



## **COMPLIANCE COMMITTEE**

CC/ERT/ASR/2019/13 12 July 2019

## Status report of the annual inventory of the Netherlands

## Note by the secretariat

The status report of the annual inventory of the Netherlands was published on 7 June 2019. For purposes of rule 10, paragraph 2, of the Rules of procedure of the Compliance Committee (annex to decision 4/CMP.2, as amended by decisions 4/CMP.4 and 8/CMP.9), the report is considered received by the secretariat on the same date. This report, FCCC/ASR/2019/NLD, contained in the annex to this note, is being forwarded to the Compliance Committee in accordance with section VI, paragraph 3, of the annex to decision 27/CMP.1 and paragraph 49 of the annex to decision 22/CMP.1.

FCCC/ASR/2019/NLD



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English only

## Status report of the annual inventory of the Netherlands

- 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 the 2019 annual greenhouse gas inventory of the Netherlands, 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 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

IPPU: industrial processes and product use

KP-LULUCF activities: activities under Article 3,

paragraphs 3 and 4, of the Kyoto Protocol

LULUCF: land use, land-use change and forestry

NIR: national inventory report SEF: standard electronic format

Gases

CH<sub>4</sub>: methane

CO: carbon monoxide CO<sub>2</sub>: carbon dioxide HFC: hydrofluorocarbon

HFC/PFC mix: unspecified mix of hydrofluorocarbons

and perfluorocarbons NF<sub>3</sub>: nitrogen trifluoride

NMVOC: non-methane volatile organic compound

NO<sub>X</sub>: nitrogen oxides N<sub>2</sub>O: nitrous oxide PFC: perfluorocarbon SF<sub>6</sub>: sulfur hexafluoride SO<sub>2</sub>: sulfur dioxide Kyoto Protocol units
AAU: assigned amount unit
CER: certified emission

reduction

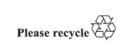
ERU: emission reduction unit lCER: long-term certified emission reduction RMU: removal unit tCER: temporary certified emission reduction

Notation keys
C: confidential

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

GE.19-09263(E)







			Genera	al infor	mation		rt I ng 2019 inve	entory	submissi	on				
Г		Date o	of origir ssion	ıal	Date o	Date of resubmission(s) Comments <sup>a</sup>								
	NIR	15 A <sub>l</sub>	pril 201	19										
	CRF tables <sup>b</sup>	15 A <sub>1</sub>	pril 201	19					est inver D_2019		sessed ir	this report):		
	Additional	15 A <sub>1</sub>	pril 201	19				File	es submi	tted (15	April 20	19):		
	information <sup>c</sup>								nnex 7 A LUCF.p		ıl (2019)	Methodology	Report	
								- Annex 7 Jansen et al (2019) Methodology Report WESP 2019-0017.xlsx						
ation									- Annex 7 Klein et al. (2019) Methods for calculating the emissions of transport in NL.pdf					
General information									- Annex 7 Lagerwerf et al (2019) Methodology Report Agriculture.pdf					
Genera								- Annex 7 Peek et al (2019) Methodology Report ENINA 2019-0018.pdf					Report	
					- NLD NIR 2019 Annex A - CSEUR					CSEUR.pdf				
									- NLD NIR 2019 Annex B - Changes in EUCR v8.0.10.2 to v8.2.2.xlsx					
	CRF tables provided for years	1990-	-2017											
	Base year or period <sup>d</sup>	1990		Base	year fo	or HFC	s, PFCs and	$SF_6^e$	1995		Base y	ear for NF <sub>3</sub> <sup>f</sup>	1995	
	Gases covered <sup>g</sup>	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	HFC/PFC mix	SF <sub>6</sub>	NF <sub>3</sub>	NO <sub>X</sub>	СО	NMVOCs	SO <sub>2</sub>	
		✓	✓	✓	<b>✓</b>	✓	✓	✓	✓	✓	✓	✓	✓	
CRF <sup>h</sup> tables	Source categories accounting for 7% or more of Party's aggregate emissions from sources included in Annex A to the Kyoto Protocol	No m	nissing	source	catego	ry acco	unting for 7	% or i	more has	s been id	entified			

<sup>&</sup>lt;sup>a</sup> 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.

- <sup>b</sup> The CRF tables are contained in annex II to decision 24/CP.19.
- <sup>c</sup> Additional information can be any information submitted by a Party in conjunction with its NIR or CRF tables.
- <sup>d</sup> 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, paragraph 6, of the Convention and decisions 9/CP.2 and 11/CP 4.
  - <sup>e</sup> A Party may select 1995 as the base year for HFCs, PFCs and SF<sub>6</sub> in accordance with Article 3, paragraph 8, of the Kyoto Protocol.
- <sup>f</sup> A Party may select 1995 or 2000 as the base year for NF3 in accordance with Article 3, paragraph 8 bis, in the Doha Amendment.
- <sup>g</sup> 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.
  - <sup>h</sup> In accordance with decision 15/CMP.1, paragraph 3(b), in conjunction with decision 3/CMP.11.

	Part II  General information regarding the submission of supplementary information under Article 7, paragraph 1, of the Kyoto Protocol										
		Date of original submission	Date of resubmission(s)	Comments <sup>a</sup>							
	KP-LULUCF information <sup>b</sup>	15 April 2019		NIR chapter 11							
information	KP-LULUCF CRF tables <sup>c</sup>	15 April 2019		KP-LULUCF CRF tables provided for years	1990, 2013–2017						
	Information on Kyoto units (ERUs, CERs, RMUs and AAUs) <sup>d</sup>	15 April 2019		NIR chapter 12							
Reporting of supplementary	SEF tables with Kyoto Protocol units <sup>e</sup>			Reported year: 2018 - SEF table for the second commitment period submitted on 15 April 2019							
Repo	Changes in national system <sup>f</sup>	15 April 2019		NIR chapter 13	R chapter 13						
	Changes in national registry	15 April 2019		NIR chapter 14							
	Minimization of adverse impacts <sup>f</sup>	15 April 2019		NIR chapter 15							

<sup>&</sup>lt;sup>a</sup> Where applicable the comments field indicates the location of the reported information in the NIR.

<sup>&</sup>lt;sup>b</sup> 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, paragraph 3, of the Kyoto Protocol, and, if any, elected activities under Article 3, paragraph 4, in accordance with decision 2/CMP.8, annex II, paragraphs 1–5.

<sup>&</sup>lt;sup>c</sup> Parties are required to report anthropogenic GHG emissions by sources and removals by sinks from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol, forest management and, if any, elected activities under Article 3, paragraph 4. Parties may also elect to report these tables for the base year or 1990.

<sup>&</sup>lt;sup>d</sup> Parties are required to include in their annual submission information on ERUs, CERs, tCERs, lCERs, AAUs and RMUs, in accordance with decision 15/CMP.1, annex, chapter I.E, in conjunction with annex II to decision 3/CMP.11.

<sup>&</sup>lt;sup>e</sup> As required by annex II to decision 3/CMP.11.

<sup>&</sup>lt;sup>f</sup> The requirements for Parties to report on changes in their national systems in accordance with Article 5, paragraph 1, of the Kyoto Protocol, changes in national registries, and the minimization of adverse impacts in accordance with Article 3, paragraph 14, of the Kyoto Protocol, are set out in decision 15/CMP.1, annex, chapters I.F, I.G and I.H respectively, in conjunction with annex II to decision 3/CMP.11.

	Part III  Completeness <sup>a</sup> of CRF tables for the latest reported inventory year (2017)												
		Energy		IPPU	ī	Agrici	ılture		LU	LUCF	UCF		
	Sectoral report tables	1	✓	2(I)	✓	3	<b>✓</b>	4	<b>✓</b>	4.1	✓	5	<b>✓</b>
		1.A(a)	<b>✓</b>	2(I).A-H	✓	3.A	✓	4.A	✓	4(I)	<b>✓</b>	5.A	✓
70		1.A(b)	<b>✓</b>	2(II)	✓	3.B(a)	<b>✓</b>	4.B	✓	4(II)	<b>✓</b>	5.B	✓
Sectoral tables	Sectoral background tables	1.A(c)	<b>✓</b>	2(II).B-H	✓	3.B(b)	<b>✓</b>	4.C	✓	4(III)	<b>✓</b>	5.C	✓
Sectora		1.A(d)	<b>✓</b>		•	3.C	<b>✓</b>	4.D	✓	4(IV)	<b>✓</b>	5.D	✓
		1.B.1	✓			3.D	✓	4.E	✓	4(V)	<b>✓</b>		
		1.B.2	✓			3.E	✓	4.F	✓				
		1.C	<b>✓</b>			3.F	<b>✓</b>	4.G	✓				
		1.D	✓			3.G-I	✓		•				
and cross- tables <sup>b</sup>	Cross-sectoral report tables	Table 6 (Indirect emissions of N <sub>2</sub> O and CO <sub>2</sub> )											
Summative and cross- cutting tables <sup>b</sup>	Other tables	Table 9 (Informa	ation or	notation keys	s – NE)		<b>✓</b>	Table 9		n notation	keys –	IE)	<b>✓</b>

 <sup>&</sup>lt;sup>a</sup> A tick indicates that the respective table is not blank.
 <sup>b</sup> Tables that are automatically generated by the CRF Reporter (summary table 1.A, summary table 2, summary table 3, table 7 key categories, table 10 emissions trends) are not included here.

	Part III (continued)  Completeness <sup>a</sup> of CRF tables related to KP-LULUCF <sup>b</sup> information for the latest reported inventory year (2017)											
		NIR-1	<b>✓</b>									
	Sectoral report tables	NIR-2	<b>✓</b>	-								
		NIR-3		1								
		4(KP)	✓	-								
tables		4(KP) Recalculation		-								
Sectoral tables	es	4(KP-I).A.1	✓	4(KP-I)B.1	<b>✓</b>	4(KP-I)B.2	✓	4(KP-II)1	<b>✓</b>			
	md tabl	4(KP-I).A.1.1	✓	4(KP-I)B.1.1	<b>✓</b>	4(KP-I)B.3	✓	4(KP-II)2	<b>✓</b>			
	Sectoral background tables	4(KP-I).A.2	✓	4(KP-I)B.1.2		4(KP-I)B.4	✓	4(KP-II)3	<b>✓</b>			
	toral be	4(KP-I).A.2.1	✓	4(KP-I)B.1.3	<b>✓</b>	4(KP-I)B.5	✓	4(KP-II)4	<b>✓</b>			
	Sec		•		•	4(KP-I).C	✓	Accounting table	<b>✓</b>			

<sup>&</sup>lt;sup>a</sup> A tick indicates that the respective table is not blank.

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

	Part IV  Provision of selected information in the CRF tables																
'Gs totals <sup>a</sup>	Gas CO <sub>2</sub> CH <sub>4</sub> N <sub>2</sub> O			HFCs		PFCs		HFC/PFC mix		SF <sub>6</sub>		NF <sub>3</sub>					
Direct GHGs totals <sup>a</sup>	Provided for years	1990– 2017	199 20	90– 17	1990– 2017		1990- 2017	-	1990– 2017		1990– 2017		1990– 2017		1990– 2017		
t CO2	Sector	Energy		IPPU		Ag	ricultur	re	LUI	UCF		Waste		Oth	ner		
Indirect $CO_2$	Provided for years			19	90–201	7	1990–2017			1990–2017 19		199	90–2017				
Energy ${\it CO}_2^{\ b}$	Comparison of CO <sub>2</sub> emissions from fuel	Reference approach		Sectora approac		Di	fference	betw	een re	ference	and	sectoral	approacl	h moi	n more than 2%		
Energ	combustion <sup>b</sup>	<b>✓</b>		<b>√</b>	,		quid	<b>√</b>		Solid			Gas	eous			
International bunkers	Bunker type	Aviation		Naviga	tion												
Interno bun	Provided for years	1990–2017		1990–2	2017												
$HFCs$ and $PFCS^{b,c}$	Disaggregation by species	HFCs		PFCs													
HFC		✓		<b>√</b>													

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	ed (base year, 1990–2017) <sup>a</sup>															
	Yes/no	Sector	Table	Year(s)	Notation keys used														
CRF submission contains blank tables <sup>b</sup>	Yes	KP-LULUCF	NIR-3	1990, 2013–2014, 2016–2017															
biank tables		KP-LULUCF	4(KP-I)B.1.2	1990, 2013–2017															
CRF submission includes tables containing only	Yes	Energy	Table1.C	1990–2017	NO														
notation keys <sup>c</sup>		Agriculture	Table3.As2	1990–2017	NA, NE														
		Agriculture	Table3.C	1990–2017	NO														
		Agriculture	Table3.E	1990–2017	NO														
		Agriculture	Table3.F	1990–2017	NO														
		LULUCF	Table4(I)	1990–2017	IE, NA, NE, NO														
		LULUCF	Table4(II)	1990–2017	IE, NA, NE, NO														
		LULUCF	Table4(IV)	1990–2017	IE														
		KP-LULUCF	4(KP-I)A.1.1	1990	NA, NO														
		KP-LULUCF	4(KP-I)A.2.1	1990, 2013–2017	NO														
																KP-LULUCF	4(KP-I)B.1.1	1990	NA
											KP-LULUCF	4(KP-I)B.1.3	1990	NA, NO					
										KP-LULUCF	4(KP-I)B.2	1990, 2013–2017	NA						
		KP-LULUCF	4(KP-I)B.3	1990, 2013–2017	NA														
		KP-LULUCF	4(KP-I)B.4	1990, 2013–2017	NA														
		KP-LULUCF	4(KP-I)B.5	1990, 2013–2017 N	NA														
		KP-LULUCF	4(KP-II)1	1990, 2013–2017	IE, NA, NO														
		KP-LULUCF	4(KP-II)2	1990, 2013–2017	NA, NE														

 <sup>&</sup>lt;sup>a</sup> KP-LULUCF tables are only considered for the years associated with the second commitment period of the Kyoto Protocol.
 <sup>b</sup> Excludes table 8 in the latest reported inventory year.
 <sup>c</sup> 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 <sup>a</sup>	1990–2016									
Recalculated sectors/gases <sup>b</sup>	Energy	IPPU	Agriculture	LULUCF	Waste	KP-LULUCF				
CO <sub>2</sub>	✓	✓	✓	<b>✓</b>		✓				
CH <sub>4</sub>	✓	✓	✓	✓	✓	✓				
N <sub>2</sub> O	✓	✓	✓	✓	✓	✓				
HFCs		✓								
PFCs		✓								
HFC/ and PFC mix										
SF <sub>6</sub>										
NF <sub>3</sub>										
Indirect CO <sub>2</sub>	✓									
Percentage difference in aggregate GHG	Base-year estimate <sup>c</sup>	With LULUCF:	0.28%	Without LULUCF:	0.09%					
emissions	Latest recalculated year <sup>d</sup>	With LULUCF:	-0.37%	Without LULUCF:	0.18%					

<sup>&</sup>lt;sup>a</sup> Years in which recalculations were performed.

<sup>&</sup>lt;sup>b</sup> Tick indicates that, for the respective sector and gas, recalculations were performed in one or more years.

<sup>&</sup>lt;sup>c</sup> 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, paragraph 6, of the Convention and decision 24/CP.19.

<sup>&</sup>lt;sup>d</sup> The latest recalculated year is the latest reported inventory year minus one.

	Part VII Provision of information relating to KP-LULUCF activ	vities	
		Provided <sup>a</sup>	Observation
	Emissions by sources and removals by sinks are clearly distinguished from emissions from categories included in Annex A to the Kyoto Protocol	✓	
	Information on how inventory methodologies have been applied, taking into account the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and any relevant supplementary guidance recognizing the principles laid out in decision 16/CMP.1	<b>√</b>	
5	Information on the geographical location of the boundaries of areas that encompass:		
I sydn	Units of land subject to activities under Article 3, paragraph 3	✓	
I, paragra	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	✓	
nnex I	Land subject to forest management or elected activities under Article 3, paragraph 4	✓	
СМР.8, а	Information on the spatial assessment unit for determining the area of accounting for afforestation, reforestation and deforestation	✓	
r decision 2/	Information on GHG emissions/removals resulting from KP-LULUCF activities, for all geographical locations reported in the current and previous years since the beginning of the commitment period or the onset of the activity, whichever occurs later	<b>√</b>	
vents unde	Information on carbon pools (above-ground/below-ground biomass, litter, deadwood and soil organic carbon) that are not accounted for	✓	
Reporting requirements under decision 2/CMP.8, annex II, paragraphs $I{ extstyle -5}$	When a Party applies the provisions for natural disturbances, information demonstrating that these emissions in any single year exceed the background level(s), including a margin, where needed. For this purpose, the Party shall include information showing:		
Repori	That all lands subject to exclusion due to natural disturbances are identified	✓	
	How annual emissions resulting from natural disturbances and the subsequent removals are estimated and excluded from the accounting	<b>√</b>	
	That no land-use change has occurred on lands for which the provisions in decision 2/CMP.7, annex, paragraph 33, are applied	✓	
	That events and circumstances were beyond the control of the Party	✓	

Part VII		
Provision of information relating to KP-LULUCF ac	tivities	
	$Provided^a$	Observation
That the efforts taken to rehabilitate the land for which the provisions contained in decision 2/CMP.7, annex, paragraph 33, are applied	<b>✓</b>	
That emissions associated with salvage logging were not excluded from the accounting	✓	
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	<b>~</b>	
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	<b>✓</b>	
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		Information required in paragraph 2(g)(iv) of annex I decision 2/CMP.8 could not be identified in the subm
How HWP resulting from deforestation has been accounted on the basis of instantaneous oxidation	✓	
How CO2 emissions from HWP in solid waste disposal sites and from wood harvested for energy purposes have been accounted on the basis of instantaneous oxidation	<b>✓</b>	
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 <sub>2</sub> 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:		1
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	<b>✓</b>	

Part VII  Provision of information relating to KP-LULUCF activities									
	Provideda	Observation							
How harvesting or forest disturbance that is followed by the re-establishment of forest is distinguished from deforestation	<b>√</b>								
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	<b>√</b>	The Party does not elect cropland management, grazing land management, revegetation or wetland drainage and rewetting							
Emissions/removals from activities under Article 3, paragraph 4, are not accounted for under activities under Article 3, paragraph 3	<b>√</b>								
Information on how emissions arising from the conversion of natural forests to planted forests are accounted for	<b>√</b>								
Methodological consistency between the reference level and reporting for forest management	✓								
Technical corrections made pursuant to decision 2/CMP.7, annex, paragraph 14	<b>✓</b>								
Forest management: if emissions/removals from the harvest and conversion of forest plantations to nonforest 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	<b>√</b>	The Party clarified that the provision of carbon equivalent forest has not yet been 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	<b>*</b>	The Party clarified that the provision of carbon equivalent forest has not yet been 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	<b>√</b>	The Party clarified that the provision of carbon equivalent forest has not yet been applied							

Part VII  Provision of information relating to KP-LULUCF activities									
	Provided <sup>a</sup>	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	<b>~</b>	The Party clarified that the provision of carbon equivalent forest has not yet been applied							

<sup>&</sup>lt;sup>a</sup> A tick is accompanied by an explanatory comment in the observation field where the provision of information is not applicable.