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Item 4(b) of the provisional agenda

**Reporting from and review of Parties included in  
Annex I**

**Annual compilation and accounting report for the  
second commitment period for Annex B Parties under  
the Kyoto Protocol (for 2019, 2020, 2021 and 2022)**

**Annual compilation and accounting report for Annex B  
Parties under the Kyoto Protocol for 2022**

**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 under 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 on anthropogenic greenhouse gas emissions in 2019 and 2020 from sources listed in Annex A to the Kyoto Protocol; greenhouse gas emissions and removals in 2019 and 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; and holdings and transactions of Kyoto Protocol units as at 31 December 2020 and 31 December 2021. This document contains values from both the latest 2021 annual submissions and the 2022 annual submissions as reported by Parties as at 19 August 2022.



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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 I <sup>1</sup> with commitments inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol
CER	certified emission reduction
CO <sub>2</sub> eq	carbon dioxide equivalent
ERU	emission reduction unit
EU	European Union
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
RMU	removal unit
tCER	temporary certified emission reduction

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

## I. Introduction

1. Document FCCC/KP/CMP/2022/3 provides an overview of the latest information available as at 19 August 2022 on annual accounting parameters for the second commitment period under the Kyoto Protocol for Annex B Parties; transactions and holdings of Kyoto Protocol units reported in 2021; and GHG emissions for 2019 and 2020.
2. This document includes the following, more detailed, information, available as at 19 August 2022, for individual Annex B Parties:
  - (a) Key initial accounting parameters for the second commitment period under the Kyoto Protocol;<sup>2</sup>
  - (b) Latest information available on the total GHG emissions from the sources listed in Annex A to the Kyoto Protocol reported for 2019 and 2020, including indirect carbon dioxide emissions where reported;
  - (c) GHG emissions and removals in the base year, 2019 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;
  - (d) Transactions and holdings of Kyoto Protocol units as at 31 December 2020 and 31 December 2021.
3. The annual information submitted in 2022 and in the reports to facilitate the calculation of the assigned amount for the second commitment period of the Kyoto Protocol will be recorded in the compilation and accounting 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 (Japan, New Zealand and Russian Federation).
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>3</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 under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	566 786 410	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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

<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 19 August 2022.

<sup>3</sup> <https://unfccc.int/process/transparency-and-reporting/reporting-and-review-under-the-kyoto-protocol/second-commitment-period/initial-reports> and <https://unfccc.int/ghg-inventories-annex-i-parties/2022>.

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
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 CO <sub>2</sub> 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 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 148,163,361 t CO<sub>2</sub> eq.

**Table 2**  
**Australia's emissions and removals of greenhouse gases in 2019 and 2020**  
(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		545 152 518		546 200 224	527 737 048
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		4 623 976		9 531 160	9 084 120
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-3 595 588		-10 001 750	255 391 598
FMRL (t CO <sub>2</sub> eq/year)		4 700 000		4 700 000	4 700 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		185 318		-13 873 687	-13 873 687
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	26 160 281	-6 467 244	42 365 429	-13 702 937	-7 061 228

**Table 3**  
**Australia's total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	14 916 842	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	12 351 327	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		

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>27 268 169</b>	<b>22 822</b>	<b>NO</b>

Table 4  
Australia's total quantities of Kyoto Protocol units by account type at the end of 2021

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	4 511 619 826	NO	NO	23 081 798	NO	NO
Entity holding accounts		NO	NO	NO	NO	NO
Retirement account		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	
ICER replacement account for expiry		NO	NO	NO		
ICER replacement account for reversal of storage		NO	NO	NO		NO
ICER replacement account for non-submission of certification report		NO	NO	NO		NO
<b>Total</b>	<b>4 511 619 826</b>	<b>NO</b>	<b>NO</b>	<b>47 272 986</b>	<b>22 822</b>	<b>NO</b>

Table 5  
Australia's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	34 225 859	NO	NO
Total transactions	NO	NO	NO	34 225 859	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	11 839 861	NO	NO
External transactions	NO	NO	NO	14 221 042	NO	NO
Total transactions	NO	NO	NO	26 060 903	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 under the Kyoto Protocol, its GHG emissions and removals, the 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**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	78 855 136	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</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>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.

<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 7

**Austria's emissions and removals of greenhouse gases in 2019 and 2020**(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		79 842 253		79 740 738	73 592 017
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		–1 715 783		–1 714 882	–1 733 252
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–3 610 359		–1 723 458	–431 414
FMRL (t CO <sub>2</sub> eq/year)		–6 516 000		–6 516 000	–6 516 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		5 823 000		5 773 943	5 773 943
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Table 8

**Austria's total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	2 343 258	NO	NO
Entity holding accounts	NO	NO	NO	68 319	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		



<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Voluntary cancellation account	NO	NO	NO	510 081	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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>2 921 658</b>	<b>NO</b>	<b>NO</b>

Table 9  
Austria's total quantities of Kyoto Protocol units by account type at the end of 2021

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</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	
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
<b>Total</b>	<b>405 717 252</b>	<b>NO</b>	<b>NO</b>	<b>3 153 561</b>	<b>NO</b>	<b>NO</b>

Table 10  
Austria's total transactions of Kyoto Protocol units in 2021

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	5 037 585	NO	NO
Total transactions	NO	NO	NO	5 037 585	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	13 828	NO	NO
External transactions	NO	NO	NO	4 805 682	NO	NO
Total transactions	NO	NO	NO	4 819 510	NO	NO

#### IV. Belarus

10. Belarus has not ratified the Doha Amendment, which entered into force on 31 December 2020.<sup>4</sup>

11. As at 19 August 2022, 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 2019 and 2020  
(t CO<sub>2</sub> eq)

Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
Emissions of GHGs from Annex A sources		90 115 696		92 183 172	88 802 058

*Note:* As at 19 August 2022, Belarus had not yet submitted annual information on its GHG emissions and removals in 2019 and 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 under the Kyoto Protocol, its GHG emissions and removals, the 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
Quantified emission limitation or reduction commitment 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>b</sup>	584 228 513	t CO <sub>2</sub> eq

<sup>4</sup> Belarus did not have a quantified emission limitation or reduction commitment in the first commitment period of the Kyoto Protocol.

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
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>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.

<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 13

**Belgium’s emissions and removals of greenhouse gases in 2019 and 2020**

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

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		116 651 489		116 448 185	106 433 258
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		379 340		444 972	446 930
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–1 677 971		–1 709 116	–1 578 428
FMRL (t CO <sub>2</sub> eq/year)		–2 499 000		–2 499 000	–2 499 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		1 430 000		1 010 170	1 010 170
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Table 14

**Belgium’s total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	3 267 881	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	NO	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	

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>NO</b>	<b>3 267 881</b>	<b>NO</b>	<b>18 156 332</b>	<b>NO</b>	<b>NO</b>

Table 15  
Belgium's total quantities of Kyoto Protocol units by account type at the end of 2021

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>584 228 513</b>	<b>3 267 881</b>	<b>NO</b>	<b>18 156 332</b>	<b>NO</b>	<b>NO</b>

Table 16  
Belgium's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	1 875 593	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	1 875 593	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 under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	114 105 323	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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	–
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 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.

<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 18

### Bulgaria's emissions and removals of greenhouse gases in 2019 and 2020

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

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		55 955 277		59 472 623	49 185 623
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		–2 536 653		–1 013 305	–1 207 754
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–7 953 025		–9 469 170	–9 173 876
FMRL (t CO <sub>2</sub> eq/year)		–7 950 000		–7 950 000	–7 950 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		NA		–2 941 666	–2 941 666
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Table 19

### Bulgaria's total quantities of Kyoto Protocol units by account type at the end of 2020

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	620 328	NO	83 593	NO	NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>NO</b>	<b>620 328</b>	<b>NO</b>	<b>83 593</b>	<b>NO</b>	<b>NO</b>

Table 20

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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>222 945 983</b>	<b>620 328</b>	<b>NO</b>	<b>83 593</b>	<b>NO</b>	<b>NO</b>

Table 21  
**Bulgaria's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	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 under the Kyoto Protocol, its GHG emissions and removals, the 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**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	31 204 631	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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>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.

<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 23  
**Croatia's emissions and removals of greenhouse gases in 2019 and 2020**  
 (t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		23 605 021		24 622 299	23 756 352
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		–224 039		–247 816	–259 642
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–6 251 144		–4 163 714	–6 730 374

Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
FMRL (t CO <sub>2</sub> eq/year)		-6 289 000		-6 289 000	-6 289 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		904 831		-841 825	-841 825
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Table 24

**Croatia's total quantities of Kyoto Protocol units by account type at the end of 2020**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
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	
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 25

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

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
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					



<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>162 271 086</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 26  
Croatia's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
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, which has been ratified by Cyprus, 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>5</sup>

20. Tables 27–31 provide detailed information on Cyprus's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	5 627 236	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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	–

<sup>5</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.

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
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>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.

<sup>c</sup> Cyprus did not have a quantified emission limitation or reduction commitment in the first commitment period of the Kyoto Protocol.

Table 28

**Cyprus's emissions and removals of greenhouse gases in 2019 and 2020**(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		8 849 599		8 906 856	8 878 439
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-33 488		-6 801	-7 092
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-151 833		-137 538	-137 579
FMRL (t CO <sub>2</sub> eq/year)		-		-157 000	-157 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-		NA	NA
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NO	NO	NA	NA	NA

Table 29

**Cyprus's total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 30  
Cyprus's total quantities of Kyoto Protocol units by account type at the end of 2021

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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	
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 31  
Cyprus's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
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 under the Kyoto Protocol, its GHG emissions and removals, the 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**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	198 316 406	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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>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.

<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 33  
**Czechia's emissions and removals of greenhouse gases in 2019 and 2020**  
 (t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		123 297 562		123 551 595	113 338 547
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		–327 079		–497 357	–464 150
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		14 060 973		9 280 955	13 826 022
FMRL (t CO <sub>2</sub> eq/year)		–4 686 000		–4 686 000	–4 686 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		NA		–225 000	–225 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Table 34  
**Czechia's total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	16 747	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					

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>16 747</b>	<b>NO</b>	<b>NO</b>

Table 35  
Czechia's total quantities of Kyoto Protocol units by account type at the end of 2021

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	520 515 203	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	8 149	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
<b>Total</b>	<b>520 515 203</b>	<b>NO</b>	<b>NO</b>	<b>8 149</b>	<b>NO</b>	<b>NO</b>

Table 36  
Czechia's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	37 612	NO	NO
Total transactions	NO	NO	NO	37 612	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
External transactions	NO	NO	NO	46 210	NO	NO
Total transactions	NO	NO	NO	46 210	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 under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	70 801 910	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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>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 8,807 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 38

### Denmark's emissions and removals of greenhouse gases in 2019 and 2020

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		44 240 830		44 503 675	41 745 749
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		–278 006		–396 472	239 686
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–1 949 077		–1 988 590	–945 422
FMRL (t CO <sub>2</sub> eq/year)		409 000		409 000	409 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		–82 617		–82 617	–82 617
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	7 567 401	4 979 669	7 915 839	5 146 356	5 011 364

Table 39  
Denmark's total quantities of Kyoto Protocol units by account type at the end of 2020

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	284 392	NO	NO
Entity holding accounts	NO	NO	NO	3 786 243	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	11 164	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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>4 081 799</b>	<b>NO</b>	<b>NO</b>

Table 40  
Denmark's total quantities of Kyoto Protocol units by account type at the end of 2021

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>269 377 890</b>	<b>NO</b>	<b>NO</b>	<b>2 781 349</b>	<b>NO</b>	<b>NO</b>

Table 41  
**Denmark's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	4 091 918	NO	NO
Total transactions	NO	NO	NO	4 091 918	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	284 392	NO	NO
External transactions	NO	NO	NO	5 392 368	NO	NO
Total transactions	NO	NO	NO	5 676 760	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 under the Kyoto Protocol, its GHG emissions and removals, the 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**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	39 996 697	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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>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.

<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 2019 and 2020**  
(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		14 699 117		14 636 120	11 555 809



Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		128 700		345 431	290 903
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-2 783 137		-2 135 124	-365 381
FMRL (t CO <sub>2</sub> eq/year)		-2 741 000		-2 741 000	-2 741 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		NE		1 818 893	1 818 893
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Table 44

**Estonia's total quantities of Kyoto Protocol units by account type at the end of 2020**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
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	
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 45

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

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>51 056 976</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 46  
Estonia's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
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 EU's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	5 875 692 700	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
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 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 5,560,495 t CO<sub>2</sub> eq.

<sup>b</sup> The assigned amount of the EU (15,813,089,338 t CO<sub>2</sub> 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 (annex I to decision 1/CMP.8), multiplied by eight (37,604,433,280 t CO<sub>2</sub> 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 CO<sub>2</sub> eq) determined in line with the terms of the joint fulfilment agreement.

Table 48

**European Union's emissions and removals of greenhouse gases in 2019 and 2020**(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		4 067 095 872		4 053 707 322	3 707 579 606
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-16 420 079		-12 506 004	-16 135 719
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-340 324 211		-321 094 808	-310 650 348
FMRL (t CO <sub>2</sub> eq/year)		-306 736 000		-306 736 000	-306 736 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		25 261 446		10 444 325	10 444 325
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	82 467 940	55 230 656	81 226 797	57 724 044	58 317 495

Table 49

**European Union's total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	141 748 062	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	18 846 838	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		

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>160 594 900</b>	<b>NO</b>	<b>NO</b>

Table 50

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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>15 813 089 338</b>	<b>NO</b>	<b>NO</b>	<b>160 186 172</b>	<b>NO</b>	<b>NO</b>

Table 51

**European Union's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	13 286 215	NO	NO
Total transactions	NO	NO	NO	13 286 215	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	2 864 549	NO	NO
External transactions	NO	NO	NO	13 694 943	NO	NO
Total transactions	NO	NO	NO	16 559 492	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 under the Kyoto Protocol, its GHG emissions and removals, the 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**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	71 350 147	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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>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.

<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 53

**Finland’s emissions and removals of greenhouse gases in 2019 and 2020**(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		53 072 460		52 788 022	47 782 251
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		2 536 696		3 474 088	2 809 177
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–32 181 487		–31 938 319	–34 799 603
FMRL (t CO <sub>2</sub> eq/year)		–20 466 000		–20 466 000	–20 466 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		–10 938 000		–9 198 000	–9 198 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Table 54

**Finland’s total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	2 912 592	NO	9 770 705	NO	NO
Entity holding accounts	NO	4 625	NO	221 994	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		

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Voluntary cancellation account	NO	NO	NO	44 409	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
<b>Total</b>	<b>NO</b>	<b>2 917 217</b>	<b>NO</b>	<b>10 037 108</b>	<b>NO</b>	<b>NO</b>

Table 55  
Finland's total quantities of Kyoto Protocol units by account type at the end of 2021

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
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
<b>Total</b>	<b>240 544 599</b>	<b>2 917 217</b>	<b>NO</b>	<b>10 133 354</b>	<b>NO</b>	<b>NO</b>

Table 56  
**Finland's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	189 702	NO	NO
Total transactions	NO	NO	NO	189 702	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	11 451	NO	NO
External transactions	NO	NO	NO	93 456	NO	NO
Total transactions	NO	NO	NO	104 907	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 under the Kyoto Protocol, its GHG emissions and removals, the 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**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	548 055 757	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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>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.

<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 58  
**France's emissions and removals of greenhouse gases in 2019 and 2020**  
 (t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		435 998 624		434 539 774	392 962 568
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		–3 737 368		–1 792 652	–2 028 956
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–38 684 961		–18 837 823	–19 728 313

Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
FMRL (t CO <sub>2</sub> eq/year)		-67 410 000		-67 410 000	-67 410 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		21 795 000		23 318 000	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	NO	IE,NE,NO	IE,NE,NO

Table 59

**France's total quantities of Kyoto Protocol units by account type at the end of 2020**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	3 969	NO	1 623 905	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	248 996	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
<b>Total</b>	<b>NO</b>	<b>3 969</b>	<b>NO</b>	<b>1 872 901</b>	<b>NO</b>	<b>NO</b>

Table 60

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

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
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
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					



<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>3 202 091 924</b>	<b>3 969</b>	<b>NO</b>	<b>7 980 818</b>	<b>NO</b>	<b>NO</b>

Table 61  
France's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	7 077 595	NO	NO
Total transactions	NO	NO	NO	7 077 595	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	868 741	NO	NO
External transactions	NO	NO	NO	969 678	NO	NO
Total transactions	NO	NO	NO	1 838 419	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 under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	1 253 599 336	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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>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.

<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 63

**Germany's emissions and removals of greenhouse gases in 2019 and 2020**(t CO<sub>2</sub> eq)

Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
Emissions of GHGs from Annex A sources		809 798 537		799 733 988	728 737 653
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		1 060 691		639 739	549 048
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-61 245 616		-58 022 801	-54 098 446
FMRL (t CO <sub>2</sub> eq/year)		-22 418 000		-22 418 000	-22 418 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		5 268 000		6 330 666	6 330 666
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	40 597 847	35 437 541	41 260 238	37 864 408	37 017 398

Table 64

**Germany's total quantities of Kyoto Protocol units by account type at the end of 2020**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	4 269 200	NO	NO
Entity holding accounts	NO	30 612	NO	1 702 300	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	9 071 153	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
<b>Total</b>	<b>NO</b>	<b>30 612</b>	<b>NO</b>	<b>15 042 653</b>	<b>NO</b>	<b>NO</b>

Table 65  
Germany's total quantities of Kyoto Protocol units by account type at the end of 2021

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>3 592 699 888</b>	<b>28 412</b>	<b>NO</b>	<b>25 379 745</b>	<b>NO</b>	<b>NO</b>

Table 66  
Germany's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	23 413 273	NO	NO
Total transactions	NO	NO	NO	23 413 273	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	3 245 865	NO	NO
External transactions	NO	2 200	NO	13 076 181	NO	NO
Total transactions	NO	2 200	NO	16 322 046	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 under the Kyoto Protocol, its GHG emissions and removals, the 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**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	107 564 136	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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>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.

<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 68  
**Greece's emissions and removals of greenhouse gases in 2019 and 2020**  
(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		85 630 943		85 603 938	74 835 612
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		–75 813		–75 168	–33 056
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–1 900 301		–1 999 202	–2 016 700
FMRL (t CO <sub>2</sub> eq/year)		–1 830 000		–1 830 000	–1 830 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		210 402		210 402	210 402
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Table 69  
**Greece's total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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					

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 70

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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>480 791 166</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 71

**Greece's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	240 000	NO	NO
Total transactions	NO	NO	NO	240 000	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
External transactions	NO	NO	NO	240 000	NO	NO
Total transactions	NO	NO	NO	240 000	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 under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	109 574 819	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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.

<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 73

### Hungary’s emissions and removals of greenhouse gases in 2019 and 2020

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

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		64 433 168		64 580 975	62 818 386
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		–682 314		–668 226	–861 808
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–3 517 407		–3 936 988	–5 309 013
FMRL (t CO <sub>2</sub> eq/year)		–1 000 000		–1 000 000	–1 000 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		–168 753		–333 706	–333 706
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Table 74  
Hungary's total quantities of Kyoto Protocol units by account type at the end of 2020

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	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	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	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
<b>Total</b>	<b>NO</b>	<b>3 876 894</b>	<b>NO</b>	<b>5 336 676</b>	<b>NO</b>	<b>NO</b>

Table 75  
Hungary's total quantities of Kyoto Protocol units by account type at the end of 2021

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>601 482 801</b>	<b>3 876 894</b>	<b>NO</b>	<b>5 336 676</b>	<b>NO</b>	<b>NO</b>

Table 76  
**Hungary's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
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 under the Kyoto Protocol, its GHG emissions and removals, the 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**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	3 633 558	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	15 327 217	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 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>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.

<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 78  
**Iceland's emissions and removals of greenhouse gases in 2019 and 2020**  
(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		4 722 349		4 713 009	4 509 640



Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-355 637		-309 605	-336 772
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-90 628		-180 473	-173 325
FMRL (t CO <sub>2</sub> eq/year)		-154 000		-154 000	-154 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		76 950		-20 864	-20 864
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	-386 762	-603 127	-385 760	-602 126	-600 391

Table 79

**Iceland's total quantities of Kyoto Protocol units by account type at the end of 2020**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
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	
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 80

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

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>15 327 217</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 81  
Iceland's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
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 under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	56 425 830	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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	–

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
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 2019 and 2020**

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

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		59 777 640		59 855 476	57 716 091
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-3 608 678		-2 670 237	-2 939 577
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-1 212 726		117 645	302 338
FMRL (t CO <sub>2</sub> eq/year)		-142 070		-142 070	-142 070
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-933 521		112 904	112 904
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	7 008 958	6 549 089	6 891 587	6 503 706	6 385 911

Table 84

**Ireland's total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	74 964	NO	6 773 042	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
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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>74 964</b>	<b>NO</b>	<b>6 773 042</b>	<b>636 919</b>	<b>NO</b>

Table 85

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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
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
<b>Total</b>	<b>343 519 892</b>	<b>74 964</b>	<b>NO</b>	<b>8 198 758</b>	<b>636 919</b>	<b>NO</b>

Table 86

**Ireland's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	1 425 716	NO	NO
Total transactions	NO	NO	NO	1 425 716	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	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 under the Kyoto Protocol, its GHG emissions and removals, the 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**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	521 920 601	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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>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.

<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 88

**Italy's emissions and removals of greenhouse gases in 2019 and 2020**(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		418 280 596		418 352 219	381 247 962
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		–7 023 783		–5 993 626	–7 141 558
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–31 081 265		–30 218 268	–23 179 067
FMRL (t CO <sub>2</sub> eq/year)		–22 166 000		–22 166 000	–22 166 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		–1 680 061		–1 680 061	–1 680 061
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	979 527	–5 649 476	1 507 087	–6 057 004	–4 624 122

Table 89

**Italy's total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	698 870	NO	975 569	NO	NO
Entity holding accounts	NO	399 901	NO	3 912 703	142 719	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		

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Voluntary cancellation account	NO	10 175	NO	28 326	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
<b>Total</b>	<b>NO</b>	<b>1 108 946</b>	<b>NO</b>	<b>4 916 598</b>	<b>142 719</b>	<b>NO</b>

Table 90  
**Italy's total quantities of Kyoto Protocol units by account type at the end of 2021**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	2 410 291 421	698 870	NO	975 569	NO	NO
Entity holding accounts	NO	372 201	NO	4 052 403	142 882	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	37 875	NO	50 597	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
<b>Total</b>	<b>2 410 291 421</b>	<b>1 108 946</b>	<b>NO</b>	<b>5 078 569</b>	<b>142 882</b>	<b>NO</b>

Table 91  
Italy's total transactions of Kyoto Protocol units in 2021

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	201 000	163	NO
Total transactions	NO	NO	NO	201 000	163	NO
<i>Subtractions</i>						
Internal transactions	NO	27 700	NO	22 271	NO	NO
External transactions	NO	NO	NO	39 029	NO	NO
Total transactions	NO	27 700	NO	61 300	NO	NO

## XXI. Kazakhstan

45. As at 19 August 2022, Kazakhstan had submitted the fourth progress report under the plan of the enforcement branch of the Compliance Committee, which contains information on the activities implemented in respect of questions of implementation raised in the 2019 annual review report,<sup>6</sup> the 2017 annual review report<sup>7</sup> and the initial review report,<sup>8</sup> as per the final decision of 13 January 2021<sup>9</sup> confirming the preliminary findings of the enforcement branch of the Compliance Committee in Committee's document CC-2020-1-4/Kazakhstan/EB, in accordance with decision 7/CMP.9, paragraph 5. Kazakhstan has not ratified the Doha Amendment, which entered into force on 31 December 2020.

46. Tables 92–93 provide detailed information on Kazakhstan's initial accounting parameters for the second commitment period under the Kyoto Protocol and its GHG emissions and removals.

47. As at 19 August 2022, Kazakhstan had not submitted information on the holdings and transactions of Kyoto Protocol units for the period ending 31 December 2021.

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 CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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 <sup>b</sup>	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>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> Kazakhstan did not have a quantified emission limitation or reduction commitment in the first commitment period of the Kyoto Protocol.

<sup>6</sup> FCCC/ARR/2019/KAZ.

<sup>7</sup> FCCC/ARR/2017/KAZ.

<sup>8</sup> FCCC/IRR/2017/KAZ.

<sup>9</sup> See Compliance Committee document CC-2020-1-4/Kazakhstan/EB, available at <https://unfccc.int/process-and-meetings/the-kyoto-protocol/compliance-under-the-kyoto-protocol/questions-of-implementation-kazakhstan-2020>.

Table 93  
**Kazakhstan's emissions and removals of greenhouse gases in 2019 and 2020**  
 (t CO<sub>2</sub> eq)

Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
Emissions of GHGs from Annex A sources		354 869 623		359 628 253	342 868 788
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-2 346 300		-	-
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-7 865 365		-	-
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	NO	NO	-	-	-

<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 under the Kyoto Protocol, its GHG emissions and removals, the 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 CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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 <sup>c</sup>	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>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.

<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 95  
**Latvia's emissions and removals of greenhouse gases in 2019 and 2020**  
(t CO<sub>2</sub> eq)

Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
Emissions of GHGs from Annex A sources		11 144 810		11 116 300	10 459 725
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		688 882		845 468	857 419
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-2 867 620		-3 069 940	-1 558 750
FMRL (t CO <sub>2</sub> eq/year)		-16 302 000		-16 302 000	-16 302 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		11 703 392		14 829 110	14 829 110
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA,NO	NA,NO	NA,NO

Table 96  
**Latvia's total quantities of Kyoto Protocol units by account type at the end of 2020**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	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
<b>Total</b>	<b>NO</b>	<b>5 317</b>	<b>NO</b>	<b>21 550</b>	<b>NO</b>	<b>NO</b>

Table 97  
**Latvia's total quantities of Kyoto Protocol units by account type at the end of 2021**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>76 633 439</b>	<b>5 317</b>	<b>NO</b>	<b>21 550</b>	<b>NO</b>	<b>NO</b>

Table 98  
Latvia's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	7 167	NO	NO
Total transactions	NO	NO	NO	7 167	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	7 167	NO	NO
Total transactions	NO	NO	NO	7 167	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 under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	231 554	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
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>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 2019 and 2020**(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		187 109		187 673	179 659
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		4 115		4 117	3 941
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		1 049		1 343	-6 148
FMRL (t CO <sub>2</sub> eq/year)		100		100	100
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		259		259	259
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	-	NO	-	NO	NO

Table 101

**Liechtenstein's total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>314 004</b>	<b>NO</b>	<b>NO</b>

Table 102

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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>1 556 044</b>	<b>NO</b>	<b>NO</b>	<b>314 004</b>	<b>NO</b>	<b>NO</b>

Table 103

**Liechtenstein's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
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 under the Kyoto Protocol, its GHG emissions and removals, the 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**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	48 196 540	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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	–
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 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.

<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 105

**Lithuania’s emissions and removals of greenhouse gases in 2019 and 2020**(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		20 367 848		20 360 592	20 182 554
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		149 176		161 902	–200 039
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–5 458 715		–5 375 990	–5 653 252
FMRL (t CO <sub>2</sub> eq/year)		–4 552 000		–4 552 000	–4 552 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		–922 000		–922 000	–922 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Table 106

**Lithuania’s total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	633 399	NO	229 828	NO	NO
Entity holding accounts	NO	388 107	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		

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Voluntary cancellation account	NO	5 494	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
<b>Total</b>	<b>NO</b>	<b>1 027 000</b>	<b>NO</b>	<b>246 966</b>	<b>NO</b>	<b>NO</b>

Table 107

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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>113 600 821</b>	<b>797 085</b>	<b>NO</b>	<b>246 966</b>	<b>NO</b>	<b>NO</b>

Table 108  
Lithuania's total transactions of Kyoto Protocol units in 2021

Transaction type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	17 438	NO	NO	NO	NO
External transactions	NO	229 915	NO	NO	NO	NO
Total transactions	NO	247 353	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 under the Kyoto Protocol, its GHG emissions and removals, the 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
Quantified emission limitation or reduction commitment 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>b</sup>	72 454 473	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 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>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.

<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 110  
Luxembourg's emissions and removals of greenhouse gases in 2019 and 2020  
(t CO<sub>2</sub> eq)

Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
Emissions of GHGs from Annex A sources		10 742 797		10 732 701	9 064 902
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		–127 458		–10 795	–10 853
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					

Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
Net emissions or removals		-215 249		-290 990	-353 891
FMRL (t CO <sub>2</sub> eq/year)		-418 000		-418 000	-418 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		181 680		55 830	55 830
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO

Table 111  
Luxembourg's total quantities of Kyoto Protocol units by account type at the end of 2020

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	1 554 135	285 462	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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>1 554 135</b>	<b>285 462</b>	<b>NO</b>

Table 112  
Luxembourg's total quantities of Kyoto Protocol units by account type at the end of 2021

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
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					



<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>72 454 473</b>	<b>NO</b>	<b>NO</b>	<b>1 565 755</b>	<b>285 788</b>	<b>NO</b>

Table 113  
Luxembourg's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	11 620	326	NO
Total transactions	NO	NO	NO	11 620	326	NO
<i>Subtractions</i>						
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, which has been ratified by Malta, 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>10</sup>

57. Tables 114–118 provide detailed information on Malta's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	1 974 638	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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	–

<sup>10</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.

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
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>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.

<sup>c</sup> Malta did not have a quantified emission limitation or reduction commitment in the first commitment period of the Kyoto Protocol.

Table 115

**Malta's emissions and removals of greenhouse gases in 2019 and 2020**(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		2 174 718		2 131 763	2 121 590
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		NO		-17	-36
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		NO		-6	-5
FMRL (t CO <sub>2</sub> eq/year)		-49 000		-49 000	-49 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		49 000		49 000	49 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO

Table 116

**Malta's total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>iCERs</i>
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	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 117

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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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		
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
<b>Total</b>	<b>9 299 769</b>	<b>NO</b>	<b>NO</b>	<b>155</b>	<b>NO</b>	<b>NO</b>

Table 118

**Malta's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	155	NO	NO
Total transactions	NO	NO	NO	155	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	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 under the Kyoto Protocol, its GHG emissions and removals, the 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**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	99 319	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>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 2019 and 2020**(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		82 539		83 291	70 036
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		NO		NO	NO
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		NO		NO	NO
FMRL (t CO <sub>2</sub> eq/year)		NA		NA	NA
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		NA		NA	NA
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NO	NO	NO	NO	NO

Table 121

**Monaco's total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>iCERs</i>
Party holding accounts	NO	NO	NO	50 700	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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>50 700</b>	<b>NO</b>	<b>NO</b>

Table 122

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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>643 717</b>	<b>NO</b>	<b>NO</b>	<b>70 772</b>	<b>NO</b>	<b>NO</b>

Table 123

**Monaco's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	20 072	NO	NO
Total transactions	NO	NO	NO	20 072	NO	NO

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Subtractions</i>						
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

60. 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 initial accounting parameters of the Netherlands for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the 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 Netherlands

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	223 950 669	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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 Netherlands resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	62 495 551	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 752,270 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 125

### Netherlands' emissions and removals of greenhouse gases in 2019 and 2020

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

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		180 872 423		180 268 781	164 334 500
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		712 419		–175 667	–152 569
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–1 024 246		–1 187 105	–1 183 110
FMRL (t CO <sub>2</sub> eq/year)		–1 425 000		–1 425 000	–1 425 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		360 000		337 420	337 420
Net emissions or removals from LULUCF activities (excluding forest)	NA	NA	NA	NA	NA

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
management) under Article 3, paragraph 4, of the Kyoto Protocol					

Table 126  
Netherlands' total quantities of Kyoto Protocol units by account type at the end of 2020

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	563 670	NO	NO
Entity holding accounts	NO	NO	NO	4 196 444	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	956 382	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
<b>Total</b>	<b>NO</b>	<b>15 000</b>	<b>NO</b>	<b>5 716 496</b>	<b>NO</b>	<b>NO</b>

Table 127  
Netherlands' total quantities of Kyoto Protocol units by account type at the end of 2021

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>924 777 902</b>	<b>15 000</b>	<b>NO</b>	<b>8 210 996</b>	<b>NO</b>	<b>NO</b>

Table 128  
Netherlands' total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	1	NO	22 123 598	NO	NO
Total transactions	NO	1	NO	22 123 598	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	1 647 550	NO	NO
External transactions	NO	1	NO	19 629 098	NO	NO
Total transactions	NO	1	NO	21 276 648	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 under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	51 921 771	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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
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>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 2019 and 2020**  
 (t CO<sub>2</sub> eq)

Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
Emissions of GHGs from Annex A sources		50 333 980		51 086 034	49 272 554
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		2 272 597		1 958 766	1 463 200
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-23 062 015		-20 587 448	-24 025 418
FMRL (t CO <sub>2</sub> eq/year)		-11 400 000		-11 400 000	-11 400 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-3 852 420		-2 312 280	-2 312 280
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	1 482 314	1 685 804	1 461 198	1 536 651	1 520 820

Table 131  
**Norway's total quantities of Kyoto Protocol units by account type at the end of 2020**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	738 305	NO	34 525 119	NO	NO
Entity holding accounts	NO	84 848	NO	654 509	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	444 413	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
<b>Total</b>	<b>NO</b>	<b>823 153</b>	<b>NO</b>	<b>35 624 041</b>	<b>NO</b>	<b>NO</b>

Table 132  
**Norway's total quantities of Kyoto Protocol units by account type at the end of 2021**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>348 914 303</b>	<b>823 153</b>	<b>NO</b>	<b>40 693 034</b>	<b>NO</b>	<b>NO</b>

Table 133  
Norway's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	5 542 972	NO	NO
Total transactions	NO	NO	NO	5 542 972	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	20 068	NO	NO
External transactions	NO	NO	NO	473 979	NO	NO
Total transactions	NO	NO	NO	494 047	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 under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	580 020 010	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	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>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.

<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 135

**Poland's emissions and removals of greenhouse gases in 2019 and 2020**(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		390 744 668		390 538 936	376 038 461
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		–539 850		–447 663	–568 626
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–17 653 836		–23 091 023	–25 050 916
FMRL (t CO <sub>2</sub> eq/year)		–27 133 000		–27 133 000	–27 133 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		NA		–7 081 988	–7 081 988
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Table 136

**Poland's total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	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	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	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
ICER cancellation account for non-submission of certification report						NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>NO</b>	<b>42 388 889</b>	<b>NO</b>	<b>42 966 159</b>	<b>NO</b>	<b>NO</b>

Table 137

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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</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
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
<b>Total</b>	<b>1 995 010 379</b>	<b>42 388 889</b>	<b>NO</b>	<b>42 966 159</b>	<b>NO</b>	<b>NO</b>

Table 138

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

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
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 under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	65 028 094	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</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>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.

<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 140

### Portugal’s emissions and removals of greenhouse gases in 2019 and 2020

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

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		63 626 310		63 624 029	57 585 722
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		–1 359 201		–1 503 036	–1 665 912
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–7 075 590		1 928 313	1 822 535
FMRL (t CO <sub>2</sub> eq/year)		–6 830 000		–6 830 000	–6 830 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year r)		3 369 143		6 703 369	6 703 369
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	4 795 580	223 822	5 174 744	–2 337 232	–2 187 041

Table 141

### Portugal’s total quantities of Kyoto Protocol units by account type at the end of 2020

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 142

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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>429 581 969</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 143  
**Portugal's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
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 under the Kyoto Protocol, its GHG emissions and removals, the 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**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	304 920 568	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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>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.

<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 145  
**Romania's emissions and removals of greenhouse gases in 2019 and 2020**  
 (t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		111 767 056		113 939 384	109 934 328
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		3 802 988		386 166	362 008
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–32 599 282		–26 690 144	–26 010 388

Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
FMRL (t CO <sub>2</sub> eq/year)		-15 793 000		-15 793 000	-15 793 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		NE		-6 167 531	-6 167 531
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	-1 698 592	-1 278 641	-1 574 450	-603 727	-602 669

Table 146

**Romania's total quantities of Kyoto Protocol units by account type at the end of 2020**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	17 860 750	NO	8 578 507	NO	NO
Entity holding accounts	NO	9 193	NO	73 324	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	782	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
<b>Total</b>	<b>NO</b>	<b>17 870 725</b>	<b>NO</b>	<b>8 692 615</b>	<b>NO</b>	<b>NO</b>

Table 147

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

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
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					



<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>1 188 653 760</b>	<b>17 870 725</b>	<b>NO</b>	<b>8 692 912</b>	<b>NO</b>	<b>NO</b>

Table 148  
**Romania's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	297	NO	NO
Total transactions	NO	NO	NO	297	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	1 250	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	1 250	NO	NO	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 under the Kyoto Protocol, its GHG emissions and removals, the 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**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	74 271 511	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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 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.

<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 150

**Slovakia's emissions and removals of greenhouse gases in 2019 and 2020**(t CO<sub>2</sub> eq)

Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
Emissions of GHGs from Annex A sources		39 993 634		39 821 650	37 048 581
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-537 084		-551 877	-555 249
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-5 157 619		-5 431 276	-7 384 365
FMRL (t CO <sub>2</sub> eq/year)		-1 084 000		-1 084 000	-1 084 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-2 606 000		-2 606 000	-3 723 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Table 151

**Slovakia's total quantities of Kyoto Protocol units by account type at the end of 2020**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
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	
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 152  
Slovakia's total quantities of Kyoto Protocol units by account type at the end of 2021

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>202 268 939</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 153  
Slovakia's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
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 under the Kyoto Protocol, its GHG emissions and removals, the 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**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	20 327 584	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</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.

<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 155  
**Slovenia's emissions and removals of greenhouse gases in 2019 and 2020**  
 (t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		17 065 451		17 074 182	15 851 442
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		238 160		259 679	262 504
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		395 726		–4 463 646	–4 411 506
FMRL (t CO <sub>2</sub> eq/year)		–3 171 000		–3 171 000	–3 171 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		NE		–161 370	–161 370
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Table 156  
**Slovenia's total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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					

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 157

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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>99 425 782</b>	<b>NO</b>	<b>NO</b>	<b>1 403 933</b>	<b>NO</b>	<b>NO</b>

Table 158

**Slovenia's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	15 582 398	NO	NO
Total transactions	NO	NO	NO	15 582 398	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	635 251	NO	NO

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
External transactions	NO	NO	NO	14 178 465	NO	NO
Total transactions	NO	NO	NO	14 813 716	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 under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	283 361 698	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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>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.

<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 160

### Spain's emissions and removals of greenhouse gases in 2019 and 2020

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

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		314 528 511		313 828 489	274 742 895
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		–4 531 877		–4 680 155	–4 163 161
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–30 033 384		–29 455 239	–28 680 121
FMRL (t CO <sub>2</sub> eq/year)		–23 100 000		–23 100 000	–23 100 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		–8 145 000		–4 261 000	–4 261 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	–144 007	–3 350 116	–144 038	–3 296 904	–3 145 922

Table 161  
Spain's total quantities of Kyoto Protocol units by account type at the end of 2020

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMU</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	1 842 444	NO	16 574 595	1 384 902	NO
Entity holding accounts	NO	308 658	NO	1 061 177	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	1 139 308	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
<b>Total</b>	<b>NO</b>	<b>2 170 468</b>	<b>NO</b>	<b>18 775 080</b>	<b>1 470 942</b>	<b>NO</b>

Table 162  
Spain's total quantities of Kyoto Protocol units by account type at the end of 2021

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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>1 766 877 232</b>	<b>2 172 668</b>	<b>NO</b>	<b>19 233 121</b>	<b>1 471 808</b>	<b>NO</b>

Table 163  
Spain's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	2 200	NO	1 446 818	866	NO
Total transactions	NO	2 200	NO	1 446 818	866	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	529 242	NO	NO
External transactions	NO	NO	NO	988 777	NO	NO
Total transactions	NO	NO	NO	1 518 019	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 under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	72 057 123	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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>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.

<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 165

**Sweden's emissions and removals of greenhouse gases in 2019 and 2020**(t CO<sub>2</sub> eq)

Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
Emissions of GHGs from Annex A sources		50 919 865		50 810 593	46 284 753
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		2 189 210		1 909 409	1 281 784
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-42 949 836		-42 101 249	-44 160 498
FMRL (t CO <sub>2</sub> eq/year)		-41 336 099		-41 336 099	-41 336 099
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		8 535 999		8 942 641	8 942 641
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Table 166

**Sweden's total quantities of Kyoto Protocol units by account type at the end of 2020**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	8 041 160	314 672	NO
Entity holding accounts	NO	NO	NO	2 015 039	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	13 110 414	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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>23 166 613</b>	<b>314 672</b>	<b>NO</b>

Table 167

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

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
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
<b>Total</b>	<b>315 554 578</b>	<b>NO</b>	<b>NO</b>	<b>23 894 807</b>	<b>314 672</b>	<b>NO</b>

Table 168  
Sweden's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	1 420 137	NO	NO
Total transactions	NO	NO	NO	1 420 137	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	4 702 228	NO	NO
External transactions	NO	NO	NO	691 943	NO	NO
Total transactions	NO	NO	NO	5 394 171	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 under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	53 706 729	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
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>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 2019 and 2020**

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

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		46 216 973		46 086 192	43 399 973
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		169 501		177 889	180 250
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-2 649 057		-2 658 916	-2 330 002
FMRL (t CO <sub>2</sub> eq/year)		220 000		220 000	220 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-2 136 090		-2 021 440	-2 021 440
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Table 171

**Switzerland's total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	2 033 442	NO	NO
Entity holding accounts	NO	78 944 204	NO	27 877 033	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	692 152	NO	13 053 681	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		

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>5 794 523</b>	<b>79 636 356</b>	<b>NO</b>	<b>42 964 156</b>	<b>NO</b>	<b>NO</b>

Table 172  
Switzerland's total quantities of Kyoto Protocol units by account type at the end of 2021

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</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
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
<b>Total</b>	<b>367 563 047</b>	<b>79 866 271</b>	<b>NO</b>	<b>75 460 443</b>	<b>NO</b>	<b>NO</b>

Table 173  
Switzerland's total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	229 916	NO	58 970 527	NO	NO
Total transactions	NO	229 916	NO	58 970 527	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	1 696 546	NO	16 962 987	NO	NO
External transactions	NO	1	NO	26 474 240	NO	NO
Total transactions	NO	1 696 547	NO	43 437 227	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. Ukraine has not ratified the Doha Amendment, which entered into force on 31 December 2020.

81. Tables 174–178 provide detailed information on Ukraine’s initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the 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**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	937 954 204	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>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 2019 and 2020**(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		332 114 021		333 834 969	317 695 597
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		–2 378 262		–2 378 262	–2 474 233
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–46 985 839		–22 649 807	–27 011 779
FMRL (t CO <sub>2</sub> eq/year)		–48 700 000		–48 700 000	–48 700 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		–4 600 000		15 700 000	15 700 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	–	NA	–	NA	NA

Table 176

**Ukraine’s total quantities of Kyoto Protocol units by account type at the end of 2020**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>iCERs</i>
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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 177

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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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	
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 178

**Ukraine's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Subtractions</i>						
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>11</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 under the Kyoto Protocol, its GHG emissions and removals, the 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

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	803 191 325	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment 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>b</sup>	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>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>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 180

### United Kingdom's emissions and removals of greenhouse gases in 2019 and 2020

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

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		452 321 765		447 410 430	404 834 197
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		–612 231		–440 858	–1 276 373
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–15 454 596		–15 800 627	–15 495 978
FMRL (t CO <sub>2</sub> eq/year)		–8 268 000		–8 268 000	–8 268 000

<sup>11</sup> In 2017 the geographical coverage of the United Kingdom's inventory changed to exclude the territory of Bermuda.

Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-8 375 000		-9 333 000	-9 333 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	23 782 151	18 921 896	20 968 846	18 545 513	18 628 663

Table 181

**United Kingdom's total quantities of Kyoto Protocol units by account type at the end of 2020**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	72 340	NO	286 904	NO	NO
Entity holding accounts	NO	9 923 828	NO	16 194 347	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	8 692 041	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
<b>Total</b>	<b>NO</b>	<b>12 291 154</b>	<b>NO</b>	<b>25 173 292</b>	<b>NO</b>	<b>NO</b>

Table 182

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

Account type	AAUs	ERUs	RMU	CERs	tCERs	ICERs
Party holding accounts	2 744 937 332	72 340	NO	286 904	NO	NO
Entity holding accounts	NO	9 923 828	NO	19 931 938	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	8 692 041	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	



<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>2 744 937 332</b>	<b>12 291 154</b>	<b>NO</b>	<b>28 910 883</b>	<b>NO</b>	<b>NO</b>

Table 183

**United Kingdom's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	3 737 591	NO	NO
Total transactions	NO	NO	NO	3 737 591	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	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 quantified emission limitation or reduction commitment 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. Tables 184–187 provide detailed information on Japan's GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 184

**Japan's emissions and removals of greenhouse gases in 2019 and 2020**(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		1 211 551 739		1 212 221 479	1 150 085 521

Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		635 972		366 926	450 361
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals FMRL (t CO <sub>2</sub> eq/year)		-41 598 343		-41 259 001	-38 938 834
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		1 899 694		1 555 726	1 555 726
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	7 920 496	4 896 501	7 923 867	4 147 196	4 016 279

Table 185

**Japan's total quantities of Kyoto Protocol units by account type at the end of 2020**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	615 848	50 174	NO
Entity holding accounts	NO	NO	NO	977 748	1 319 967	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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>1 593 596</b>	<b>1 370 141</b>	<b>NO</b>

Table 186

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

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	615 848	50 174	NO
Entity holding accounts	NO	NO	NO	977 748	1 319 967	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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>1 593 596</b>	<b>1 370 141</b>	<b>NO</b>

Table 187  
**Japan's total transactions of Kyoto Protocol units in 2021**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

## B. New Zealand

86. Tables 188–192 provide detailed information on New Zealand's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 188  
**Key initial accounting parameters under the Kyoto Protocol for New Zealand**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
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>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 189  
**New Zealand's emission and removals of greenhouse gases in 2019 and 2020**  
(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		82 313 578		81 612 758	78 774 187

Parameter	2021 submission		2022 submission		
	Base year	2019	Base year	2019	2020
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		-12 905 443		-13 601 764	-13 444 186
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-20 665 275		-15 220 715	-16 031 917
FMRL (t CO <sub>2</sub> eq/year)		11 150		11 150 000	11 150 000
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		-21 860		-25 489 310	-25 489 310
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	-	NA,NE	-	NA,NE	NA,NE

Table 190

**New Zealand's total quantities of Kyoto Protocol units by account type at the end of 2020**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
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	
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 191

**New Zealand's total quantities of Kyoto Protocol units by account type at the end of 2021**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
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
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Table 192  
New Zealand’s total transactions of Kyoto Protocol units in 2021

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

### C. Russian Federation

87. Table 193 provides detailed information on the Russian Federation’s GHG emissions and removals.

Table 193  
Russian Federation’s emissions and removals of greenhouse gases in 2019 and 2020  
(t CO<sub>2</sub> eq)

<i>Parameter</i>	<i>2021 submission</i>		<i>2022 submission</i>		
	<i>Base year</i>	<i>2019</i>	<i>Base year</i>	<i>2019</i>	<i>2020</i>
Emissions of GHGs from Annex A sources		2 119 432 414		2 122 793 407	2 051 437 414
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol		IE, NA, NO		IE, NA, NO	IE, NA, NO
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		IE, NA, NO		IE, NA, NO	IE, NA, NO
FMRL (t CO <sub>2</sub> eq/year)		NA		NA	NA
Technical correction to FMRL (t CO <sub>2</sub> eq/year)		NA		NA	NA
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA