Session III: Discussion on the ETF GHG Inventory Reporting Tool
Breakout Group 1: Energy, IPPU, Waste

16 July 2025

22nd Workshop on GHG Inventories in Asia (WGIA22)

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Objectives

- In this session, participants will discuss operational issues related to the ETF GHG Inventory Reporting Tool (ETF tool) and explore possible solutions.
- This Session is intended as a follow-up to the hands-on training conducted at the last WGIA.
- Since we are at different stages regarding the CRT submission, the countries that have submitted their CRTs can share their experiences to support countries facing the same issues when preparing to submit the CRTs.
- We can also discuss issues directly with people from UNFCCC and IPCC.

Procedures

- The session will be 16:30-18:00 (90 minutes).
- Introduction (5 minutes)
- Group discussion (85 minutes)
  1. The issues raised from the questionnaires will be discussed
  2. Issues raised from the floor will be discussed
  3. Issues identified by GIO will be shared

Break out Group 1: Energy, IPPU, Waste

[Issue 1] All the cells in CRT Table 1.A(b) and 1.(d) are filled with "NE" (not estimated).
CRT Table 1.A(b) is the table to report the Reference Approach.
CRT Table 1.A(d) is the table to report how feedstocks, reductants and other non-energy use of fuels are reported under the Energy or the IPPU sectors.
All the cells in CRT Table 1.A(b) and 1.(d) are filled with "NE" (not estimated).
How to fill values in these tables?

TABLE 1.A(b) SECTORAL BACKGROUND DATA FOR ENERGY

CO_2 from fuel combustion activities - reference approach (IPCC worksheet fuel combustion activities)

(Sheet 1 of 1)

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FUEL TYPES			Unit	Production	Imports	Exports	International bunkers	Stock change	Apparent consumption	Conversion factor (TJ/Unit) (1)	NCV/ GCV (2)	Appar consum (TJ
Liquid fossil	Primary fuels											
		Crude oil	TJ	NE	NE	NE		NE	NE	NA	GCV	
		Orimulsion	TJ	NE	NE	NE		NE	NE	NA	GCV	
		Natural gas liquids	TJ	NE	NE	NE		NE	NE	NA	GCV	
	Secondary fuels											
		Gasoline	TJ		NE	NE	NE	NE	NE	NA	GCV	
		Jet kerosene	TJ		NE	NE	NE	NE	NE	NA	GCV	
		Other kerosene	TJ		NE	NE	NE	NE	NE	NA	GCV	
		Shale oil	TJ		NE	NE		NE	NE	NA	GCV	
		Gas/diesel oil	TJ		NE	NE	NE	NE	NE	NA	GCV	
		Residual fuel oil	TJ		NE	NE	NE	NE	NE	NA	GCV	
		Liquefied petroleum gases (LPG)	TJ		NE	NE		NE	NE	NA	GCV	

Table1.A(a)s2 | Table1.A(a)s3 | Table1.A(a)s4 | Table1.A(b) | Table1.A(c) | Table1.A(d)

Break out Group 1: Energy, IPPU, Waste

[Suggestion from GIO] If you are using the energy balance tables, there are similar items in the tables that can be used for the CRT.

CRT	IEA Energy Balance Tables	Japan's National GHG Inventory
Table 1.A(b) Production	Production	"Indigenously Produced" in the General Energy Statistics (GES; Japan's Energy Balance Tables)
Table 1.A(b) Imports	Imports	"Imported" in GES + International bunker fuels*
Table 1.A(b) Exports	Exports	"Export" in GES
Table 1.A(b) International bunkers	International marine bunkers + International aviation bunkers	Yearbook of Mineral Resources and Petroleum Products Statistics*
Table 1.A(b) Stock change	Stock changes	"Stockpile Change / Supply" in GES
Table 1.A(d) Fuel quantity for NEU	Non-energy use	"Non-energy and feedstock use" in GES

* Since the data of international bunkers are not included in GES, they are sourced from the other statistics.

Break out Group 1: Energy, IPPU, Waste

[Suggestion from GIO] Sample: IEA Energy Balance Tables

	Coal[1]	Crude oil	Oil products	Natural gas
	TJ	TJ	TJ	TJ
Production	15 913	14 212		74 862
Imports	4 548 184	5 612 703	1 736 642	3 473 665
Exports	-23 334		-712 828	
International marine bunkers	0		-199 563	
International aviation bunkers	0		-204 563	
Stock changes	-3 878	86 399	-20 907	-81 517
Total energy supply	**4 536 885**	**5 713 315**	**598 780**	**3 467 010**
Transfers	0	-25	-2 363	
Statistical Differences	-196 951	-109 051	-182 149	-26 201
Electricity plants	-2 773 251	-6 594	-415 624	-2 355 705
CHP plants	0			
Heat plants	-6 173		-851	-12 929
Gas works	0		-96 724	91 990
Coal transformation	-683 650		-15 914	
Oil refineries	0	-5 760 923	5 892 429	
Liquefication plants	0			
Other transformation	0	165 501	-173 703	
Energy industry own use	**-128 228**	**-598**	**-255 092**	**-30 223**
Transmission and Distribution Losses	0			
Total final consumption	**748 629**	**1 625**	**5 348 785**	**1 133 941**
Industry	713 436		698 256	443 231
Transport	14		2 611 741	737
Residential	0		422 450	363 244
Commercial and Public Services	5 895		367 841	316 477
Agriculture / Forestry	0		93 813	13
Fishing	0		66 745	1
Other non-specified	0			
Non-energy use	29 283	1 625	1 087 937	10 235

https://www.iea.org/data-and-statistics/data-tools/energy-statistics-data-browser?country=JAPAN&energy=Balances&year=2022

Break out Group 1: Energy, IPPU, Waste

[Suggestion from GIO] Sample: General Energy Statistics (Japan's Energy Balance Tables)

2023FY		$0100	$0200	$0300	$0400	$0500	$0600
	<< Energy Unit >>	Coal	Coal Products	Crude Oil	Oil Products	Natural Gas	City Gas
	HCV: High Calorific Value / GCV: Gross Calorific Value	TJ	TJ	TJ	TJ	TJ	TJ
#01	Primary Energy Supply	4274980	12852	5525659	746762	3626868	56
#02	Indigenously Produced	15117	0	14323	0	77993	0
#03	Imported	4259934	27179	5514620	1771694	3548482	0
#05	Export	-71	-14706	0	-1012962	0	0
#06	Stockpile Change / Supply	0	379	-3284	-11970	393	56
#08	Energy Transformation & Own Use	-3951739	843055	-5525496	4633412	-3579715	962948
#18	Statistical Discrepancy	-2777	80072	163	-57	-9490	0
#19	Final Energy Consumption	326019	775835	0	5380232	56643	963003
#20	Industry	326003	775835	0	2251069	56643	578089
#21	Agriculture, Fishery, Mining and Construction	0	87	0	351173	4434	2082
#22	Manufacturing	325996	769859	0	1561401	52209	250651
#32	Commercial Industry	7	5888	0	338495	0	325356
#33	Residential	0	0	0	409052	0	384235
#34	Transportation	15	0	0	2720111	0	679
#37	Final Energy Consumption (Non-energy and Feedstock Use)	11	16241	0	1208442	9291	0

https://www.enecho.meti.go.jp/statistics/total_energy/results.html

Break out Group 1: Energy, IPPU, Waste

[Suggestion from GIO] CRT Table 1.A(d) "CO_2 emissions from the NEU reported in the inventory" show how much fossil fuels for non-energy use (not combusted) are reported as emissions under the IPPU sector. "Reported under" in the same table show what fossil fuels industrial products are made from.
If the energy balance tables are used for the activity data and the data of non-energy use by products are available in the tables, it is good to use the data. If not, interview to industrial organizations or individual companies will be helpful. Otherwise, amount of fuel use can be estimated from the production amount based on the 2006 IPCC Guidelines, Vol.3 (IPPU), Table 1.5b.

Example

Natural gas → Energy use →Report under CRT Table 1.A(a)
- Electricity generation
- Residential
- …

Non-energy use →Report under CRT Table 1.A(d)
- The usage that leads to CO_2 emissions under the IPPU sector
  - Ammonia production →Report under CRT Table2(I).A-H and Table 1.A(d)
  - Methanol production
  - …
- The usage that does not lead to CO_2 emissions

Break out Group 1: Energy, IPPU, Waste

[Issue 2] Cells are completely empty for F-gases (Table 2(II)).

TABLE 2(II) SECTORAL REPORT FOR INDUSTRIAL PROCESSES AND PRODUCT USE - EMISSIONS OF HFCs, PFCs, SF_6 AND NF_3
(Sheet 1 of 1)

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GREENHOUSE GAS SOURCE AND SINK CATEGORIES	HFC-23	HFC-32	HFC-41	HFC-43-10mee	HFC-125	HFC-134	HFC-134a	HFC-143	HFC-143a	HFC-152	HFC-152a	HFC-161	HFC-227ea	HFC-236cb	HFC-236ea	HFC-236fa	HFC-245ca	HFC-245fa	HFC-365mfc	Unspecified mix of HFCs [1]	Total HFCs	CF_4	C_2F_6	C_3F_8	C_4F_{10}	c-C_4F_8	C_5F_{12}	C_6F_{14}	$C_{10}F_{18}$	c-C_3F_6	Unspecified mix of PFCs [1]	Total PFCs	Unspecified mix of HFCs and PFCs [1]	SF_6	NF_3
	(t)																			CO_2 equivalents (kt) [2]		(t)									CO_2 equivalents (kt) [2]			(t)	
2. Total actual emissions of halocarbons (by chemical), SF_6 and NF_3																																		
2.B. Chemical industry																																		
2.B.9. Fluorochemical production																																		
2.B.9.a. By-product emissions																																		
2.B.9.b. Fugitive emissions																																		
2.B.10. Other																																		
2.C. Metal industry																																		
2.C.3. Aluminium production																																		
2.C.4. Magnesium production																																		
2.C.7. Other																																		
2.E. Electronics industry																																		
2.E.1. Integrated circuit or semiconductor																																		
2.E.2. TFT flat panel display																																		
2.E.3. Photovoltaics																																		
2.E.4. Heat transfer fluid																																		
2.E.5. Other																																		
2.F. Product uses as substitutes for ODS																																		
2.F.1. Refrigeration and air conditioning																																		
2.F.2. Foam blowing agents																																		
2.F.3. Fire protection																																		
2.F.4. Aerosols																																		
2.F.5. Solvents																																		
2.F.6. Other applications																																		
2.G. Other product manufacture and use																																		

Table1.D | Table2(I) | Table2(I).A-H | Table2(II) | Table2(II).B-Hs1 | Table2(II).B-Hs2 | Table3 | Table3.A | Table3.E

Break out Group 1: Energy, IPPU, Waste

[Suggestion from GIO] To apply flexibility provisions for F-gas reporting, enable the option for paragraph 48 of MPGs in the “Version Settings” function.

TABLE 2(II) SECTORAL REPORT FOR INDUSTRIAL PROCESSES AND PRODUCT USE - EMISSIONS OF HFCs, PFCs, SF_6 AND NF_3
(Sheet 1 of 1)

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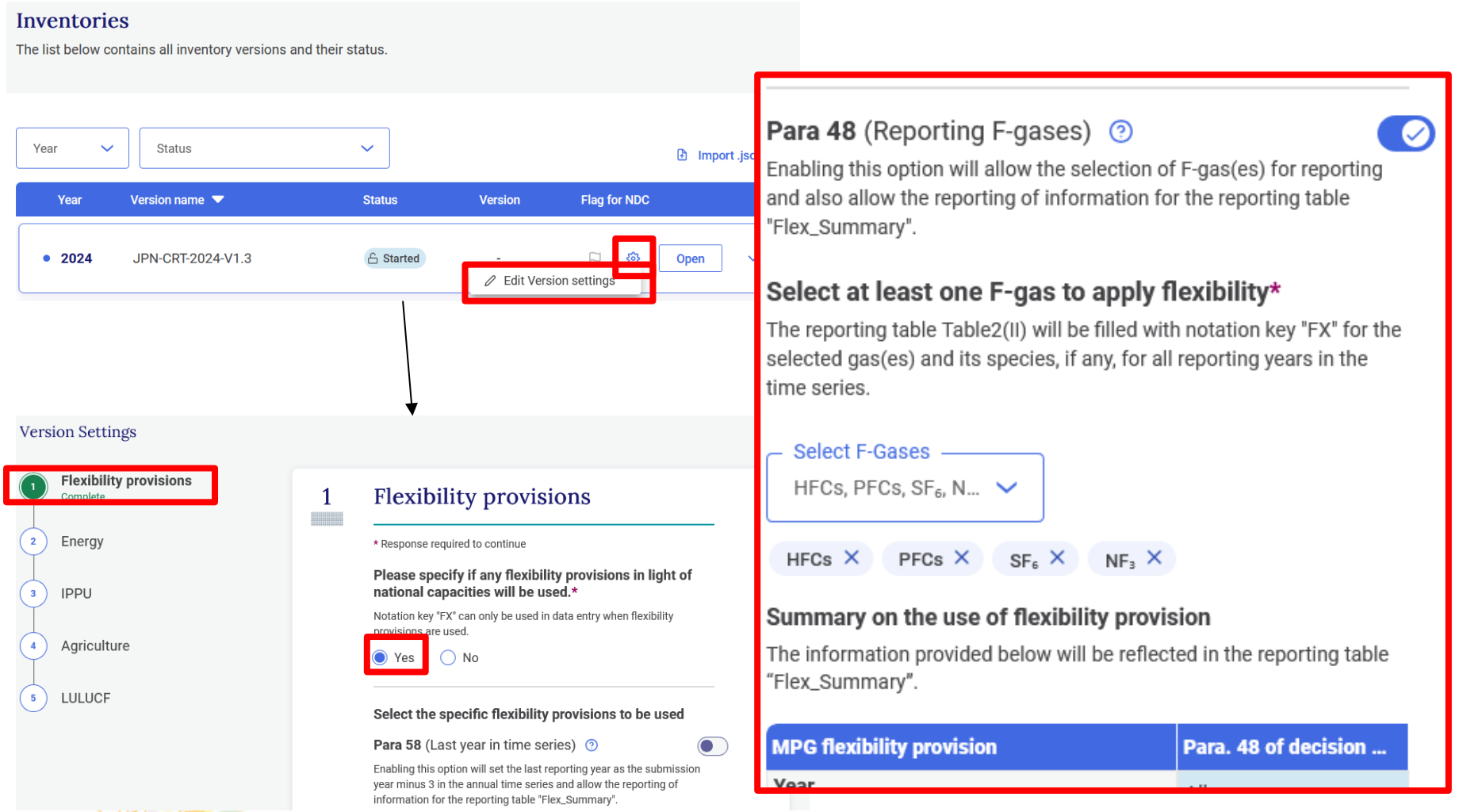
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	HFC-23	HFC-32	HFC-41	HFC-43-10mee	HFC-125	HFC-134	HFC-134a	HFC-143	HFC-143a	HFC-152	HFC-152a	HFC-161	HFC-227ea	HFC-236cb	HFC-236ea	HFC-236fa	HFC-245ca	HFC-245fa	HFC-365mfc	Unspecified mix of HFCs (1)	Total HFCs	CF_4	C_2F_6	C_3F_8	C_4F_{10}	c-C_4F_8	C_5F_{12}	C_6F_{14}	$C_{10}F_{18}$	c-C_3F_6	Unspecified mix of PFCs (1)	Total PFCs	Unspecified mix of HFCs and PFCs (1)	SF_6	NF_3
	(t)																			CO_2 equivalents (kt) (2)		(t)									CO_2 equivalents (kt) (2)			(t)	
2. Total actual emissions of halocarbons (by chemical), SF_6 and NF_3	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.B. Chemical industry	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.B.9. Fluorochemical production	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.B.9.a. By-product emissions	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.B.9.b. Fugitive emissions	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.B.10. Other	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.C. Metal industry	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.C.3. Aluminium production																						FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX		FX	
2.C.4. Magnesium production	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	
2.C.7. Other	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.E. Electronics industry	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.E.1. Integrated circuit or semiconductor	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.E.2. TFT flat panel display	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.E.3. Photovoltaics	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.E.4. Heat transfer fluid	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.E.5. Other	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.F. Product uses as substitutes for ODS	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.F.1. Refrigeration and air conditioning	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.F.2. Foam blowing agents	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.F.3. Fire protection	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.F.4. Aerosols	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.F.5. Solvents	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.F.6. Other applications	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.G. Other product manufacture and use	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX

Table1.B.2 | Table1.C | Table1.D | Table2(I) | Table2(I).A-H | Table2(II) | Table2(II).B-Hs1 | Table2(II).B-Hs2 | Tabl

Break out Group 1: Energy, IPPU, Waste

- Instructions -

*This function is available only to users assigned the role of “Inventory Focal Point (IFP)” or “IFP Alternate”.



Break out Group 1: Energy, IPPU, Waste

[Suggestion from GIO] Information on the application of the flexibility provisions, such as clarification of capacity constraints, would be useful.

SUMMARY TABLE ON THE USE OF FLEXIBILITY PROVISIONS

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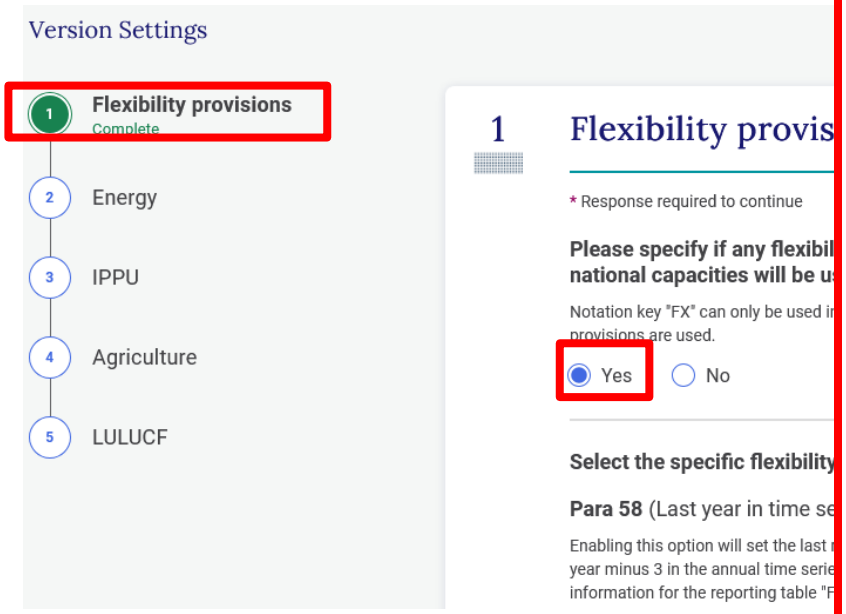
MPG flexibility provision	Year	Sector	Category	Gas	Description of the application of flexibility	Clarification of capacity constraint	Timeframe for improvement	Progress made in addressing areas of improvement
Para. 48 of decision 18/CMA.1 (Reporting F-gases)	All	2. IPPU, 6. Other	All	HFCs,PFCs,SF_6,NF_3				

Note: This table is used on a voluntary basis.

Table10s2 | Table10s3 | Table10s4 | Table10s5 | Table10s6 | Flex_Summary

Break out Group 1: Energy, IPPU, Waste

- Instructions -



Summary on the use of flexibility provision

The information provided below will be reflected in the reporting table "Flex_Summary".

MPG flexibility provision	Para. 48 of decision ...
Year	All
Sector	2. IPPU, 6. Other
Category	All
Gas	HFCs,PFCs,SF_6,NF_3
Description of the application of flexibility	Add Text
Clarification of capacity constraint	Add Text
Timeframe for improvement	Add Text
Progress made in addressing areas of improvement	Add Text

Break out Group 1: Energy, IPPU, Waste

[Suggestion from GIO] Applying flexibility for all F-gases, and then partially changing it to report one specific species of F-gas emissions.

TABLE 2(II) SECTORAL REPORT FOR INDUSTRIAL PROCESSES AND PRODUCT USE - EMISSIONS OF HFCs, PFCs, SF_6 AND NF_3 2022
(Sheet 1 of 1)

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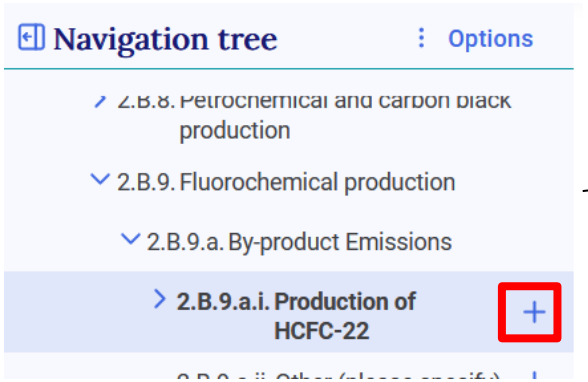
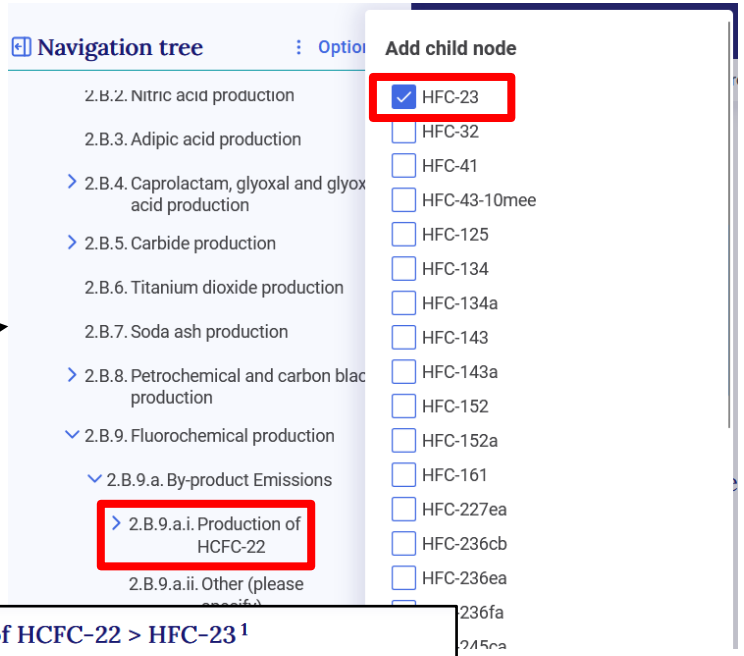
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	HFC-23	HFC-32	HFC-41	HFC-43-10mee	HFC-125	HFC-134	HFC-134a	HFC-143	HFC-143a	HFC-152	HFC-152a	HFC-161	HFC-227ea	HFC-236cb	HFC-236ea	HFC-236fa	HFC-245ca	HFC-245fa	HFC-365mfc	Unspecified mix of HFCs (1)	Total HFCs	CF_4	C_2F_6	C_3F_8	C_4F_{10}	c-C_4F_8	C_5F_{12}	C_6F_{14}	$C_{10}F_{18}$	c-C_3F_6	Unspecified mix of PFCs (1)	Total PFCs	Unspecified mix of HFCs and PFCs (1)	SF_6	NF_3
	(t)																			CO_2 equivalents (kt) (2)		(t)									CO_2 equivalents (kt) (2)			(t)	
2. Total actual emissions of halocarbons (by chemical), SF_6 and NF_3	10.00	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.B. Chemical industry	10.00	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.B.9. Fluorochemical production	10.00	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.B.9.a. By-product emissions	10.00	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.B.9.b. Fugitive emissions	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.B.10. Other	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.C. Metal industry	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.C.3. Aluminium production																						FX	FX	FX	FX	FX	FX	FX	FX	FX	FX			FX	
2.C.4. Magnesium production	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	
2.C.7. Other	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.E. Electronics industry	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.E.1. Integrated circuit or semiconductor	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.E.2. TFT flat panel display	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.E.3. Photovoltaics	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.E.4. Heat transfer fluid	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.E.5. Other	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.F. Product uses as substitutes for ODS	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.F.1. Refrigeration and air conditioning	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.F.2. Foam blowing agents	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX
2.F.3. Fire protection	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX	FX	FX	FX	FX	FX	FX	FX		FX	FX	FX

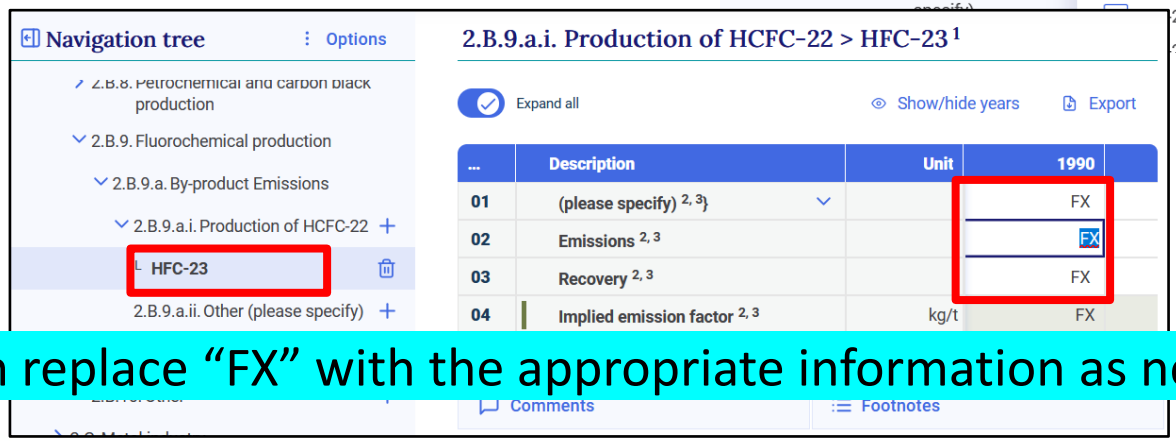
Index | Table2(I) | Table2(I).A-H | Table2(II) | Table2(II).B-Hs1 | Table2(II).B-Hs2 | Summary1 | Summary2 | Sumi

Break out Group 1: Energy, IPPU, Waste

- Instructions -







You can replace “FX” with the appropriate information as needed.