

# Capacity Building Initiative for Transparency - Global Support Programme (CBIT-GSP): Asia Region

Welcome to Training Workshop on Transparency and Reporting under the Paris Agreement in Bhutan: A discussion on ETFs, MPGs, CRT and CTF Tables

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**27 November 2023** 





programme

# **IPCC** Inventory Software

#### Home IPCC

**IPCC-TFI Home** 

Organization

**Publications** 

Emission Factor Database (EFDB)

Inventory Software

Meetings

FAQs

Electronic Discussion Group (EDG)



IPCC honoured with the 2007 Nobel Peace Prize

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#### **Inventory Software**

#### New Version 2.890 - IPCC Inventory Software

This is the new version 2.890 of the IPCC Inventory Software released on November 27, 2023.

Please note that version 2.890 comes in 2 different files for installation. Thus, before downloading the file you shall check which one you actually need by using this decision tree.

- Ver. 2.890 IPCC Inventory Software 64bit
- Ver. 2.890 IPCC Inventory Software 32bit

If you find any issues in the use of the IPCC Inventory Software, come back to us at <a href="mailto:ipcc-software@iges.or.jp">ipcc-software@iges.or.jp</a>

Thank you very much for your support.

#### Important!

When setting YOUR Password always set YOUR Password Hint too.

It is highly recommended that you take note of your password and store it in a safe place. In case you lose or forget your password, the IPCC Inventory Software does not have a mechanism to restore your password, this means that you can no longer access your database.

Please note that the IPCC Inventory Software cannot be used with iOS (Apple Computers).

#### Getting started with the IPCC Inventory Software

After installing the IPCC Inventory Software, launch it for the first time and you will be asked to initialize the associated database by providing YOUR Login (User Name) and YOUR Password.

#### IPCC 2006

Welcome to 2006 IPCC Software for National Greenhouse Gas Inventories

The application is being run for the first time.

It is necessary to define superuser. Superuser has full control over database and application and is responsible for defining and managing additional users working with this instance of application.

Please, supply superuser login name and password in the textboxes





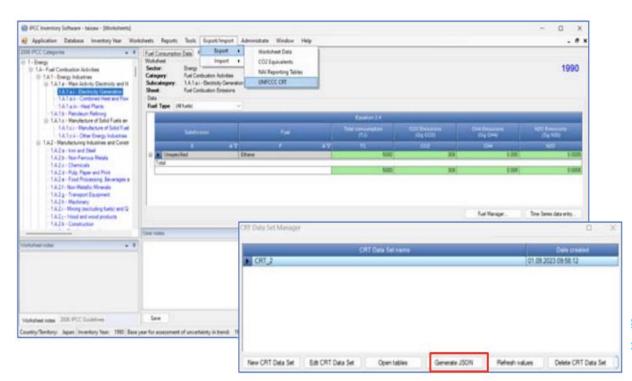
### CBIT-GSP Interoperability of IPCC Software with ETF Tool

The interoperability with the IPCC Software allows the transfer of the data from the IPCC software to the GHG Inventory Reporting Tool. After estimating the national GHG inventory Parties can export the JSON data exchange file from IPCC software and import it to GHG inventory reporting tool. Please note the following for the interoperability:

- Generation and Export of JSON file is available in the IPCC software version 2.871 or later.
- In the test version, JSON import can be done at the sector level only.
- In the test version, JSON file generation has been implemented for Energy and Waste sector only. More sectors will follow in future releases.

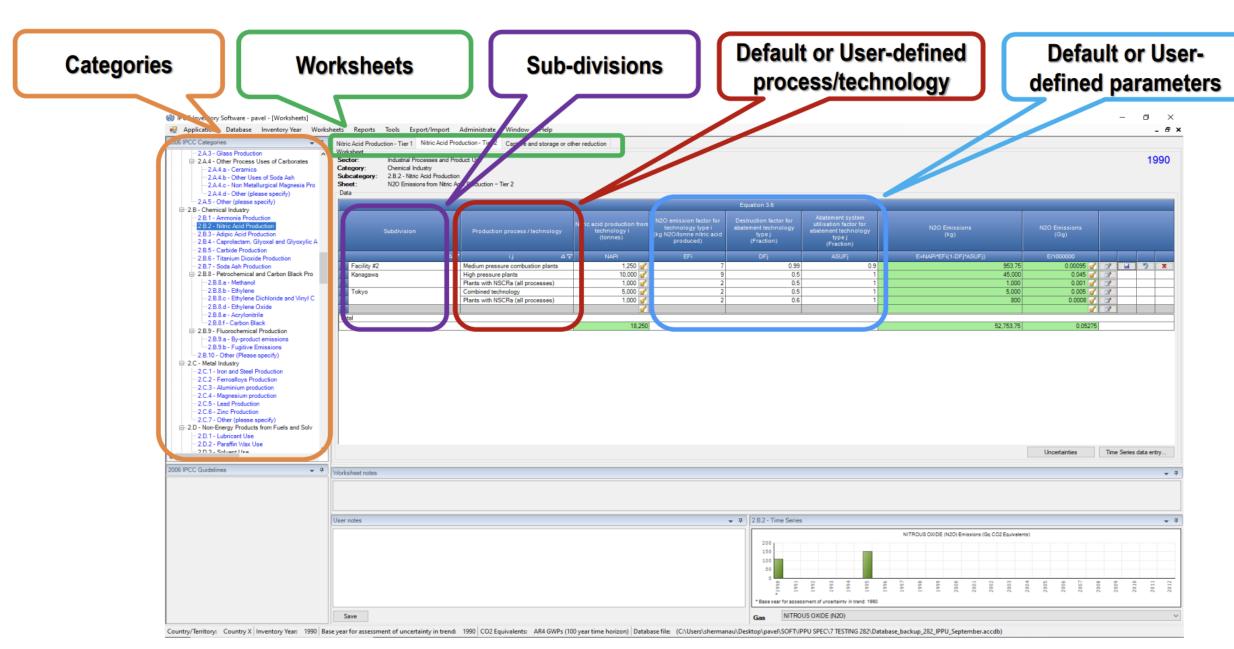
#### In the IPCC Software

- 1. After compiling your GHG inventory, Click "Export/Import" > "Export" > "UNFCCC CRT"
- 2. Click "Generate JSON" and a JSON file is generated.
- 3. Save the JSON file to your computer and it can now be imported to the GHG Inventory reporting tool.





### CBIT-GSP Example of Worksheet - IPCC Software





### **CBIT-GSP** Outline of the National Inventory Report (NIR)

**Executive Summary (including six sub-sections)** 

- National circumstances, institutional arrangements and cross-cutting Information (including nine sub-sections)
- Trends in greenhouse gas emissions and removals (including two sub-sections)
- Energy (CRT Sector 1) (including six sub-sections)
- Industrial processes and product use (CRT sector 2) (including two sub-sections)
- Agriculture (CRT sector 3) (including two sub-sections)
- Land use, land-use change and forestry (CRT sector 4) (including four sub-sections)
- Waste (CRT sector 5) (including two sub-sections)
- Other (CRT sector 6) (if applicable)
- Indirect carbon dioxide and nitrous oxide emissions (related to nonmandatory provisions as per para 52 of the MPGs) (including six subsections)
- Recalculations and improvements (including six sub-sections)
- Annex I: Key categories (flexibility provided to those developing country Parties that need it in the light of their capacities as per para. 25 of the MPGs)
- Annex II: Uncertainty assessment (flexibility provided to those developing country Parties that need it in the light of their capacities as per para. 29 of the MPGs)
- **Annex III:** Detailed description of the reference approach (including inputs to the reference approach such as the national energy balance) and the results of the comparison of national estimates of emissions with those obtained using the reference approach (related to a nonmandatory provision as per para. 36 of the MPGs)
- Annex IV: QA/QC plan (related to a non-mandatory provision as per para. 35 of the MPGs, with flexibility provided to those developing country Parties that need it in the light of their capacities as per paras. 34–35 of the MPGs)
- **Annex V:** Any additional information, as applicable, including detailed methodological descriptions of source or sink categories and the national emission balance
- **Annex VI:** Common reporting tables



### **CBIT-GSP** Overview of common reporting tables (CRTs)

	Sectoral report for energy
Tables 1	11 background tables for energy
Tables 2	2 sectoral reports for industrial processes and product use (IPPU)  3 background tables for IPPU
Tables 3	Sectoral report for agriculture  8 background tables for agriculture
Tables 4	Sectoral report for land use, land-use change and forestry (LULUCF)  13 background tables for LULUCF
Tables 5	Sectoral report for waste 4 background tables for Waste
'Summary'	3 summary reports (sources and sinks; CO <sub>2</sub> equivalents; methods and emission factors)
Tables 6-9	5 cross-cutting reports (indirect emissions; key categories; recalculations; completeness)
Tables 10	6 trend tables (CO <sub>2</sub> equivalents; CO <sub>2</sub> ; CH <sub>4</sub> ; N <sub>2</sub> O; fluorinated gases; summary)
vironment conenhage	Summary table on the use of <b>flexibility</b> provisions





### CBIT-GSP Index of common reporting tables (CRT)

1	
Table1	
Table1.A(a)s1	
Table1.A(a)s2	
Table1.A(a)s3	
Table1.A(a)s4	
Table1.A(b)	Energy
Table1.A(c)	Lifergy
Table1.A(d)	
Table1.B.1	
Table1.B.2	
Table1.C	
<u>Table1.D</u>	
Table2(I)	
Table2(I).A-H	
Table2(II)	IPPU
Table2(II)B-Hs1	
Table2(II)B-Hs2	
<u>Table3</u>	
Table3.A	
Table3.B(a)	
Table3.B(b)	
Table3.C	Agriculture
Table3.D	
Table3.E	
Table3.F	
Me3.G-J	
/Iranment	

Table4	
Table4.1	
Table4.A	
Table4.B	
Table4.C	
Table4.D	
Table4.E	LILLICE
Table4.F	LULUCF
Table4(I)	
Table4(II)	
Table4(III)	
Table4(IV)	
Table4.Gs1	
Table4.Gs2	
Table5	
Table5.A	
Table5.B	Waste
Table5.C	
Table5.D	
Summary1	
Summary2	<b>Summary Tables</b>
Summary3	•

Table6	
<u>Table7</u>	<b>Cross Cutting (Key</b>
Table8s1	Category,
Table8s2	Recalculation)
Table9	
Table10s1	
Table10s2	
Table10s3	Trend Tables
Table10s4	Trend Tables
Table10s5	
Table10s6	
Flex Summary	Flexibility
Tiex_Summary	Provisions





### **CBIT-GSP** Worksheets under Common Reporting Tables (CRT)

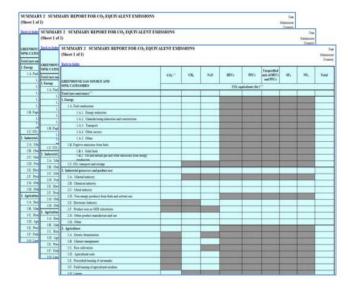
- Prepared for the electronic reporting of information in the NIR of anthropogenic emissions by sources and removals sinks of GHGs
- Set of MS Excel workbook (containing 60 worksheets) for each reported year
- There are three types of table for each year
  - Sectoral Background Tables (white/orange cells) Need to fill data at this layer
  - Sectoral Report Tables (green cells) Automatically generated
  - Summary Tables/Cross-sectoral Tables (blue cells) Automatically generated



Sectoral Background Tables



Sectoral Report Tables



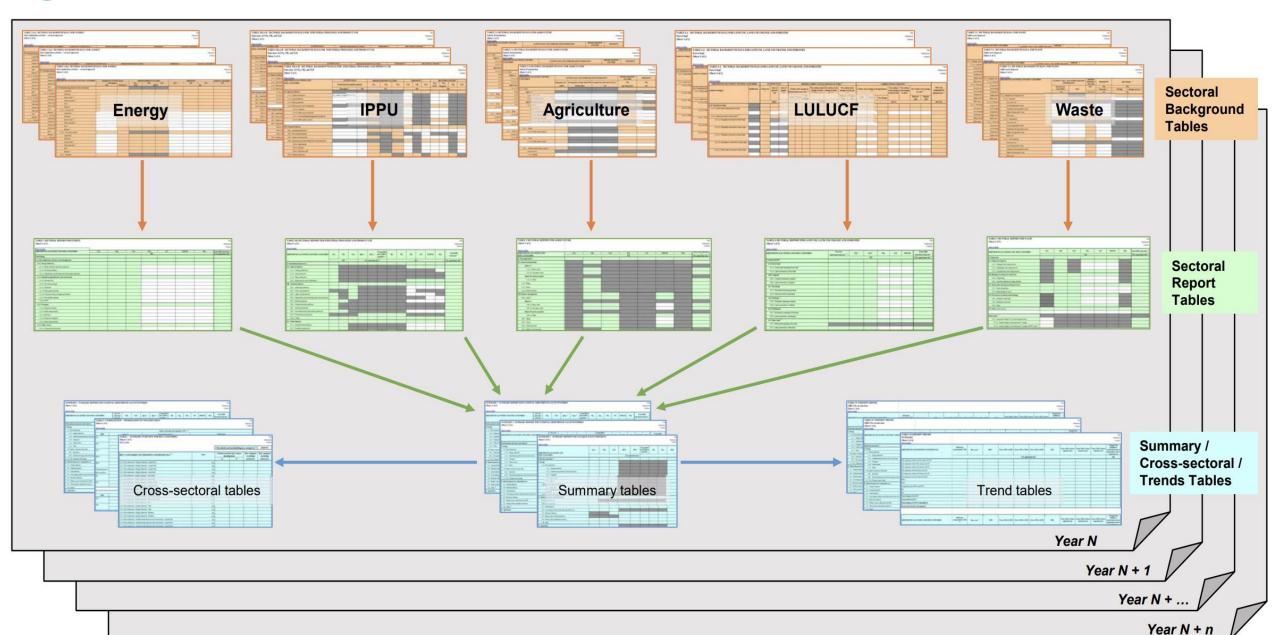
Summary / Cross-sectoral / Trends Tables







## **CBIT-GSP** Worksheets under Common Reporting Tables (CRT)



# **CBIT-GSP** Sectoral Background Table under CRT

#### TABLE 1.A(a) SECTORAL BACKGROUND DATA FOR ENERGY Fuel combustion activities - sectoral approach (Sheet 1 of 4)

Year Submission Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	AGGREGATE ACT	IVITY DATA		ED EMISSION FACTORS		EMISSIONS		AMOUNT CAPTURED
	Consumption		CO <sub>2</sub> (1)	CH <sub>4</sub> N <sub>2</sub> O	CO <sub>2</sub> (2,3)	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub>
	(TJ)	NCV/GCV (5)	(t/TJ)	(kg/TJ)		<u> </u>	(kt)	
1.A. Fuel combustion								
Liquid fuels								
Solid fuels								
Gaseous fuels <sup>(6)</sup>								
Other fossil fuels (7)								
Peat <sup>(8)</sup>								
Biomass (3)								
I.A.1. Energy industries								
Liquid fuels								
Solid fuels								
Gaseous fuels (6)								
Other fossil fuels (7)								
Peat <sup>(8)</sup>								
Biomass (3)								
1.A.1.a. Public electricity and heat production (9)								
Liquid fuels								
Solid fuels								
Gaseous fuels (6)								
Other fossil fuels (7)								
Peat <sup>(8)</sup>								
Biomass (3)								
Drop-down list:								
1.A.1.a.i. Electricity generation								
Liquid fuels								
Solid fuels								
Gaseous fuels (6)								
Other fossil fuels (7)								



## CBIT-GSP Japan - Sectoral Background Table under CRT

TABLE 1.A(a) SECTORAL BACKGROUND DATA FOR ENERGY Fuel combustion activities - sectoral approach (Sheet 1 of 4)

Inventory 2021 Submission 2023 v4

JAPAN

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	AGGREGATE ACTIVIT	Y DATA	IMPLI	ED EMISSION FACTOR	RS		EMISSI	IONS	
	Consumption		$\mathrm{CO_2}^{(1)}$	$\mathbf{CH_4}$	N <sub>2</sub> O	CO <sub>2</sub> <sup>(2)</sup>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> Amount captured
	(TJ)	NCV/GCV <sup>(3)</sup>	(t/TJ)	(kg/TJ)			(kt	)	•
1.A. Fuel combustion	15111117.16	GCV				1007257.23	49.73	18.14	
Liquid fuels	5299632.16	GCV	67.52	2.10	1.32	357817.42	11.14	7.02	NO
Solid fuels	4675810.22	GCV	90.11	2.95	1.65	421340.29	13.80	7.70	NO
Gaseous fuels	4100719.27	GCV	51.03	4.11	0.47	209251.74	16.84	1.95	NO
Other fossil fuels <sup>(4)</sup>	487266.06	GCV	38.68	0.96	2.09	18847.77	0.47	1.02	NO
Peat <sup>(5)</sup>	NO,IE	GCV	NO,IE	NO,IE	NO,IE	NO,IE	NO,IE	NO,IE	NO
Biomass <sup>(6)</sup>	547689.45	GCV	126.88	13.67	0.83		7.48	0.46	NO
1.A.1. Energy industries	6522649.60	GCV				444312.99	16.14	6.39	NO
Liquid fuels	781238.73	GCV	66.50	0.83	1.15	51948.65	0.65	0.90	NO
Solid fuels	2913287.53	GCV	88.55	1.36	1.38	257985.88	3.97	4.01	NO
Gaseous fuels	2641027.35	GCV	50.87	4.31	0.51	134345.01	11.37	1.33	NO
Other fossil fuels <sup>(4)</sup>	721.24	GCV	46.36	NO,IE	NO,IE	33.44	NO,IE	NO,IE	NO
Peat <sup>(5)</sup>	IE	GCV	NO,IE	IE	IE	IE	IE	IE	NO
Biomass <sup>(6)</sup>	186374.75	GCV	106.07	0.79	0.78	19769.09	0.15	0.15	
a. Public electricity and heat production <sup>(7)</sup>	5834362.48	GCV				396750.15	11.66	5.30	NO
Liquid fuels	307756.44	GCV	69.10	0.51	0.44	21265.94	0.16	0.14	NO
Solid fuels	2734622.46	GCV	88.84	0.15	1.35	242949.57	0.40	3.70	NO
Gaseous fuels	2605608.83	GCV	50.87	4.21	0.51	132534.64	10.96	1.32	NO
Other fossil fuels <sup>(4)</sup>	IE	GCV	NO,IE	IE	IE	IE	IE	IE	NO
Peat <sup>(5)</sup>	IE	GCV	NO,IE	IE	IE	IE	IE	IE	NO
Biomass <sup>(6)</sup>	186374.75	GCV	106.07	0.79	0.78	19768.23	0.15	0.15	
b. Petroleum refining	482420.83	GCV				31266.92	0.28	1.04	NO
Liquid fuels	463339.82	GCV	64.68	0.58	1.60	29969.32	0.27	0.74	NO
Solid fuels	8564.12	GCV	89.05	0.13	33.98	762.67	0.00	0.29	NO
Gaseous fuels	10516.90	GCV	50.86	0.71	0.51	534.93	0.01	0.01	NO
Other fossil fuels <sup>(4)</sup>	NO	GCV	NO	NO	NO	NO	NO	NO	NO
Peat <sup>(5)</sup>	IE	GCV	NO,IE	IE	IE	IE	IE.	IE	NO
Biomass <sup>(6)</sup>	NO	GCV	NO	NO	NO	NO	NO	NO	NO
c. Manufacture of solid fuels and other energy industries <sup>(8)</sup>	205866.29	GCV				16295.92	4.20	0.05	NO
Liquid fuels	10142.47	GCV	70.34	21.95	1.68	713.39	0.22	0.02	NO
Solid fuels	170100.96	GCV	83.91	20.98	0.13	14273.65	3.57	0.02	NO
Gaseous fuels	24901.62	GCV	51.22	16.22	0.48	1275.44	0.40	0.01	NO
Other fossil fuels <sup>(4)</sup>	721.24	GCV	46.36	IE	NO	33.44	IE	NO	NO
Peat <sup>(5)</sup>	IE	GCV	NO,IE	IE	IE	IE	IE	IE	NO
Biomass <sup>(6)</sup>	IE	GCV	IE	IE	NO	0.86	IE	NO	NO

### **TABLE 1 SECTORAL REPORT FOR ENERGY** (Sheet 1 of 1)

Year Submission

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>X</sub>	CO	NMVOC	SO <sub>X</sub>	Total GHG emissions (
			1	(kt)	I	I	I	CO <sub>2</sub> equivalents (kt) (2
Total Energy								
1.A. Fuel combustion activities (sectoral approach)								
1.A.1. Energy industries								
1.A.1.a. Public electricity and heat production								
1.A.1.b. Petroleum refining								
1.A.1.c. Manufacture of solid fuels and other energy industries								
1.A.2. Manufacturing industries and construction								
1.A.2.a. Iron and steel								
1.A.2.b. Non-ferrous metals								
1.A.2.c. Chemicals								
1.A.2.d. Pulp, paper and print								
1.A.2.e. Food processing, beverages and tobacco								
1.A.2.f. Non-metallic minerals								
1.A.2.g. Other								
1.A.3. Transport								
1.A.3.a. Domestic aviation								
1.A.3.b. Road transportation								
1.A.3.c. Railways								
1.A.3.d. Domestic navigation								
1.A.3.e. Other transportation								
1.A.4. Other sectors								
1.A.4.a. Commercial/institutional								
1.A.4.b. Residential								
1.A.4.c. Agriculture/forestry/fishing								
1.A.5. Other								
1.A.5.a. Stationary								
1.A.5.b. Mobile								



### CBIT-GSP Japan - Sectoral Table under CRT

#### TABLE 1 SECTORAL REPORT FOR ENERGY

Inventory 2021

(Sheet 1 of 2) Submission 2023 v4

**JAPAN** 

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	$NO_X$	CO	NMVOC	$SO_2$
				(kt)		'	
Total Energy	1007616.09	77.13	18.14	974.05	2642.58	254.63	301.7
A. Fuel combustion activities (sectoral approach)	1007257.23	49.73	18.14	974.05	2642.58	131.45	301.7
1. Energy industries	444312.99	16.14	6.39	143.10	170.35	16.42	102.4
a. Public electricity and heat production	396750.15	11.66	5.30	122.96	101.52	15.39	77.0
b. Petroleum refining	31266.92	0.28	1.04	17.11	14.56	0.30	24.0
c. Manufacture of solid fuels and other energy industries	16295.92	4.20	0.05	3.03	54.27	0.74	1.4
2. Manufacturing industries and construction	249548.61	21.88	4.95	225.34	1697.99	33.83	74.2
a. Iron and steel	124783.98	8.71	1.18	30.66	1354.37	7.29	14.4
b. Non-ferrous metals	3016.38	0.26	0.05	6.81	15.72	0.19	8.2
c. Chemicals	42619.29	0.66	0.94	49.77	21.07	1.16	14.4
d. Pulp, paper and print	17727.66	1.42	0.87	25.49	61.49	15.89	9.3
e. Food processing, beverages and tobacco	7988.19	1.07	0.05	9.64	6.63	2.10	6.4
f. Non-metallic minerals	24885.51	2.63	1.38	67.12	185.93	2.94	6.9
g. Other (please specify)	28527.60	7.12	0.47	35.85	52.78	4.26	14.4
3. Transport	177910.87	4.14	4.69	474.61	662.63	59.68	31.0
a. Domestic aviation	6818.82	0.05	0.20	23.26	11.17	1.68	N
b. Road transportation	160345.04	3.15	4.04	203.24	623.91	50.34	1.0
c. Railways	468.04	0.03	0.18	11.46	3.88	0.83	N
d. Domestic navigation	10278.96	0.92	0.26	236.64	23.66	6.84	30.0
e. Other transportation	NO	NO	NO	NO	NO	NO	N

### SUMMARY 1 SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES (Sheet 1 of 1)

Year Submission Country

Back to Index			1										
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Net CO <sub>2</sub> emissions/ removals	$\mathbf{CH_4}$	N <sub>2</sub> O	HFCs (1)	PFCs (1)	Unspecified mix of HFCs and PFCs (1)	$SF_6$	NF <sub>3</sub>	NO <sub>x</sub>	co	NMVOC	$SO_X$	Total GHG emissions/removals <sup>(2)</sup>
		(kt)		со	<sub>2</sub> equivalents (	kt) <sup>(3)</sup>			(1	kt)			CO <sub>2</sub> equivalents (kt) <sup>(3)</sup>
Total national emissions and removals													
1. Energy													
1.A. Fuel combustion													
1.A.1. Energy industries													
1.A.2. Manufacturing industries and construction													
1.A.3. Transport													
1.A.4. Other sectors													
1.A.5. Other													
1.B. Fugitive emissions from fuels													
1.B.1. Solid fuels													
1.B.2. Oil and natural gas and other emissions from energy production													
1.C. CO <sub>2</sub> Transport and storage													
2. Industrial processes and product use													
2.A. Mineral industry													
2.B. Chemical industry													
2.C. Metal industry													
2.D. Non-energy products from fuels and solvent use													
2.E. Electronic industry													
2.F. Product uses as substitutes for ODS													
2.G. Other product manufacture and use													
2.H. Other <sup>(4)</sup>													
3. Agriculture													
3.A. Enteric fermentation													
3.B. Manure management													
3.C. Rice cultivation													
3.D. Agricultural soils													
3.E. Prescribed burning of savannahs													



### CBIT-GSP Japan - Summary Table under CRT

#### SUMMARY 1.A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES

Inventory 2021

Submission 2023 v4

JAPAN

(Sheet 1 of 3)			

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Net CO <sub>2</sub> emissions/removals	CH₄	N <sub>2</sub> O	HFCs <sup>(1)</sup>	PFCs <sup>(1)</sup>	Unspecified mix of HFCs and PFCs <sup>(1)</sup>	SF <sub>6</sub>	NF <sub>3</sub>	NO <sub>x</sub>	со	NMVOC	SO <sub>2</sub>
	(l	xt)		(kt CO <sub>2</sub> equivalent)					(k	t)		
Total national emissions and removals	1009951.40	1097.51	66.67	53561.04	3155.54	NO,NA	0.09	0.02	1045.72	2797.93	822.53	337.32
1. Energy	1007616.09	77.13	18.14						974.05	2642.58	254.63	301.72
A. Fuel combustion Reference approach(2)	1017836.85											
Sectoral approach(2)	1007257.23	49.73	18.14						974.05	2642.58	131.45	301.72
Energy industries	444312.99	16.14	6.39						143.10	170.35	16.42	102.46
2. Manufacturing industries and construction	249548.61	21.88	4.95						225.34	1697.99	33.83	74.29
3. Transport	177910.87	4.14	4.69						474.61	662.63	59.68	31.06
4. Other sectors	135484.77	7.57	2.11						130.99	111.60	21.52	93.90
5. Other	NO	NO	NO						NO	NO	NO	NO
B. Fugitive emissions from fuels	358.86	27.40	0.00						NO,NE	NO,NE	123.18	NO,NE
1. Solid fuels	3.43	18.23	0.00						NO,NE	NO,NE	NO,NE	NO,NE
2. Oil and natural gas and other emissions from energy production	355.43	9.16	0.00						NO,NE	NO,NE	123.18	NO,NE
C. CO <sub>2</sub> Transport and storage	NO,NE											
2. Industrial processes and product use	43041.92	1.74	3.45	53561.04	3155.54	NO,NA	0.09	0.02	37.00	NE,IE,NA	566.97	16.70
A. Mineral industry	31136.83								9.18	NE	NE	0.35
B. Chemical industry	4072.11	1.08	1.50	251.27	79.08	NA NA	0.00	0.00	1.94	NE,IE	NE,IE	2.32
C. Metal industry	5458.73	0.66	NA	1.72	NO,NE,NA	NA NA	0.01		25.72	NE,NA	NE,NA	13.27
D. Non-energy products from fuels and solvent use	2293.32	NE,IE	NE,IE						0.15	NE	550.65	0.76
E. Electronic industry				107.17	1611.80		0.01	0.02				
F. Product uses as substitutes for ODS				53194.29	1382.17		NO					
G. Other product manufacture and use			1.96		82.50	) NO	0.06	NO				
H. Other <sup>(3)</sup>	80.94	NO	NO						NE	NE	16.32	NE



TABLE 10 EMISSION TRENDS

 $GHG\ CO_2\ eq\ emissions$ 

(Sheet 1 of 6)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year <sup>(1)</sup>	1990	1991	1992	1993	1994	1995	1996
Total (net emissions) <sup>(2)</sup>	1206061.85	1206061.85	1211718.46	1219843.45	1212355.71	1273580.42	1295257.77	1304484.98
1. Energy	1091892.23	1091892.23	1102278.49	1110363.17	1104411.90	1155388.36	1167441.96	1178894.07
A. Fuel combustion (sectoral approach)	1086590.50	1086590.50	1097298.72	1106228.01	1100840.50	1152037.42	1164144.49	1175881.53
Energy industries	369878.56	369878.56	370781.62	375647.22	358393.92	392857.52	380658.17	383259.66
Manufacturing industries and construction	351435.23	351435.23	348032.79	342964.62	343984.46	352919.95	359810.73	363195.23
3. Transport	206170.68	206170.68	218113.78	224782.13	228507.14	237784.92	247210.19	254054.67
4. Other sectors	159106.03	159106.03	160370.53	162834.04	169954.99	168475.03	176465.39	175371.96
5. Other	NO	NO	NO	NO	NO	NO	NO	NO
B. Fugitive emissions from fuels	5301.74	5301.74	4979.77	4135.16	3571.40	3350.94	3297.47	3012.54
1. Solid fuels	4902.60	4902.60	4543.14	3704.28	3129.00	2884.60	2525.32	2190.28
<ol><li>Oil and natural gas and other emissions from energy production</li></ol>	399.14	399.14	436.62	430.88	442.40	466.34	772.15	822.26
C. CO <sub>2</sub> transport and storage	NO,NE	NO,NE	NO,NE	NO,NE	NO,NE	NO,NE	NO,NE	NO,NE
2. Industrial Processes	109935.81	109935.81	114487.97	116363.98	118577.14	126111.46	136267.49	138425.43
A. Mineral industry	48713.80	48713.80	50055.73	50515.74	49824.56	50822.75	50688.53	51044.13
B. Chemical industry	35894.53	35894.53	37224.94	37644.61	36579.27	39825.49	43638.84	42699.73
C. Metal industry	7638.93	7638.93	7438.26	7071.62	6930.63	6940.69	7211.01	7251.08
D. Non-energy products from fuels and solvent use	2039.82	2039.82	2135.93	2108.69	2093.72	2325.96	2376.55	2533.61
E. Electronic industry	1904.04	1904.04	2182.27	2291.77	3188.19	3870.13	5016.42	5985.60
F. Product uses as ODS substitutes	4551.28	4551.28	5268.35	5507.92	8681.72	11462.23	15495.18	16321.74
G. Other product manufacture and use	9128.79	9128.79	10115.69	11158.26	11219.37	10797.11	11769.11	12509.69
H. Other	64.61	64.61	66.80	65.37	59.68	67.10	71.85	79.85
3. Agriculture	37515.64	37515.64	37131.79	37893.21	37903.45	38001.16	37096.27	36294.40
A. Enteric fermentation	9422.90	9422.90	9610.08	9674.52	9571.57	9424.32	9318.45	9217.90
B. Manure management	7729.19	7729.19	7762.10	7745.69	7605.86	7416.83	7303.98	7222.72
C. Rice cultivation	12129.25	12129.25	11775.52	12599.72	12712.60	13477.46	13092.10	12634.02
D. Agricultural soils	7336.00	7336.00	7161.31	7096.70	7219.65	7069.21	6763.31	6625.16
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	NO	NO
F. Field burning of agricultural residues	166.28	166.28	153.53	158.90	144.37	151.40	145.24	141.74
G. Liming	550.24	550.24	527.37	477.14	481.58	292.76	303.53	292.74
H. Urea application	181.77	181.77	141.88	140.55	167.82	169.17	169.66	160.13
I. Other carbon-containing fertilizers	NO	NO	NO	NO	NO	NO	NO	NC
J. Other	NO	NO	NO	NO	NO	NO	NO	NO
4. Land use, land-use change and forestry <sup>(2)</sup>	-63272.18	-63272.18	-72077.83	-75768.57	-79036.43	-78849.34	-78560.48	-82262.62
A. Forest land	-86199.60	-86199.60	-93858.87	-94241.12	-94596.22	-94980.76	-95370.22	-98585.89
B. Cropland	8407.93	8407.93	7653.73	3957.82	2509.61	3234.65	3894.56	3089.67
C. Grassland	885.01	885.01	453.37	-393.73	-978.67	-596.68	95.58	-581.02
D. Wetlands	68.48	68.48	60.91	195.46	107.63	88.76	276.79	493.04
E. Settlements	11139.06	11139.06	11345.20	11430.93	9921.00	8962.72	8574.78	7919.23
F. Other land	2367.10	2367.10	2444.55	2226.95	2404.93	2271.35	2095.18	1994.49
G. Harvested wood products	-264.17	-264.17	-490.53	749.78	1301.18	1886.49	1597.07	3138.36
H. Other	33.75	33.75	32.13	30.71	28.37	26.59	25.42	24.36
5. Waste	29990.35	29990.35	29898.05	30991.66	30499.65	32928.78	33012.53	33133.71



## CBIT-GSP Japan - Summary Table under CRT (2 of 4)

TABLE 10 EMISSION TRENDS

GHG CO<sub>2</sub> eq emissions (Sheet 1 of 6)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	1997	1998	1999	2000	2001	2002	2003	2004	2005
			1	'	'	·	'	(kt CO <sub>2</sub>	eq)
Total (net emissions) <sup>(2)</sup>	1295530.75	1246554.43	1270684.85	1289217.89	1262827.36	1285107.85	1280413.32	1275208.22	1288622.63
1. Energy	1173498.51	1139334.39	1175885.33	1197823.56	1185563.82	1217207.93	1226082.87	1221891.10	1228830.82
A. Fuel combustion (sectoral approach)	1170629.06	1136709.57	1173278.23	1195386.35	1183322.40	1215562.38	1224522.05	1220381.63	1227294.72
Energy industries	379229.59	366735.71	388807.54	397370.75	388558.98	415479.50	434631.21	432349.68	452029.81
Manufacturing industries and construction	359251.82	334419.93	339038.88	349191.10	343284.62	348885.56	346895.28	346385.53	336867.46
3. Transport	255876.32	253895.30	257971.96	257399.77	261378.31	257455.03	253140.15	246893.61	241129.89
4. Other sectors	176271.34	181658.63	187459.85	191424.73	190100.50	193742.28	189855.40	194752.80	197267.55
5. Other	NO	NO							
B. Fugitive emissions from fuels	2869.45	2624.82	2607.11	2437.21	2241.42	1645.55	1560.82	1509.47	1536.10
1. Solid fuels	2027.70	1869.66	1808.81	1654.27	1423.89	832.06	759.22	728.02	706.95
<ol><li>Oil and natural gas and other emissions from energy production</li></ol>	841.75	755.16	798.30	782.94	817.53	813.49	801.60	781.45	829.15
C. CO <sub>2</sub> transport and storage	NO,NE	NO,NE							
2. Industrial Processes	135494.76	122783.62	110201.29	108272.18	97263.20	90634.25	89399.60	86028.79	87081.51
A. Mineral industry	48409.23	43437.70	43162.22	43487.28	42501.92	40225.14	40022.71	39745.12	41111.51
B. Chemical industry	41021.52	37400.38	31443.58	31312.10	23402.12	19125.66	17665.61	12721.57	12309.47
C. Metal industry	7253.47	7145.44	7257.40	7884.82	8028.94	7870.26	7643.46	7735.73	7797.44
D. Non-energy products from fuels and solvent use	2625.98	2459.62	2623.91	2658.70	2727.25	2849.53	2780.16	2873.75	2864.96
E. Electronic industry	7474.09	7666.85	8456.28	8941.45	7031.25	7196.95	7163.45	7633.04	6456.69
F. Product uses as ODS substitutes	17375.11	14517.35	11076.91	9781.70	10170.04	10446.26	11454.81	12820.83	14325.73
G. Other product manufacture and use	11248.99	10069.54	6091.42	4119.47	3322.85	2839.78	2583.20	2411.63	2125.49
H. Other	86.36	86.74	89.57	86.67	78.83	80.66	86.20	87.13	90.23
3. Agriculture	36355.49	35222.64	35263.06	35238.81	34514.60	34675.01	34256.02	34113.11	34527.66
A. Enteric fermentation	9176.95	9117.37	9073.18	8966.34	9013.61	8949.91	8851.12	8668.84	8650.71
B. Manure management	7177.56	7071.65	7020.97	6975.20	6950.10	6970.59	6967.57	6901.69	7005.24
C. Rice cultivation	12856.32	11952.32	12124.02	12175.44	11707.10	11927.16	11619.97	11877.35	12216.12
D. Agricultural soils	6540.80	6484.20	6466.11	6495.61	6300.36	6266.64	6245.81	6125.05	6115.34
E. Prescribed burning of savannas	NO	NO		NO	NO		NO	NO	NO
F. Field burning of agricultural residues	137.66	131.47	129.05	125.55	124.59	120.87	115.00	110.45	112.16
G. Liming	303.65	300.00	293.57	332.90	247.35	269.92	246.40	236.30	231.29
H. Urea application	162.55	165.63	156.17	167.77	171.48	169.92	210.15	193.43	196.79
I. Other carbon-containing fertilizers	NO	NO		NO	NO		NO	NO	NO
J. Other	NO	NO							
4. Land use, land-use change and forestry <sup>(2)</sup>	-83279.49	-83749.76	-82977.55	-84085.52	-84734.06	-86506.03	-98038.71	-94621.08	-88841.24
A. Forest land	-98396.81	-98245.16	-98073.86	-97887.95	-97702.13	-97507.56	-106855.89	-106268.53	-99741.15
B. Cropland	3930.14	5097.19	4973.05	4061.62	3588.89	3074.13	1515.99	4493.42	3965.89
C. Grassland	-1049.28	-1001.88	-1284.29	-865.53	-793.32	-754.93	-1182.84	-590.93	-281.81
D. Wetlands	91.89	374.43	352.31	329.15	298.56	71.65	46.62	41.64	33.76
E. Settlements	7658.10	7404.80	6984.09	6570.92	6229.72	5603.60	5363.94	5159.18	5230.11
F. Other land	2183.55	1924.87	1967.43	1723.61	1709.42	1640.23	1503.16	1478.42	1108.65
G. Harvested wood products	2037.98	435.34	1847.33	1731.90	1689.92	1127.43	1336.10	837.68	622.95
H. Other	23.55	22.61	21.75	20.88	19.82	19.37	19.12	18.99	18.64
	23.33	22.01	32312.72	20.00	17.02	19.37	19.12	10.77	10.04



### **CBIT-GSP** Japan - Summary Table under CRT (3 of 4)

#### TABLE 10 EMISSION TRENDS GHG CO<sub>2</sub> eq emissions (Sheet 1 of 6)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2006	2007	2008	2009	2010	2011	2012	2013
Total (net emissions) <sup>(2)</sup>	1272113.02	1311399.24	1248395.59	1179536.17	1229192.80	1281621.09	1321698.39	1340696.67
1. Energy	1206112.20	1242281.36	1174439.79	1113006.35	1163132.44	1213768.33	1254138.34	1261661.14
A. Fuel combustion (sectoral approach)	1204529.24	1242649.80	1172891.15	1111551.57	1161735.11	1212388.39	1252762.99	1260371.68
Tuer combustion (sectoral approach)      Energy industries	443073.20	493370.51	474125.27	443767.63	476188.28	537346.94	584071.41	586071.65
Manufacturing industries and construction	334362.57	332689.29	303590.58	286575.01	303332.49	302236.83	302035.43	307108.29
Transport	238207.56	235263.73	227412.69	223931.21	224196.78	219248.21	220022.87	217040.88
4. Other sectors	188885.91	179326.28	167762.60	157277.72	158017.57	153556.41	146633.29	150150.86
5. Other	NO							
B. Fugitive emissions from fuels	1582.96	1631.55	1548.65	1454.78	1397.33	1379.95	1375.35	1289.46
1. Solid fuels	691.74	650.63	626.89	615.06	602.70	588.02	580.13	568.09
2. Oil and natural gas and other emissions from energy production	891.22	980.92	921.75	839.72	794.63	791.93	795.22	721.37
C. CO <sub>2</sub> transport and storage	NO.NE	NE.NO						
2. Industrial Processes	89933.62	89005.17	84597.47	77353.16	80646.09	82477.06	85078.40	89366.01
A. Mineral industry	41069.22	40094.30	37327.81	32651.32	32676.03	32983.41	33594.96	34930.31
B. Chemical industry	13043.69	11654.31	11054.91	9123.56	8932.85	8470.81	7443.71	7647.98
C. Metal industry	7797.13	7895.41	7060.20	5994.77	6658.65	6357.66	6453.68	6546.22
D. Non-energy products from fuels and solvent use	3078.87	3047.61	2778.93	2865.62	2750.04	2703.18	2553.97	2689.21
E. Electronic industry	6651.88	5960.50	4542.10	2916.02	3139.50	2661.40	2369.77	2225.44
F. Product uses as ODS substitutes	15970.52	18183.80	19771.55	21907.89	24699.28	27412.26	30697.74	33384.09
G. Other product manufacture and use	2234.51	2082.52	1989.48	1821.80	1712.95	1800.23	1864.65	1849.24
H. Other	87.80	86.71	72.49	72.19	76.79	88.12	99.91	93.53
3. Agriculture	34367.62	34731.59	33618.89	33439.29	33667.46	32928.63	32555.29	32782.10
A. Enteric fermentation	8626.33	8673.28	8586.85	8479.76	8202.11	8154.27	7953.13	7736.85
B. Manure management	7035.00	7065.15	7062.78	7082.71	6951.22	6910.01	6764.49	6536.72
C. Rice cultivation	12130.33	11927.38	11766.19	11945.34	12184.83	11635.44	11510.89	12077.78
D. Agricultural soils	6068.74	6437.33	5634.95	5415.83	5805.81	5698.88	5692.09	5742.36
E. Prescribed burning of savannas	NO	NC						
F. Field burning of agricultural residues	108.81	105.77	101.90	98.92	96.25	95.23	92.72	94.39
G. Liming	230.36	325.00	305.74	270.15	242.88	246.78	369.97	379.58
H. Urea application	168.05	197.68	160.49	146.58	184.36	188.02	172.00	214.43
I. Other carbon-containing fertilizers	NO	NC						
J. Other	NO	NC						
4. Land use, land-use change and forestry <sup>(2)</sup>	-83967.23	-79901.02	-70111.83	-67013.45	-70853.95	-69120.05	-71895.77	-64653.76
A. Forest land	-93356.19	-91816.20	-87162.54	-82387.11	-82547.55	-84277.95	-83998.69	-76251.50
B. Cropland	2717.12	6074.45	11397.80	8693.80	5896.89	6894.85	6558.18	5521.97
C. Grassland	-61.73	-413.40	-178.85	390.67	161.27	786.04	785.25	1099.94
D. Wetlands	33.75	62.14	62.46	93.84	94.01	50.67	50.61	18.15
E. Settlements	4974.45	5291.75	5039.80	4698.41	4427.90	3765.44	3417.04	3447.12
F. Other land	1025.95	1083.36	1029.16	934.19	890.77	940.44	792.22	717.87
G. Harvested wood products	486.59	-389.38	-498.39	373.61	41.93	2549.35	338.28	638.36
H. Other	18.58	18.43	18.13	17.75	17.39	16.41	15.26	15.06
5. Waste	25666.81	25282.14	25851.26	22750.82	22600.75	21567.11	21822.13	21541.18



### **CBIT-GSP** Japan - Summary Table under CRT (4 of 4)

#### TABLE 10 EMISSION TRENDS GHG CO<sub>2</sub> eq emissions (Sheet 1 of 6)

Inventory 2021

Submission 2023 v4

JAPAN

									Change from base to latest
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2014	2015	2016	2017	2018	2019	2020	2021	reported year
				1	1				%
Total (net emissions) <sup>(2)</sup>	1294776.55	1261703.75	1247860.93	1230488.17	1186906.06	1157042.48	1093338.59	1116399.87	-7.43
1. Energy	1211475.13	1172253.21	1152461.97	1136569.62	1091083.48	1055453.27	994148.09	1014950.14	-7.05
A. Fuel combustion (sectoral approach)	1210185.40	1171010.02	1151177.37	1135296.23	1089890.89	1054337.18	993057.50	1013905.90	-6.69
Energy industries	555923.72	529955.95	5,24,104.61	5,10,542.75	4,72,802.90	4,49,887.73	4,38,246.89	4,46,619.95	20.75
Manufacturing industries and construction	299508.99	290334.43	2,76,465.29	2,72,170.28	2,69,658.65	2,62,145.40	2,35,717.02	2,51,570.71	-28.42
3. Transport	212000.16	210678.43	2,08,827.64	2,06,987.36	2,04,723.11	2,00,693.27	1,78,060.32	1,79,412.07	-12.98
4. Other sectors	142752.54	140041.21	1,41,779.84	1,45,595.83	1,42,706.23	1,41,610.77	1,41,033.26	1,36,303.17	-14.33
5. Other	NO	NO	NO	NO	NO	NO	NO	NO	0.00
B. Fugitive emissions from fuels	1289.73	1243.20	1284.59	1273.39	1192.59	1116.09	1090.59	1044.24	-80.30
1. Solid fuels	572.88	552.16	543.72	558.17	502.47	481.76	472.68	459.71	-90.62
Oil and natural gas and other emissions from energy production	716.85	691.04	740.87	715.22	690.12	634.33	617.92	584.54	46.45
C. CO <sub>2</sub> transport and storage	NE,NO	NO,NE	NO,NE,NA	NO,NE,NA	NO,NE,NA	NO,NE,NA	NO,NE	NO,NE	0.00
2. Industrial Processes	91994.41	93006.62	96071.86	98894.42	99902.42	101078.22	100710.99	103258.47	-6.07
A. Mineral industry	34678.09	33525.54	33,421.17	33,940.11	33,565.01	32,232.04	30,702.65	31,136.83	-36.08
B. Chemical industry	6704.38	5854.12	5,448.55	5,293.21	4,734.22	4,873.75	4,409.30	4,944.86	-86.22
C. Metal industry	6471.24	6304.58	6,322.68	6,169.07	6,069.07	5,718.24	5,334.88	5,796.24	-24.12
D. Non-energy products from fuels and solvent use	2532.09	2493.03	2,591.27	2,699.74	2,669.93	2,564.97	2,332.08	2,293.32	12.43
E. Electronic industry	2345.77	2325.75	2,463.21	2,634.44	2,581.28	2,458.23	2,656.28	2,374.66	24.72
F. Product uses as ODS substitutes	37098.20	40568.94	43,814.55	46,177.58	48,372.40	51,285.45	53,333.33	54,576.45	1099.15
G. Other product manufacture and use	2074.04	1837.93	1,903.48	1,869.63	1,805.17	1,845.71	1,855.74	2,055.17	-77.49
H. Other	90.60	96.74	106.95	110.64	105.33	99.84	86.73	80.94	25.26
3. Agriculture	32373.60	32118.87	32142.07	32255.97	32023.19	31990.59	32101.38	32174.35	-14.24
A. Enteric fermentation	7543.46	7533.93	7,480.76	7,494.13	7,464.99	7,563.30	7,631.29	7,717.70	-18.10
B. Manure management	6391.33	6352.09	6,289.11	6,352.59	6,307.56	6,339.99	6,362.17	6,369.07	-17.60
C. Rice cultivation	12101.41	11941.01	12,128.26	12,074.55	11,999.91	11,931.22	11,957.61	11,942.42	-1.54
D. Agricultural soils	5678.90	5730.46	5,694.89	5,748.57	5,715.50	5,621.54	5,625.96	5,627.99	-23.28
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	NO	NO	0.00
F. Field burning of agricultural residues	91.73	87.83	87.85	84.41	85.07	84.08	83.61	83.61	-49.72
G. Liming	362.50	258.75	253.01	293.54	241.96	242.27	232.56	225.38	-59.04
H. Urea application	204.26	214.79	208.19	208.19	208.19	208.19	208.19	208.19	14.53
I. Other carbon-containing fertilizers	NO	NO	NO	NO	NO	NO	NO	NO	0.00
J. Other	NO	NO	NO	NO	NO	NO	NO	NO	0.00
4. Land use, land-use change and forestry <sup>(2)</sup>	-61734.47	-56132.44	-52285.84	-56248.09	-55809.65	-50699.93	-51593.91	-51694.59	-18.30
A. Forest land	-73282.20	-66821.07	-62,282.32	-64,314.93	-62,828.30	-58,620.70	-60,294.08	-58,272.22	-32.40
B. Cropland	6241.88	5746.60	5,491.68	4,600.52	4,016.44	4,729.85	4,698.78	4,715.12	-43.92
C. Grassland	1711.26	1380.71	1,085.04	843.45	604.41	723.65	587.03	517.97	-41.47
D. Wetlands	18.32	62.81	62.43	24.38	23.89	23.57	23.66	35.36	-48.36
E. Settlements	3305.85	3414.24	3,287.41	2,969.78	2,996.82	3,107.77	3,159.32	2,375.81	-78.67
F. Other land	684.55	665.80	650.00	591.43	578.48	528.12	496.97	394.05	-83.35
G. Harvested wood products	-562.74	-725.10	-719.24	-1,098.49	-1,336.63	-1,326.89	-400.22	-1,595.59	504.00
H. Other	14.73	14.50	14.40	14.41	14.73	14.94	15.16	15.60	-53.78
5. Waste	20667.88	20457.50	19470.87	19016.27	19706.63	19220.33	17972.04	17711.50	-40.94



### CBIT-GSP Modalities Procedures and Guidelines (MPGs)

- **Building on and enhancing** the transparency arrangements;
- Recognizing the importance of facilitating improved reporting and transparency over time;
- @ Providing **flexibility** to those developing country Parties that need it in the light of their capacities;
- Promoting transparency, accuracy, completeness, consistency and comparability;
- Avoiding duplication of work and undue burden on Parties and the secretariat;
- @ Maintain the frequency and quality of reporting in accordance with respective obligations under the Convention;
- Ensure double counting is avoided;
- **@** Ensuring **environmental integrity.**







### **CBIT-GSP** Para of Modalities Procedures and Guidelines (MPGs)

#### Contents of MPGs as contained in Annex to 18/CMA.1

- Introduction (para 1 to 16): Purpose, Guiding Principles, Flexibilities, improved reporting over time, reporting format
- National GHG inventory (para 17 to 58): national circumstances and institutional arrangements, Methods (key category analysis, time-series consistency, recalculations, uncertainty assessment, completeness, QA/QC), Metrices, Reporting (sectors and gases, time series)
- NDC Tracking (para 59 to 79): national circumstances and institutional arrangements,
   NDC description, information on indicators, definitions, methodology and accounting approach)
- Mitigation (para 80 to 103)
- Adaptation (para 104 to 117)
- FTC Support provided and mobilized (para 118 to 129)
- FTC Support needed and received (para 130 to 145)
- Technical Expert Review (para 146 to 188)





- Specific flexibility provisions are provided in relation to:
  - Reporting anthropogenic emissions by sources and removals by sinks of GHG in the national inventory report
  - Reporting information to track progress in implementing and achieving the nationally determined contribution
  - Technical expert review
  - Facilitative, multilateral consideration of progress
- Use the new notation key "FX" (flexibility) in the relevant common reporting tables or common tabular formats
- Need to provide an explanation of how the specific flexibility provision has been applied in the corresponding documentation box below CRTs and CTFs







## CBIT-GSP Requirement under the ETF

Reporting element under the ETF	Requested ("should") or required ("shall") under the ETF?	Is this information, or similar information already covered in reporting BR, BUR and NC guidelines?
Estimates of emissions and removals for <b>all categories, gases</b> and carbon pools considered in the GHG inventory throughout the reported period on a gas-by-gas basis in units of mass at the most disaggregated level (MPG, Para 47)	Required	Developed – yes (shall) Developing – yes (shall)
Report <b>seven gases</b> (CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub> and NF <sub>3</sub> ) (MPG, Para 48)	Required, with flexibility provided	Developed – yes (shall), Developing –yes (shall for CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O and encouraged to provide information on HFCs, PFCs, SF <sub>6</sub> and NF <sub>3</sub>
Report the following <b>sectors</b> : energy, industrial processes and product use, agriculture, LULUCF and waste, according to the IPCC guidelines (MPG, Para 50)	Required	Developed – yes (shall) Developing – yes (shall)
Information on the following <b>precursor gases</b> CO, NOx, NMVOCs, as well as sulphur oxides (MPG, Para 51)	Requested (should)	Developed – yes Developing –yes, to a lesser extent
Consistent annual <b>time series</b> starting from 1990 (MPG, Para 57)	Required, with flexibility provided	Developed – yes Developing –yes, to a lesser extent
The latest <b>reporting year</b> shall be no more than two years prior to the submission of its NID (MPG, Para 58)	Required, with flexibility provided	Developed – yes Developing – yes, three years





# CBIT-GSP Requirement under the ETF

Reporting element under the ETF	Requested ("should") or required ("shall") under the ETF?	Is this information, or similar information already covered in reporting BR, BUR and NC guidelines?	
Methods used, including the rationale for the choice of <b>methods</b> , <b>references and sources of information</b> used for the emission factors and activity data used to compile the GHG inventory (MPG, <i>Para 39</i> )	Required	Developed – yes (shall) Developing – yes, to a lesser extent (encouraged)	
Information on the category and gas, and the methodologies, emission factors and activity data used at the most disaggregated level (MPG, Para 40)	Required, but with qualifier "to the extent possible".	Developed – yes Developing –yes, to a lesser extent	
Description of <b>key categories</b> , including information on the approach used for their identification, and on the level of disaggregation used (MPG, Para 25 and 41)	Required, with flexibility provided on	Developed – yes Developing –yes, to a lesser extent	
Individual and cumulative percentage contributions from <b>key categories</b> (MPG, Para 25 and 42)	the threshold used for defining key categories		
Report <b>recalculations</b> including explanatory information and justifications for recalculations with an indication of relevant changes and their impact on the emission trends (MPG, Para 26–28 and 43)	Required	Developed – yes (shall) Developing – yes, to a lesser extent	
Results of the <b>uncertainty analysis</b> as well as methods used (MPG, Para 29 and 44)	Required, with flexibility provided	Developed – yes Developing –yes, to a lesser extent UN ①	



### CBIT-GSP Requirement under the ETF

Reporting element under the ETF	Requested ("should") or required ("shall") under the ETF?	Is this information, or similar information already covered in reporting BR, BUR and NC guidelines?
Information on the reasons for <b>lack of completeness</b> (MPG, Para 30-33 and 45)	Required	Developed – yes (shall) Developing – yes, to a lesser extent (encouraged)
<b>QA/QC plan</b> and information on QA/QC <b>procedures</b> (MPG, Para 34-36 and 46)	Required, with flexibility provided	Developed – yes (shall) Developing – yes, to a lesser extent
International aviation and marine bunker fuel emissions as two separate entries (MPG, Para 53)	Requested (should)	Developed – yes (shall) Developing – yes, to a lesser extent
Supplementary information on emissions and removals from harvested wood product (HWP)s estimated using the production approach (MPG, Para 56)	Required, for parties using an approach to reporting emissions and removals from HWP	Developed – yes (shall) Developing – yes, to a lesser extent



### Key points in the BTR to facilitate transparency

- Carefully review decisions 18/CMA.1 and 5/CMA.3, in particular references to the items that "shall" be reported (i.e. are mandatory) versus those that "should be", are "encouraged" to be, "can be" or "may be" reported.
- Provide all information required by the provisions in decision 18/CMA.1 in the BTR, the CRTs and the CTF tables, to the extent applicable, which will enhance the transparency of the BTR.
- In the case of developing country Parties that need **flexibility** in the light of their capacities, identify the capacity-building constraints preventing implementation of a specific provision and the anticipated timeline for addressing those constraints.
- Regularly submitting BTRs is a cycle of continuous improvement. It is expected that the information available to Parties and the reporting capacities of Parties are at different stages of development but will improve over time.







Welcome to the Climate
Transparency
Platform

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# Thank you for your attention!



### Please reach out to us for any question, comments or suggestions!



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