Framework Convention on

Climate Change





English only

Status report of the annual inventory of Portugal

- 1. This status report was prepared by the secretariat pursuant to decision 22/CMP.1 in conjunction with decision 4/CMP.11 as part of the initial check of Portugal's 2020 annual greenhouse gas inventory, submitted in accordance with decisions 24/CP.19 and 15/CMP.1 in conjunction with decisions 3/CMP.11 and 2/CMP.8.
- 2. The report reflects the content of the inventory submission as submitted by the Party, which, in accordance with decision 24/CP.19, is due by 15 April each year (dates of submission are provided in the table on page 2).
- 3. In accordance with decision 24/CP.19, Parties report aggregate emissions and removals in carbon dioxide equivalent using the global warming potential values from the Fourth Assessment Report of the Intergovernmental Panel on Climate Change over a 100-year time-horizon.
- 4. In this report, the following abbreviations are used:

CRF: common reporting format

GHG: greenhouse gas

HWP: harvested wood products

IPCC: Intergovernmental Panel on Climate Change

IPPU: industrial processes and product use

KP-LULUCF activities: activities under Article 3,

paragraphs 3-4, of the Kyoto Protocol

LULUCF: land use, land-use change and forestry

NIR: national inventory report SEF: standard electronic format

Gases

CH₄: methane

CO: carbon monoxide CO₂: carbon dioxide HFC: hydrofluorocarbon

HFC/PFC mix: unspecified mix of hydrofluorocarbons

and perfluorocarbons NF₃: nitrogen trifluoride

NMVOC: non-methane volatile organic compound

NO_X: nitrogen oxides N₂O: nitrous oxide PFC: perfluorocarbon SF₆: sulfur hexafluoride SO₂: sulfur dioxide Kyoto Protocol units
AAU: assigned amount unit

CER: certified emission

reduction

ERU: emission reduction unit ICER: long-term certified emission reduction RMU: removal unit tCER: temporary certified emission reduction

Notation keys C: confidential

IE: included elsewhere NA: not applicable NE: not estimated NO: not occurring

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	Part I General information regarding 2020 inventory submission													
		Date subm	of origin ssion	ıal	Date o	of resubn	nission(s)	Cor	Comments ^a					
	NIR	3 Ap	ril 2020)										
	CRF tables ^b	3 Ар	ril 2020)					est inver T_2020_		sessed in	n this report):		
General information	Additional information ^c CRF tables provided for years		ril 2020 -2018)				Files submitted (3 April 2020): - Annex A - CSEUR.pdf - Annex B - Changes in EUCR v8.0.10.2 to v8.2.2.pdf - RREG2_PT_2019_1.xlsx - RREG3_PT_2019_1.xlsx - RREG4_PT_2019_1.xlsx - RREG5_PT_2019_1.xlsx				ю		
	Base year or period ^d	1990		Base	year fo	or HFC:	s, PFCs and	SF_6^e 1995 Base year for NF_3^f 2000				2000		
	Gases covered ^g	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	HFC/PFC mix	SF ₆	NF ₃	NOx	СО	NMVOCs	SO ₂	
CRF ^h tables	Source categories accounting for 7% or more of Party's aggregate emissions from sources included	✓ No n	No missing source category accounting for 7% or more has been identified							✓				
CK	in Annex A to the Kyoto Protocol													

^a The comment field is used to indicate the name of the inventory being assessed (relevant to CRF tables), the names of the files submitted as additional information (relevant to the row for additional information) and any other information relevant to the submission.

- ^b The CRF tables are contained in annex II to decision 24/CP.19.
- ^c Additional information can be any information submitted by a Party in conjunction with its NIR or CRF tables.
- ^d Parties included in Annex I to the Convention undergoing the process of transition to a market economy may use a base year or a period of years other than 1990 in accordance with the provisions of Article 4, para. 6, of the Convention and decisions 9/CP.2 and 11/CP.4.
 - ^e A Party may select 1995 as the base year for HFCs, PFCs and SF₆ in accordance with Article 3, para. 8, of the Kyoto Protocol.
 - ^f A Party may select 1995 or 2000 as the base year for NF₃ in accordance with Article 3, para. 8 bis, in the Doha Amendment.
- ^g If, in the latest year, for a given gas, a Party reports a numerical value or a notation key other than "NE", a tick is shown in the respective cell; if "NE", zero or no value is reported, the cell is left blank.
 - h In accordance with decision 15/CMP.1, para. 3(b), in conjunction with decision 3/CMP.11.

	General information regarding the subr	nission of supplemen	Part II tary information und	ler Article 7, paragraph 1, of the	e Kyoto Protocol	
		Date of original submission	Č ,			
	KP-LULUCF information ^b	3 April 2020		NIR chapter 11		
ation	KP-LULUCF CRF tables ^c	3 April 2020		KP-LULUCF CRF tables provided for years	1990, 2013–2018	
ary inform	Information on Kyoto units (AAUs, CERs, ERUs and RMUs) ^d	3 April 2020		NIR chapter 12		
Reporting of supplementary information	SEF tables with Kyoto Protocol units ^e	3 April 2020		Reported year: 2019 - SEF tables for first commi submitted on 3 April 2020 - SEF tables for second com submitted on 3 April 2020	-	
	Changes in national system ^f	3 April 2020		NIR chapter 13		
	Changes in national registry ^f	3 April 2020		NIR chapter 14		
	Minimization of adverse impacts ^f	3 April 2020		NIR chapter 15		

- ^a Where applicable the comments field indicates the location of the reported information in the NIR.
- ^b Parties are required to include in their annual submission information on anthropogenic GHG emissions by sources and removals by sinks from LULUCF activities under Article 3, para. 3, of the Kyoto Protocol, and, if any, elected activities under Article 3, para. 4, in accordance with decision 2/CMP.8, annex II, paras. 1–5.
- ^c Parties are required to report anthropogenic GHG emissions by sources and removals by sinks from LULUCF activities under Article 3, para. 3, of the Kyoto Protocol, forest management and, if any, elected activities under Article 3, para. 4. Parties may also elect to report these tables for the base year or 1990.
- ^d Parties are required to include in their annual submission information on AAUs, CERs, ICERs, tCERs, ERUs and RMUs in accordance with decision 15/CMP.1, annex, chap. I.E, in conjunction with annex II to decision 3/CMP.11.
 - ^e As required by annex II to decision 3/CMP.11.
- ^f The requirements for Parties to report on changes in their national systems in accordance with Article 5, para. 1, of the Kyoto Protocol, changes in national registries, and the minimization of adverse impacts in accordance with Article 3, para. 14, of the Kyoto Protocol are set out in decision 15/CMP.1, annex, chaps. I.F, I.G and I.H, respectively, in conjunction with annex II to decision 3/CMP.11.

	Part III Completeness ^a of CRF tables for the latest reported inventory year (2018)												
		Ener	rgy	IPPU	,	Agrica	ılture		LULUCF				aste
	Sectoral report tables	1	✓	2(I)	√	3	√	4	✓	4.1	√	5	✓
		1.A(a)	✓	2(I)A-H	✓	3.A	✓	4.A	✓	4(I)	✓	5.A	✓
5		1.A(b)	✓	2(II)	✓	3.B(a)	✓	4.B	✓	4(II)	✓	5.B	√
Sectoral tables		1.A(c)	✓	2(II)B-H	✓	3.B(b)	✓	4.C	✓	4(III)	✓ 5.C ✓	✓	
Sectora	Sectoral background tables	1.A(d)	✓			3.C	✓	4.D	✓	4(IV)	✓	5.D	✓
		1.B.1	✓			3.D	✓	4.E	✓	4(V)	✓		
		1.B.2	✓			3.E	✓	4.F	✓				
		1.C	✓			3.F	✓	4.G	✓				
		1.D	✓			3.G-I	✓						
Summative and cross- cutting tables ^b	Cross-sectoral report tables	Table 6 (Indirect	Table 6 (Indirect emissions of N ₂ O and CO ₂)										
Summative cutting	Other tables	Table 9 (Informa	ation on	notation keys	s – NE)		✓	Table 9		n notation	keys – l	(E)	√

 ^a A tick indicates that the respective table is not blank.
 ^b Tables that are automatically generated by the CRF Reporter (summary table 1.A, summary table 2, summary table 3, table 7 key categories and table 10 emission trends) are not included here.

	Part III (continued) Completeness ^a of CRF tables related to KP-LULUCF ^b information for the latest reported inventory year (2018)											
		NIR-1	✓									
	Sectoral report tables	NIR-2	✓									
		NIR-3	✓									
		4(KP)	✓									
l tables		4(KP) Recalculation										
Sectoral tables	es	4(KP-I)A.1	✓	4(KP-I)B.1	✓	4(KP-I)B.2	✓	4(KP-II)1	✓			
	md tabl	4(KP-I)A.1.1	✓	4(KP-I)B.1.1	✓	4(KP-I)B.3	✓	4(KP-II)2	✓			
	ackgrou	4(KP-I)A.2	✓	4(KP-I)B.1.2		4(KP-I)B.4	✓	4(KP-II)3	✓			
	Sectoral background tables	4(KP-I)A.2.1	✓	4(KP-I)B.1.3	✓	4(KP-I)B.5	✓	4(KP-II)4	✓			
	Sec					4(KP-I)C	✓	Accounting table	✓			

^a A tick indicates that the respective table is not blank.

^b Parties are required to report anthropogenic GHG emissions by sources and removals by sinks from LULUCF activities under Article 3, para. 3, of the Kyoto Protocol, and, if any, elected activities under Article 3, para. 4, using the agreed CRF tables adopted under decision 6/CMP.9.

	Part IV Provision of selected information in the CRF tables														
IG totals ^a	Gas	CO ₂	CF	I 4	N ₂ O		HFCs		PFCs		HFC/PFC mix		SF ₆		NF ₃
Direct GHG totals ^a	Provided for years	1990– 2018	199 20	90– 18			1990- 2018	-	1990 2018			90– 18	1990– 2018	-	1990– 2018
t CO2	Sector	Energy		IPPU	IPPU		ricultui	re	LULUCF			Waste		Ot	ner
Indirect CO ₂	Provided for years	1990–2018		1990–2018		19	1990–2018					199	90–2018		
Energy ${\it CO}_2^b$	Comparison of CO ₂ emissions from fuel	Reference approach		Sectoral approach		Di	fference	e betw	een re	eference	and	sectoral	approac	h mo	re than 2%
Energ	combustion ^b	✓	✓			Lie	iquid		Solid			✓	Gas	seous	
International bunkers	Bunker type	Aviation		Navigation											
Interna bun	Provided for years	1990–2018		1990–2018											
$HFCs$ and $PFCS^{b,c}$	Disaggregation by species	HFCs		PFCs											
HFC: PFC		✓		√											

Considered provided if the total for a given gas is a numerical value or a notation key other than "NE".
 A tick indicates that the information is provided.
 Assessment based on information reported for the latest inventory year.

	Comp	leteness of CRF tab	Part V	d (base year, 1990–2018) ^a							
	Yes/no	Sector	Table	Year(s)	Notation keys used						
CRF submission contains blank tables ^b	Yes	KP-LULUCF	4(KP-I)B.1.2	1990, 2013–2018							
CRF submission includes tables containing only	Yes	Energy	Table 1.C	1990–2018	NO						
notation keys ^c		IPPU	Table 2(II)	1990–1994	NA, NO						
		IPPU	Table 2(II)B- Hs1	1990–2018	NA, NE, NO						
		IPPU		Table 2(II)B- Hs2	1990–1994	NA					
		Agriculture	Table 3.E	1990–2018	NO						
		LULUCF	Table 4(I)	1990–2018	IE, NO						
		LULUCF	Table 4(II)	1990–2018	NO						
		KP-LULUCF	NIR-3	1990, 2013–2018	NO						
								KP-LULUCF	4(KP-I)A.2.1	1990	NO
									KP-LULUCF	4(KP-I)B.1.1	1990
				KP-LULUCF	4(KP-I)B.4	1990, 2013–2018	NA				
		KP-LULUCF	4(KP-I)B.5	1990, 2013–2018	NA						
		KP-LULUCF	4(KP-II)1	1990, 2013–2018	IE, NA						
		KP-LULUCF	4(KP-II)2	1990, 2013–2018	NA, NO						

 ^a KP-LULUCF tables are only considered for the years associated with the second commitment period of the Kyoto Protocol.
 ^b Excludes table 8 in the latest reported inventory year.

^c Notation keys associated with methods and emission factor information are not considered.

	Part VI Provision of information in the CRF tables relating to recalculations								
Recalculation reported for years ^a	1990–2017								
Recalculated sectors/gases ^b	Energy	IPPU	Agriculture	LULUCF	Waste	KP-LULUCF			
CO ₂	✓	✓	✓	✓	✓	✓			
CH ₄	✓	✓	✓	✓	✓	✓			
N ₂ O	✓		✓	✓		✓			
HFCs		✓							
PFCs		✓							
HFC/PFC mix									
SF ₆		✓							
NF ₃									
Indirect CO ₂	✓								
Percentage difference in aggregate GHG	Base-year estimate ^c	With LULUCF:	-0.9%	Without LULUCF:	-0.9%				
emissions	Latest recalculated year ^d	With LULUCF:	3.22%	Without LULUCF:	-0.14%				

 $^{^{\}it a}$ Years in which recalculations were performed.

b Tick indicates that, for the respective sector and gas, recalculations were performed in one or more years.
c Parties included in Annex I to the Convention undergoing the process of transition to a market economy may use a base year or a period of years other than 1990 in accordance with the provisions of Article 4, para. 6, of the Convention and decision 24/CP.19.

^d The latest recalculated year is the latest reported inventory year minus one.

		Part VII		
		Provision of information relating to KP-LULUCF acti	ivities	
			Provided ^a	Observation
		nissions by sources and removals by sinks are clearly distinguished from emissions from categories cluded in Annex A to the Kyoto Protocol	✓	
	Gu	Formation on how inventory methodologies have been applied, taking into account the 2006 IPCC uidelines for National Greenhouse Gas Inventories and any relevant supplementary guidance recognizing e principles laid out in decision 16/CMP.1	√	
1–5	Inf	Formation on the geographical location of the boundaries of areas that encompass:		
raphs		Units of land subject to activities under Article 3, paragraph 3	✓	
: II, parag		Units of land subject to activities under Article 3, paragraph 3, which would otherwise be included in land subject to forest management or elected activities under Article 3, paragraph 4	✓	
annex		Land subject to forest management or elected activities under Article 3, paragraph 4	✓	
2/CMP.8,		Cormation on the spatial assessment unit for determining the area of accounting for afforestation, Corestation and deforestation	✓	
ler decision 2	loc	formation on GHG emissions/removals resulting from KP-LULUCF activities, for all geographical cations reported in the current and previous years since the beginning of the commitment period or the onset the activity, whichever occurs later	√	
ments unc		Formation on carbon pools (above-ground/below-ground biomass, litter, deadwood and soil organic carbon) at are not accounted for	✓	
Reporting requirements under decision 2/CMP.8, annex II, paragraphs 1–5	in a	hen a Party applies the provisions for natural disturbances, information demonstrating that these emissions any single year exceed the background level(s), including a margin, where needed. For this purpose, the rty shall include information showing:		
Repo		That all lands subject to exclusion due to natural disturbances are identified	✓	In chapter 11.1.7 of the NIR, the Party reported that the provisions for natural disturbances have not yet been applied
		How annual emissions resulting from natural disturbances and the subsequent removals are estimated and excluded from the accounting	✓	In chapter 11.1.7 of the NIR, the Party reported that the provisions for natural disturbances have not yet been applied
		That no land-use change has occurred on lands for which the provisions in decision 2/CMP.7, annex, paragraph 33, are applied	✓	In chapter 11.1.7 of the NIR, the Party reported that the provisions for natural disturbances have not yet been applied

Part VII Provision of information relating to KP-LULUCF ac	ctivities	
	Provided ^a	Observation
That events and circumstances were beyond the control of the Party	✓	In chapter 11.1.7 of the NIR, the Party reported that the provisions for natural disturbances have not yet been a
That the efforts taken to rehabilitate the land for which the provisions contained in decision 2/CMP.7, annex, paragraph 33, are applied	✓	In chapter 11.1.7 of the NIR, the Party reported that the provisions for natural disturbances have not yet been a
That emissions associated with salvage logging were not excluded from the accounting	✓	In chapter 11.1.7 of the NIR, the Party reported that the provisions for natural disturbances have not yet been a
If not accounted for by instantaneous oxidation, information on GHG emissions/removals resulting from changes in the HWP pool accounted for in accordance with decision 2/CMP.7, including:		
Activity data for the HWP categories used for estimating the pool removed from domestic forests, for domestic consumption and for export	√	
Half-lives used in estimating emissions/removals for the HWP categories used	✓	
Whether emissions from HWP originating from forests prior to the start of the second commitment period have been included in the accounting, if the forest management reference level is based on a projection	*	
How emissions from the HWP pool accounted for in the first commitment period on the basis of instantaneous oxidation have been excluded from the accounting for the second commitment period	✓	
How HWP resulting from deforestation has been accounted on the basis of instantaneous oxidation	✓	
How CO ₂ emissions from HWP in solid waste disposal sites and from wood harvested for energy purposes have been accounted on the basis of instantaneous oxidation	✓	
How emissions/removals from changes in the HWP pool accounted for do not include imported HWP	✓	
Information on anthropogenic GHG emissions from KP-LULUCF activities, factoring out removals from:		
Elevated CO ₂ concentrations above pre-industrial levels	✓	
Indirect nitrogen deposition	✓	
The dynamic effects of age structure resulting from activities prior to 1 January 1990	✓	
Specific information to be reported for activities under Article 3, paragraph 3:		

Part VII		
Provision of information relating to KP-LULUCF ac	ctivities	
	Provided ^a	Observation
Activities that began on or after 1 January 1990 and before 31 December of the last year of the commitment period and are directly human-induced	√	
How harvesting or forest disturbance that is followed by the re-establishment of forest is distinguished from deforestation	√	
Specific information to be reported for activities under Article 3, paragraph 4:		
Activities that have occurred since 1 January 1990 and are human-induced	✓	
Cropland management, grazing land management, revegetation, wetland drainage and rewetting: emissions/removals reported for each year of the commitment period and for the base year for each of the elected activities at the geographical locations reported	√	
Emissions/removals from activities under Article 3, paragraph 4, are not accounted for under activities under Article 3, paragraph 3	✓	
Information on how emissions arising from the conversion of natural forests to planted forests are accounted for	√	
Methodological consistency between the reference level and reporting for forest management	✓	
Technical corrections made pursuant to decision 2/CMP.7, annex, paragraph 14	✓	
Forest management: if emissions/removals from the harvest and conversion of forest plantations to non-forest land were included, information on how requirements set out in decision 2/CMP.7, annex, paragraphs 37–39, were met, including:		
The identification of all lands and associated carbon pools subject to decision 2/CMP.7, annex, paragraph 37, including the georeferenced location and year of conversion	√	In chapter 11.4.6 of the NIR, the Party reported that the equivalent forest provision is not being applied
A demonstration that the forest plantation was first established through direct human-induced planting and/or seeding of non-forest land before 1 January 1990, and, if the forest plantation was reestablished, that this last occurred on forest land through direct human-induced planting and/or seeding after 1 January 1960	√	In chapter 11.4.6 of the NIR, the Party reported that the equivalent forest provision is not being applied
A demonstration that a new forest of area at least equivalent to the harvested forest plantation is established through direct human-induced planting and/or seeding of non-forest land that did not contain forest on 31 December 1989	✓	In chapter 11.4.6 of the NIR, the Party reported that the equivalent forest provision is not being applied

Part VII Provision of information relating to KP-LULUCF activities									
	Provided ^a	Observation							
A demonstration that this newly established forest will reach at least the equivalent carbon stock that was contained in the harvested forest plantation at the time of harvest, within the normal harvesting cycle of the harvested forest plantation, and, if not, that a debit would be generated under Article 3, paragraph 4	~	In chapter 11.4.6 of the NIR, the Party reported that the equivalent forest provision is not being applied							

^a A tick is accompanied by an explanatory comment in the observation field where the provision of information is not applicable.