period^b$	343 519 892	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Ireland's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	15 796 928	t CO <sub>2</sub> eq

- <sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 8,230 t CO<sub>2</sub> eq.
- <sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.
- <sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Table 83 Ireland's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		58 032 341
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-2 939 577
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		302 338
FMRL (t CO <sub>2</sub> eq/year)		$-142\ 070$
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		170 260
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	6 891 586	6 385 911

Table 84
Ireland's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	343 519 892	NO	NO	5 288 933	NO	NO
Entity holding accounts	NO	74 964	NO	2 909 825	636 919	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	343 519 892	74 964	NO	8 198 758	636 919	NO

Table 85
Ireland's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	343 519 892	10 088	NO	8 198 758	NO	NO
Entity holding accounts	NO	64 876	NO	NO	636 919	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	6 594 092					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	350 113 984	74 964	NO	8 198 758	636 919	NO

Table 86
Ireland's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	5 288 933	NO	NO
Total transactions	NO	NO	NO	5 288 933	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	5 288 933	NO	NO
Total transactions	NO	NO	NO	5 288 933	NO	NO

## XX. Italy

- 43. Italy met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 19 April 2008.
- 44. Tables 87–91 provide detailed information on Italy's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 87 **Key initial accounting parameters under the Kyoto Protocol for Italy** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	521 920 601	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period $^b$	2 410 291 421	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Italy's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	146 137 768	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 88 Italy's emissions and removals of greenhouse gases in 2020  $(t\ \text{CO}_2\ \text{eq})$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		381 247 963
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-7 141 558
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-23 179 067
FMRL (t CO <sub>2</sub> eq/year)		-22 166 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		$-1\ 680\ 061$
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	1 507 087	-4 624 123

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, 27 its member States, Iceland and the United Kingdom.

Table 89
Italy's total quantities of Kyoto Protocol units by account type at the end of 2021

AAUs	ERUs	RMUs	CERs	tCERs	lCERs
2 410 291 421	698 870	NO	975 569	NO	NO
NO	372 201	NO	4 052 403	142 882	NO
NO	NO	NO	NO	NO	NO
NO					
NO	NO	NO	NO		
NO	NO	NO	NO		
NO	37 875	NO	50 597	NO	NO
NO	NO	NO	NO	NO	NO
NO					
NO					
				NO	
					NO
					NO
					NO
NO	NO	NO	NO	NO	
NO	NO	NO	NO		
NO	NO	NO	NO		NO
NO	NO	NO	NO		NO
2 410 291 421	1 108 946	NO	5 078 569	142 882	NO
	2 410 291 421 NO	2 410 291 421 698 870  NO 372 201  NO NO  NO NO	2 410 291 421 698 870 NO NO 372 201 NO N	2 410 291 421   698 870   NO   975 569     NO   372 201   NO   4 052 403     NO   NO   NO   NO     NO   NO   NO	2 410 291 421   698 870   NO   975 569   NO   NO   372 201   NO   4 052 403   142 882   NO   NO   NO   NO   NO   NO   NO   N

Table 90 Italy's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	2 410 291 421	698 870	NO	975 569	NO	NO
Entity holding accounts	NO	370 848	NO	4 074 377	142 882	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	664 334					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	39 228	NO	540 552	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	2 410 955 755	1 108 946	NO	5 590 498	142 882	NO

Table 91
Italy's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	617 932	NO	NO
Total transactions	NO	NO	NO	617 932	NO	NO
Subtractions						
Internal transactions	NO	1 353	NO	489 955	NO	NO
External transactions	NO	NO	NO	106 003	NO	NO
Total transactions	NO	1 353	NO	595 958	NO	NO

#### XXI. Kazakhstan

- 45. As at 31 August 2023, Kazakhstan had submitted its fifth progress report pursuant to the preliminary findings (Compliance Committee document CC2020-1-2/Kazakhstan/EB, para. 29(b)) confirmed by the final decision of the enforcement branch of the Compliance Committee (Compliance Committee document CC-2020-1-4/Kazakhstan/EB). The progress report, which was submitted in accordance with rule 25 bis of the "Rules of procedure of the Compliance Committee of the Kyoto Protocol",8 contains information on the activities implemented in respect of the question of implementation. As at 31 August 2023, Kazakhstan had not deposited its instrument of acceptance of the Doha Amendment.
- 46. Tables 92–93 provide detailed information on Kazakhstan's initial accounting parameters for the second commitment period of the Kyoto Protocol and its GHG emissions and removals.
- 47. As at 31 August 2023, Kazakhstan had not submitted information on its holdings and transactions of Kyoto Protocol units for the period ending 31 December 2022.

Table 92 **Key initial accounting parameters under the Kyoto Protocol for Kazakhstan** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	371 295 113	t CO2 eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	95	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period	2 821 842 860	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by $eight^b$	548 265 662	t CO <sub>2</sub> eq
Limitation on the additions to Kazakhstan's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	103 962 632	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>8</sup> Available at <a href="https://unfccc.int/files/kyoto">https://unfccc.int/files/kyoto</a> protocol/compliance/background/ application/pdf/rules of procedure of the compliance committee of the kp.pdf.

Table 93 **Kazakhstan's emissions and removals of greenhouse gases in 2020** (t CO<sub>2</sub> eq)

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		342 868 789
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		_
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-
FMRL (t CO <sub>2</sub> eq/year) <sup>a</sup>		_
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		_
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	_	_

<sup>&</sup>lt;sup>a</sup> Kazakhstan has not yet submitted information on its FMRL in accordance with the guidelines outlined in part I of appendix II to decision 2/CMP.6, and therefore it has no value for its FMRL inscribed in the appendix to the annex to decision 2/CMP.7.

#### XXII. Latvia

- 48. Latvia met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 29 April 2008.
- 49. Tables 94–98 provide detailed information on Latvia's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 94 **Key initial accounting parameters under the Kyoto Protocol for Latvia** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	26 409 077	t CO2 eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period $^b$	76 633 439	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by $eight^c$	NA	_
Limitation on the additions to Latvia's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	7 394 541	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 95 **Latvia's emissions and removals of greenhouse gases in 2020** (t CO<sub>2</sub> eq)

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		10 459 725

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>&</sup>lt;sup>b</sup> Kazakhstan did not have a QELRC in the first commitment period of the Kyoto Protocol.

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Parameter	Base year	2020
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		857 419
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-1 558 750
FMRL (t CO <sub>2</sub> eq/year)		$-16\ 302\ 000$
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		14 829 110
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA, NO	NA, NO

Table 96

Latvia's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	76 633 439	NO	NO	NO	NO	NO
Entity holding accounts	NO	5 317	NO	21 550	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	76 633 439	5 317	NO	21 550	NO	NO

Table 97

Latvia's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	76 633 439	NO	NO	NO	NO	NO
Entity holding accounts	NO	5 317	NO	21 550	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	28 249 726					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	104 883 165	5 317	NO	21 550	NO	NO

Table 98 **Latvia's total transactions of Kyoto Protocol units in 2022** 

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

#### XXIII. Liechtenstein

- 50. Liechtenstein met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 22 April 2008.
- 51. Tables 99–103 provide detailed information on Liechtenstein's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 99 **Key initial accounting parameters under the Kyoto Protocol for Liechtenstein** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	231 554	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	84	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period	1 556 044	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight	-410 191	t CO <sub>2</sub> eq
Limitation on the additions to Liechtenstein's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	64 169	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 100 Liechtenstein's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		180 011
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		3 941
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-6 148
FMRL (t CO <sub>2</sub> eq/year)		100
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		259
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	_	NO

Table 101 Liechtenstein's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	1 556 044	NO	NO	314 004	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	1 556 044	NO	NO	314 004	NO	NO

Table 102 Liechtenstein's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	1 562 675	NO	NO	314 004	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	1 562 675	NO	NO	314 004	NO	NO

Table 103
Liechtenstein's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	6 631	NO	NO	NO	NO	NO
Total transactions	6 631	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

# XXIV. Lithuania

- 52. Lithuania met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 24 October 2012.
- 53. Tables 104–108 provide detailed information on Lithuania's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 104 **Key initial accounting parameters under the Kyoto Protocol for Lithuania** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	48 196 540	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment $period^b$	113 600 821	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period,		
multiplied by eight <sup>c</sup>	NA	_

Parameter	Value	Unit
Limitation on the additions to Lithuania's assigned amount resulting from forest		
management under Article 3, paragraph 4, of the Kyoto Protocol	13 495 031	t CO2 eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 105 Lithuania's emissions and removals of greenhouse gases in 2020  $(t\ \mathrm{CO_2}\ \mathrm{eq})$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		20 182 554
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol $$		-200 039
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-5 653 252
FMRL (t CO <sub>2</sub> eq/year)		-4 552 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-922 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Table 106 Lithuania's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	113 600 821	633 399	NO	229 828	NO	NO
Entity holding accounts	NO	140 754	NO	659	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	22 932	NO	16 479	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	113 600 821	797 085	NO	246 966	NO	NO

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

 $<sup>^{</sup>c}$  This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Table 107
Lithuania's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	113 600 821	633 399	NO	229 828	NO	NO
Entity holding accounts	NO	140 754	NO	659	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	22 932	NO	16 479	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	113 600 821	797 085	NO	246 966	NO	NO

Table 108 Lithuania's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

# XXV. Luxembourg

- 54. Luxembourg met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 29 April 2008.
- 55. Tables 109–113 provide detailed information on Luxembourg's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 109 **Key initial accounting parameters under the Kyoto Protocol for Luxembourg** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	13 141 245	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period $^b$	72 454 473	t CO2 eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Luxembourg's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	3 604 402	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 268,381 t CO<sub>2</sub> eq.

Table 110 Luxembourg's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		9 064 903
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol $$		354
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-377 064
FMRL (t CO <sub>2</sub> eq/year)		-418 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		40 180
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA, NO	NA, NO

Table 111
Luxembourg's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	72 454 473	NO	NO	1 565 755	285 788	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for expiry	NO	NO	NO	NO		
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER cancellation account for non-submission of certification report						NO
Account type	AAUs	ERUs	RMUs	CERs	tCERs	<i>lCERs</i>

Table 112 Luxembourg's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	72 454 473	NO	NO	1 303 192	285 788	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	262 563	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	72 454 473	NO	NO	1 565 755	285 788	NO

Table 113 **Luxembourg's total transactions of Kyoto Protocol units in 2022** 

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

### XXVI. Malta

- 56. Upon the entry into force of the Doha Amendment, the assigned amount for Malta was recorded in the compilation and accounting database, and as at 31 December 2020, its eligibility to participate in the flexibility mechanisms under the Kyoto Protocol had been established.<sup>9</sup>
- 57. Tables 114–118 provide detailed information on Malta's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 114 **Key initial accounting parameters under the Kyoto Protocol for Malta** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	1 974 638	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period $^b$	9 299 769	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Malta's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	552 898	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 115 Malta's emissions and removals of greenhouse gases in 2020 (t  $CO_2$  eq)

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		2 121 590
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol $$		-36
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-5
FMRL (t CO <sub>2</sub> eq/year)		-49 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		48 990
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA, NO	NA, NO

Table 116
Malta's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	9 299 769	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	155	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		

<sup>&</sup>lt;sup>9</sup> See decision 11/CMP.1, annex, paras. 2–3, in conjunction with decision 1/CMP. 8; decision 9/CMP.1, annex, paras. 21–22; and decision 3/CMP.1, annex, paras. 31–32.

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> Malta did not have a QELRC in the first commitment period of the Kyoto Protocol.

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
Total	9 299 769	NO	NO	155	NO	NO

Table 117
Malta's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	9 299 769	NO	NO	NO	NO	NO
Entity holding accounts	NO	15 509	NO	577 989	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	234 641	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
Total	9 299 769	15 509	NO	812 630	NO	NO

Table 118

Malta's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	15 509	NO	1 706 896	NO	NO
Total transactions	NO	15 509	NO	1 706 896	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	234 641	NO	NO
External transactions	NO	NO	NO	894 421	NO	NO
Total transactions	NO	NO	NO	1 129 062	NO	NO

#### XXVII. Monaco

- 58. Monaco met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 7 September 2008.
- 59. Tables 119–123 provide information on Monaco's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 119 **Key initial accounting parameters under the Kyoto Protocol for Monaco** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	99 319	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	78	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period	619 751	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight	-92 460	t CO <sub>2</sub> eq
Limitation on the additions to Monaco's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	27 809 000	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 120 **Monaco's emissions and removals of greenhouse gases in 2020** (t CO<sub>2</sub> eq)

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		70 037
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		NO
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		NO
FMRL (t CO <sub>2</sub> eq/year)		NA
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		NA
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NO	NO

Table 121 Monaco's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	619 751	NO	NO	70 772	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	23 966					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
Total	643 717	NO	NO	70 772	NO	NO

Table 122 Monaco's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	619 751	NO	NO	77 751	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	23 966					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
Total	643 717	NO	NO	77 751	NO	NO

Table 123 **Monaco's total transactions of Kyoto Protocol units in 2022** 

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	6 979	NO	NO
Total transactions	NO	NO	NO	6 979	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

## **XXVIII.** Netherlands (Kingdom of the)

- 60. The Kingdom of the Netherlands met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 21 April 2008.
- 61. Tables 124–128 provide detailed information on the Kingdom of the Netherlands' initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 124
Key initial accounting parameters under the Kyoto Protocol for the Kingdom of the Netherlands

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	223 950 669	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period $^b$	924 777 902	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to the assigned amount of the Kingdom of the Netherlands resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	62 495 551	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 752,270 t CO<sub>2</sub> eq.

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Table 125 The Kingdom of the Netherlands' emissions and removals of greenhouse gases in 2020  $(t\ {\rm CO_2}\ {\rm eq})$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		164 334 501
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-152 569
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-1 183 110
FMRL (t CO <sub>2</sub> eq/year)		$-1\ 425\ 000$
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		337 420
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Table 126

The Kingdom of the Netherlands' total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	924 777 902	NO	NO	563 670	NO	NO
Entity holding accounts	NO	NO	NO	5 043 394	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	15 000	NO	2 603 932	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	924 777 902	15 000	NO	8 210 996	NO	NO

Table 127
The Kingdom of the Netherlands' total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	924 777 902	NO	NO	563 670	NO	NO
Entity holding accounts	NO	NO	NO	4 121 424	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					

Account type	AAUs	ERUs	RMUs	CERs	tCERs	<i>lCERs</i>
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	15 000	NO	4 711 737	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	924 777 902	15 000	NO	9 396 831	NO	NO

Table 128

The Kingdom of the Netherlands' total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	8 352 945	NO	NO
Total transactions	NO	NO	NO	8 352 945	NO	NO
Subtractions						_
Internal transactions	NO	NO	NO	2 107 805	NO	NO
External transactions	NO	NO	NO	7 167 110	NO	NO
Total transactions	NO	NO	NO	9 274 915	NO	NO

## XXIX. Norway

- 62. Norway met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 22 April 2008.
- 63. Tables 129–133 provide detailed information on Norway's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 129 **Key initial accounting parameters under the Kyoto Protocol for Norway** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	51 921 771	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	84	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period	348 914 303	t CO <sub>2</sub> eq

Parameter	Value	Unit
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight	-86 925 501	t CO <sub>2</sub> eq
Limitation on the additions to Norway's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	14 538 096	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 130 Norway's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		49 272 555
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol $$		1 463 200
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-24 025 418
FMRL (t CO <sub>2</sub> eq/year)		$-11\ 400\ 000$
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-2 312 280
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	1 461 198	1 520 820

Table 131 Norway's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	348 914 303	738 305	NO	39 579 459	NO	NO
Entity holding accounts	NO	84 848	NO	649 094	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	464 481	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	348 914 303	823 153	NO	40 693 034	NO	NO

Table 132 Norway's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	406 770 908	738 305	NO	40 609 864	NO	NO
Entity holding accounts	NO	84 848	NO	656 881	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	6 069 999					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	581 089	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	412 840 907	823 153	NO	41 847 834	NO	NO

Table 133 Norway's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	57 856 605	NO	NO	1 263 744	NO	NO
Total transactions	57 856 605	NO	NO	1 263 744	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	116 608	NO	NO
External transactions	NO	NO	NO	108 944	NO	NO
Total transactions	NO	NO	NO	225 552	NO	NO

### XXX. Poland

- 64. Poland met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 29 April 2008.
- 65. Tables 134–138 provide detailed information on Poland's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 134 **Key initial accounting parameters under the Kyoto Protocol for Poland** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	580 020 010	t CO2 eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period $^b$	1 583 938 824	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Poland's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	162 405 602	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 135 **Poland's emissions and removals of greenhouse gases in 2020** (t CO<sub>2</sub> eq)

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		376 038 462
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-562 598
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-25 050 916
FMRL (t CO <sub>2</sub> eq/year)		-27 133 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-7 081 988
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Table 136

Poland's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	<i>lCERs</i>
Party holding accounts	1 583 938 824	42 388 889	NO	42 947 508	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	411 071 555					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	18 651	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	1 995 010 379	42 388 889	NO	42 966 159	NO	NO

Table 137 **Poland's total quantities of Kyoto Protocol units by account type at the end of 2022** 

A A T T					
AAUs	ERUs	RMUs	CERs	tCERs	<i>lCERs</i>
1 583 938 824	42 388 889	NO	42 947 508	NO	NO
NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO
411 071 555					
NO	NO	NO	NO		
NO	NO	NO	NO		
NO	NO	NO	18 651	NO	NO
NO	NO	NO	NO	NO	NO
NO					
NO					
				NO	
					NO
					NO
					NO
NO	NO	NO	NO	NO	
NO	NO	NO	NO		
NO	NO	NO	NO		NO
NO	NO	NO	NO		NO
1 995 010 379	42 388 889	NO	42 966 159	NO	NO
	1 583 938 824  NO NO NO 411 071 555  NO	1 583 938 824	1 583 938 824	1 583 938 824	1 583 938 824

Table 138
Poland's total quantities of Kyoto Protocol units by account type at the end of 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

## XXXI. Portugal

- 66. Portugal met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 28 April 2008.
- 67. Tables 139–143 provide detailed information on Portugal's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 139 **Key initial accounting parameters under the Kyoto Protocol for Portugal** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	65 028 094	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup><math>b</math></sup>	429 581 969	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Portugal's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	17 010 374	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 4,276,759 t CO<sub>2</sub> eq.

Table 140 Portugal's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		57 654 453
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol $$		-1 665 912
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		1 822 535
FMRL (t CO <sub>2</sub> eq/year)		-6 830 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		6 703 369
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	5 174 744	-2 187 041

Table 141

Portugal's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	429 581 969	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	429 581 969	NO	NO	NO	NO	NO

Table 142
Portugal's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	429 581 969	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	429 581 969	NO	NO	NO	NO	NO

Table 143

Portugal's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

#### XXXII. Romania

- 68. Romania met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 13 July 2012.
- 69. Tables 144–148 provide detailed information on Romania's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 144 **Key initial accounting parameters under the Kyoto Protocol for Romania** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	304 920 568	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment $period^b$	656 059 490	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Romania's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	85 377 759	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 145 Romania's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		110 366 834
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		362 008
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-25 847 804
FMRL (t CO <sub>2</sub> eq/year)		-15 793 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-2 578 402
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	-1 574 450	-602 669

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Table 146
Romania's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	656 059 490	17 860 750	NO	8 578 507	NO	NO
Entity holding accounts	NO	7 943	NO	73 621	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	532 594 270					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	2 032	NO	40 784	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	1 188 653 760	17 870 725	NO	8 692 912	NO	NO

Table 147
Romania's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	656 059 490	17 860 750	NO	8 578 507	NO	NO
Entity holding accounts	NO	6 844	NO	63 463	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	532 594 270					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	3 131	NO	50 942	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	

Total	1 188 653 760	17 870 725	NO	8 692 912	NO	NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for expiry	NO	NO	NO	NO		
Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs

Table 148

Romania's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	1 099	NO	10 158	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	1 099	NO	10 158	NO	NO

### XXXIII. Slovakia

- 70. Slovakia met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 4 February 2008.
- 71. Tables 149–153 provide detailed information on Slovakia's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 149 **Key initial accounting parameters under the Kyoto Protocol for Slovakia** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	74 271 511	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period $^b$	202 268 939	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Slovakia's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	20 796 023	t CO2 eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 150 Slovakia's emissions and removals of greenhouse gases in 2020 (t CO<sub>2</sub> eq)

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		37 048 582

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Parameter	Base year	2020
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-551 236
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-6 252 264
FMRL (t CO <sub>2</sub> eq/year)		$-1\ 084\ 000$
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-3 723 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Table 151 Slovakia's total quantities of Kyoto Protocol units by account type at the end of 2021

-						
Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	202 268 939	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	202 268 939	NO	NO	NO	NO	NO

Table 152
Slovakia's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	202 268 939	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
lCER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
lCER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	202 268 939	NO	NO	NO	NO	NO

Table 153 Slovakia's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

## XXXIV. Slovenia

- 72. Slovenia met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 22 April 2008.
- 73. Tables 154–158 provide detailed information on Slovenia's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 154 **Key initial accounting parameters under the Kyoto Protocol for Slovenia** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	20 327 584	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup><math>b</math></sup>	99 425 782	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Slovenia's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	5 691 720	t CO <sub>2</sub> eq

- <sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.
- <sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.
- $^{c}$  This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Table 155 Slovenia's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		15 851 443
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol $$		262 504
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-2 956 118
FMRL (t CO <sub>2</sub> eq/year)		-3 171 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		$-161\ 370$
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Table 156 Slovenia's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	99 425 782	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	768 682	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	635 251	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	99 425 782	NO	NO	1 403 933	NO	NO

Table 157
Slovenia's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	99 425 782	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	1 864 816	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	1 248 230					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	798 751	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	100 674 012	NO	NO	2 663 567	NO	NO

Table 158 Slovenia's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	6 697 261	NO	NO
Total transactions	NO	NO	NO	6 697 261	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	163 500	NO	NO
External transactions	NO	NO	NO	5 437 627	NO	NO
Total transactions	NO	NO	NO	5 601 127	NO	NO

# XXXV. Spain

- 74. Spain met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 19 April 2008.
- 75. Tables 159–163 provide detailed information on Spain's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 159 **Key initial accounting parameters under the Kyoto Protocol for Spain** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	283 361 698	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period $^b$	1 766 877 232	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Spain's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	79 341 275	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 160 Spain's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		274 742 895
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-4 163 161
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-28 680 121
FMRL (t CO <sub>2</sub> eq/year)		-23 100 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-4 261 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	-144 038	-3 145 922

Table 161
Spain's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	1 766 877 232	1 842 444	NO	16 626 524	1 385 768	NO
Entity holding accounts	NO	310 858	NO	938 047	86 040	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	19 366	NO	1 668 550	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	1 766 877 232	2 172 668	NO	19 233 121	1 471 808	NO

Table 162 Spain's total quantities of Kyoto Protocol units by account type at the end of 2022

AAUs	ERUs	RMUs	CERs	tCERs	lCERs
1 766 877 232	1 842 444	NO	16 669 292	1 385 768	NO
NO	309 849	NO	919 971	86 040	NO
NO	NO	NO	NO	NO	NO
NO					
NO	NO	NO	NO		
NO	NO	NO	NO		
NO	20 375	NO	2 789 390	NO	NO
NO	NO	NO	NO	NO	NO
NO					
NO					
				NO	
					NO
					NO
					NO
NO	NO	NO	NO	NO	
NO	NO	NO	NO		
NO	NO	NO	NO		NO
NO	NO	NO	NO		NO
1 766 877 232	2 172 668	NO	20 378 653	1 471 808	NO
	NO N	1 766 877 232	1 766 877 232	1 766 877 232	1 766 877 232

Table 163 **Spain's total transactions of Kyoto Protocol units in 2022** 

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	1 354 933	NO	NO
Total transactions	NO	NO	NO	1 354 933	NO	NO
Subtractions						
Internal transactions	NO	1 009	NO	1 120 840	NO	NO
External transactions	NO	NO	NO	209 401	NO	NO
Total transactions	NO	1 009	NO	1 330 241	NO	NO

# XXXVI. Sweden

- 76. Sweden met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 19 April 2008.
- 77. Tables 164–168 provide detailed information on Sweden's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 164 **Key initial accounting parameters under the Kyoto Protocol for Sweden** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	72 057 123	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment $period^b$	315 554 578	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	_
Limitation on the additions to Sweden's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	20 175 994	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 165 Sweden's emissions and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		46 284 753
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol $$		1 281 783
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-44 160 498
FMRL (t CO <sub>2</sub> eq/year)		-41 336 099
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		8 942 641
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Table 166
Sweden's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	315 554 578	NO	NO	4 350 633	314 672	NO
Entity holding accounts	NO	NO	NO	1 731 532	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	17 812 642	NO	NO

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	315 554 578	NO	NO	23 894 807	314 672	NO

Table 167 Sweden's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	<i>lCERs</i>
Party holding accounts	315 554 578	NO	NO	5 026 310	314 672	NO
Entity holding accounts	NO	NO	NO	518	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	17 883 521	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	315 554 578	NO	NO	22 910 349	314 672	NO

Table 168 **Sweden's total transactions of Kyoto Protocol units in 2022** 

	Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
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Additions

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Internal transactions		NO	NO			
External transactions	NO	NO	NO	731 688	NO	NO
Total transactions	NO	NO	NO	731 688	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	70 879	NO	NO
External transactions	NO	NO	NO	1 716 146	NO	NO
Total transactions	NO	NO	NO	1 787 025	NO	NO

## XXXVII. Switzerland

- 78. Switzerland met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 10 March 2008.
- 79. Tables 169–173 provide detailed information on Switzerland's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 169 **Key initial accounting parameters under the Kyoto Protocol for Switzerland** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	53 706 729	t CO2 eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	84.2	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period	361 768 524	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight	-69 065 389	t CO <sub>2</sub> eq
Limitation on the additions to Switzerland's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	15 037 884	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 170 Switzerland's emissions and removals of greenhouse gases in 2020  $(t\ \mathrm{CO_2}\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		43 398 964
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		180 250
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-2 330 002
FMRL (t CO <sub>2</sub> eq/year)		220 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-2 021 440
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

Table 171 Switzerland's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	<i>lCERs</i>
Party holding accounts	361 768 524	NO	NO	1 961 642	NO	NO
Entity holding accounts	NO	77 477 573	NO	43 482 133	NO	NO

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	5 794 523					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	2 388 698	NO	30 016 668	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	367 563 047	79 866 271	NO	75 460 443	NO	NO

Table 172 Switzerland's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	361 768 524	NO	NO	22 130 576	NO	NO
Entity holding accounts	NO	75 233 945	NO	34 807 682	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	5 794 523					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	4 632 326	NO	48 174 509	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Total	367 563 047	79 866 271	NO	105 112 767	NO	NO

Table 173
Switzerland's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	53 641 818	NO	NO
Total transactions	NO	NO	NO	53 641 818	NO	NO
Subtractions						_
Internal transactions	NO	2 243 628	NO	18 157 841	NO	NO
External transactions	NO	NO	NO	23 989 494	NO	NO
Total transactions	NO	2 243 628	NO	42 147 335	NO	NO

# XXXVIII. Ukraine

- 80. Ukraine met all the eligibility criteria for the first commitment period of the Kyoto Protocol. Its eligibility to participate in all the flexibility mechanisms under the first commitment period of the Kyoto Protocol was established on 9 March 2012. As at 31 August 2023, Ukraine had not deposited its instrument of acceptance of the Doha Amendment.
- 81. Tables 174–178 provide detailed information on Ukraine's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 174 **Key initial accounting parameters under the Kyoto Protocol for Ukraine** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	937 954 204	t CO <sub>2</sub> eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	76	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period	5 702 761 558	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight	2 426 086 209	t CO <sub>2</sub> eq
Limitation on the additions to Ukraine's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	262 627 177	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 175 **Ukraine's emissions and removals of greenhouse gases in 2020** (t  $CO_2 \, eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		317 695 597
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-2 474 233
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-27 011 779
FMRL (t CO <sub>2</sub> eq/year)		-48 700 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		15 700 000

Parameter	Base year	2020
Net emissions or removals from LULUCF activities (excluding forest		
management) under Article 3, paragraph 4, of the Kyoto Protocol	_	NA

Table 176
Ukraine's total quantities of Kyoto Protocol units by account type at the end of 2021

AAUs	ERUs	RMUs	CERs	tCERs	lCERs
NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO
NO					
NO	NO	NO	NO		
NO	NO	NO	NO		
NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO
NO					
NO					
				NO	
					NO
					NO
					NO
NO	NO	NO	NO	NO	
NO	NO	NO	NO		
NO	NO	NO	NO		NO
NO	NO	NO	NO		NO
NO	NO	NO	NO	NO	NO
	NO N	NO N	NO N	NO         NO         NO         NO           NO         NO         NO         NO	NO N

Table 177
Ukraine's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
Total	NO	NO	NO	NO	NO	NO

Table 178
Ukraine's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
Subtractions						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

# XXXIX. United Kingdom of Great Britain and Northern Ireland

- 82. The United Kingdom of Great Britain and Northern Ireland<sup>10</sup> met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 11 April 2008.
- 83. Tables 179–183 provide detailed information on the United Kingdom's initial accounting parameters for the second commitment period of the Kyoto Protocol, GHG emissions and removals, holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 179 **Key initial accounting parameters under the Kyoto Protocol for the United Kingdom** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	803 191 325	t CO2 eq
QELRC inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment $period^b$	2 744 937 332	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	=
Limitation on the additions to the United Kingdom's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	224 824 677	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 246,048 t CO<sub>2</sub> eq.

<sup>&</sup>lt;sup>b</sup> The assigned amounts of each EU member State, Iceland and the United Kingdom are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, para. 7 bis, in the Doha Amendment for that member State, Iceland or the United Kingdom.

<sup>&</sup>lt;sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the EU, its 27 member States, Iceland and the United Kingdom.

In 2017 the geographical coverage of the United Kingdom's inventory changed to exclude the territory of Bermuda.

Table 180 United Kingdom's emissions and removals of greenhouse gases in 2020  $(t\ \mathrm{CO_2}\ \mathrm{eq})$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		404 834 197
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-1 276 373
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-15 495 978
FMRL (t CO <sub>2</sub> eq/year)		-8 268 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-9 333 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	20 968 846	18 628 664

Table 181
United Kingdom's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	2 744 937 332	72 340	NO	286 904	NO	NO
Entity holding accounts	NO	9 923 828	NO	16 844 388	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	2 294 986	NO	8 800 700	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
lCER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	2 744 937 332	12 291 154	NO	25 931 992	NO	NO

Table 182 United Kingdom's total quantities of Kyoto Protocol units by account type at the end of 2022

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	2 744 937 332	72 340	NO	286 904	NO	NO
Entity holding accounts	NO	9 666 813	NO	22 061 304	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	2 536 492	NO	10 894 859	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non- submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non- submission of certification report	NO	NO	NO	NO		NO
Total	2 744 937 332	12 275 645	NO	33 243 067	NO	NO

Table 183
United Kingdom's total transactions of Kyoto Protocol units in 2022

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Additions						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	19 298 577	NO	NO
Total transactions	NO	NO	NO	19 298 577	NO	NO
Subtractions						
Internal transactions	NO	241 506	NO	2 094 159	NO	NO
External transactions	NO	15 509	NO	11 987 502	NO	NO
Total transactions	NO	257 015	NO	14 081 661	NO	NO

# XL. Parties without quantified emission limitation or reduction commitments for the second commitment period of the Kyoto Protocol

84. In accordance with decisions 2/CMP.8, paragraph 4, and 3/CMP.11, paragraph 14, Parties included in Annex I without a QELRC inscribed in the third column of Annex B in the Doha Amendment (Japan, New Zealand and Russian Federation) shall continue to report information on LULUCF activities under Article 3, paragraphs 3–4, of the Kyoto Protocol for the second commitment period as well as relevant information on their national registry, or changes thereto, including information on the units in the registry, if their registry is connected to the international transaction log at any time during the relevant calendar year. This chapter contains the relevant information reported by those Parties.

## A. Japan

85. Table 184 provides detailed information on Japan's GHG emissions and removals.

Table 184 **Japan's emissions and removals of greenhouse gases in 2020**  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		1 150 085 522
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		450 361
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-38 938 834
FMRL (t CO <sub>2</sub> eq/year)		_
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		1 555 726
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	7 923 867	4 016 278

#### B. New Zealand

86. Tables 185–186 provide detailed information on New Zealand's initial accounting parameters for the second commitment period of the Kyoto Protocol and its GHG emissions and removals.

Table 185 **Key initial accounting parameters under the Kyoto Protocol for New Zealand** 

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	65 828 380	t CO <sub>2</sub> eq
Limitation on the additions to the New Zealand's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	18 431 946	t CO <sub>2</sub> eq

<sup>&</sup>lt;sup>a</sup> The total GHG emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paras. 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 186 New Zealand's emission and removals of greenhouse gases in 2020  $(t\ CO_2\ eq)$ 

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		78 774 188
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-13 444 187
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		-16 031 917
FMRL (t CO <sub>2</sub> eq/year)		11 150 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-25 489 310
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	_	NA, NE

## C. Russian Federation

87. Table 187 provides detailed information on the Russian Federation's GHG emissions and removals.

Table 187

# Russian Federation's emissions and removals of greenhouse gases in 2020 $(t\ \text{CO}_2\ \text{eq})$

Parameter	Base year	2020
Emissions of GHGs from Annex A sources		2 051 437 414
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol $$		IE, NA, NO

Parameter	Base year	2020
Forest management under Article 3, paragraph 4, of the Kyoto Protocol		
Net emissions or removals		IE, NA, NO
FMRL (t CO <sub>2</sub> eq/year)		NA
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		NA
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA

*Note:* Information provided by the Russian Federation. The General Assembly has addressed the status of the Autonomous Republic of Crimea and the city of Sevastopol in resolution 68/262 of 27 March 2014.

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