Annex IV

REPORTING DATA ON PROGRESS IN THE IMPLEMENTATION OF COUNTRY PROGRAMMES TO THE FUND SECRETARIAT

Practical manual for country programme data reporting (2019 data and beyond)

Background

1. Article 5 countries that request funding from the Multilateral Fund for the phase-out of controlled substances in the consumption and production (where applicable) sectors are required to submit annually a mandatory progress report on the implementation of country programmes (CP) to the Fund Secretariat.[1]

2. CP data reports represent the sole source of information on the sector distribution of the use of these controlled substances in Article 5 countries. Based on the CP data reports, the Secretariat prepares a document on CP data and prospects for compliance, which the Executive Committee considers at each meeting. This document is also submitted as an information document to each meeting of the Implementation Committee under the Non-compliance Procedure of the Montreal Protocol.

3. Therefore, the accuracy of the consumption and production data reported under CP is of great relevance.

Scope of the Practical manual for CP data reporting

4. Article 5 countries are required to submit annual reports on the progress in the implementation of the CP for the previous calendar year to the Fund Secretariat, eight weeks prior to the Executive Committee's first meeting of the year, if possible, and no later than 1 May, in line with decision 74/9(b)(iv). The Secretariat has developed the present Practical manual for CP data reporting to assist national ozone officers in filling the CP data reports.

5. The CP data report format contains six separate sections as described below:

Section	Description
A. Annex A - Group I Annex B - Group II Annex C - Group I Annex E	Data reporting for Annex A - Group I (CFCs), Annex B - Group II (CTC), Annex C - Group I (HCFCs) and Annex E (MB) controlled substances
B. Annex F - Consumption	Data reporting for HFCs (including HFC-23 use) and HFCs contained in imported pre-blended polyols (The total quantity of HFC-blends should be reported and not the quantities of each of their individual HFCs)
B1. Annex F – Production	Data reporting for HFC production

[1] At its 5th meeting, the Executive Committee noted that Governments should monitor the progress being made in reducing consumption of controlled substances in line with their plans set out in the CP, and should periodically review the effectiveness of the measures being taken, and requested Article 5 Parties to present annually information on progress being made in the implementation of their CPs. (UNEP/OzL.Pro/ExCom/5/16, paragraphs 22 and 23).

Section	Description
C. Price of HCFCs, HFCs, alternatives and energy	Average estimated freight on board (FOB) price of controlled substances. Prices could be obtained from importers and/or suppliers. Retailer price data can include taxes and transportation costs.
D. Annex F, Group II (HFC-23 generation)	Quantification of HFC-23 by-product generation, only related to countries with manufacturing facilities for Annex C Group I or Annex F substances that generate HFC-23. The amounts of production or generated HFC-23 that is captured for use, feedstock, destruction or storage.
E. Annex F, Group II (HFC-23 emissions)	Emissions of HFC-23, only related to countries with manufacturing facilities for Annex C Group I or Annex F substances that generate HFC-23. Emissions of HFC-23 should be reported separately for each manufacturing facility.
F. Comments by bilateral/implementing agencies	Narrative comments

6. For countries that have ratified the Kigali Amendment, CP data reporting for Annex F substances is mandatory. Countries that have not ratified the Kigali Amendment are encouraged to submit data on Annex F substances on a voluntary basis. Data forms D and E are only relevant to countries with production facilities of controlled substances.

Report of controlled substances under Article 7 of the Montreal Protocol

7. Article 5 countries are required to submit data on imports, exports and production of controlled substances under Article 7 of the Montreal Protocol to the Ozone Secretariat. The columns for import, export and production in the CP data report format should be consistent with the data reported under Article 7. Where there is a discrepancy, the country should provide an explanation for the difference in the "Remarks" column in Sections A, B, B1 and E.

8. Data is required for "Use by Sector" for each controlled substance. This data allows for an analysis of trends in consumption of controlled substances and for an accurate assessment of the assistance to be provided to Article 5 countries for the cost-effective phase-out/phase-down of controlled substances. Such sector-specific data will also be useful to Article 5 countries for developing their phase-out/phase-down strategies.

9. In most cases, when the total amount of controlled substance imported for the year was totally consumed in the various use sectors, the TOTAL "Use by Sector" is equal to the TOTAL amount of "Imports" minus "Exports" plus "Production columns". In other cases, the amounts in these columns will not be equal, since the amounts in "Use by Sector" for the year do not always equate to the total amounts imported for the same year. For instance, a country may register use of a controlled substance in the refrigeration servicing sector from the previous year's imports without having imported such controlled substance in the reporting year. The country should provide a clarification in the "Remarks" column for each controlled substance where there is a data discrepancy.

10. Countries should check the reported data of all controlled substances before submitting the report, ensuring that there are no data discrepancies or that an explanation has been provided for cases of data discrepancies. Inconsistencies in the data could delay the project review process of the Multilateral Fund because of the need to reconcile the data.

11. The list of blends/mixtures containing controlled substances with their compositions can be found in Appendix I of this Practical manual.

Practical instructions for filling the data forms

12. The following observations are relevant when filling the data forms:

- Data entry is needed only in unshaded cells. The unshaded cells are automatically pre-filled with 0 (zero) values
- Data should be provided in **metric tonnes only** and not in ODP tonnes or CO_2-equivalent. Conversion of the data to ODP or CO_2-equivalent will be done by the Secretariat
- Quantities of controlled substances contained in end-products, either imported or exported, e.g. mobile automobile air conditioners (MACs), domestic refrigerators and freezers, air-conditioners should not be reported on the data forms
- Reported data should not include quantities of controlled substances used as feedstock for producing other chemicals, or used for quarantine and pre-shipment applications, or quantities that have been destroyed. These quantities can be explained in the "Remarks" column

13. The following instructions are arranged by section and guide the user in collecting the information required for accurate and reliable reporting.

Section A. Annex A - Group I, Annex B - Group II, Annex C - Group I and Annex E

14. This section is used to report data on Annex A (CFCs), Annex B (CTC), Annex C (HCFCs) and Annex E (methyl bromide) as shown in the table below. Cells in the data forms where data is not required have been shaded.

SECTION A. ANNEX A - GROUP I, ANNEX B - GROUP II, ANNEX C - GROUP I AND ANNEX E - DATA ON CONTROLLED SUBSTANCES (METRIC TONNES)

NOTE: Data entry is required in UNSHADED cells only

Substance[1]	Use by Sector											Import	Export	Production	Import quotas	If imports are banned, indicate date ban commenced	Remarks[3]
	Aerosol	Foam	Fire Fighting	Refrigeration		Solvent	Process agent	Lab Use	Methy Bromide		TOTAL						
				Manufacturing	Servicing				QPS	Non-QPS							
Annex A, Group I																	
CFC-11	0.00	0.00		0.00	0.00						0.00	0.00	0.00	0.00	0.00		
CFC-12	0.00	0.00		0.00	0.00						0.00	0.00	0.00	0.00	0.00		
CFC-113	0.00					0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00		
CFC-114				0.00	0.00						0.00	0.00	0.00	0.00	0.00		
CFC-115				0.00	0.00						0.00	0.00	0.00	0.00	0.00		
Sub-Total	**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**			**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		
Annex B, Group II																	
Carbon tetrachloride											0.00				0.00		
Sub-Total						**0.00**	**0.00**	**0.00**			**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		
Annex C, Group I																	
HCFC-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00		
HCFC-141b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00		
HCFC-141b in imported pre-blended polyol		0.00									0.00	0.00	0.00	0.00	0.00		
HCFC-142b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00		
HCFC-123	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00		
HCFC-124	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00		
HCFC-133	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00		
HCFC-225	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00		
HCFC-225ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00		
HCFC-225cb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00		
Other[2]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00		
Other[2]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00		
Subtotal	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**			**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		
Annex E																	
Methyl Bromide									0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Subtotal									**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		
TOTAL	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		

1 Where the data involves a blend of two or more substances, the quantities of individual components of controlled substances must be indicated separately.
2 Indicate relevant controlled substances.
3 Provide explanation if total sector use and consumption (import-export+production) is different (e.g, stockpiling).

15. Each controlled substance should be broken down into specific sector uses, such as for aerosol, foam, refrigeration (manufacturing and servicing), solvent, process agent, laboratory use and methyl bromide. All "Use by Sector" columns should be added up to get a TOTAL for each substance.

16. Quantities of HCFC-141b contained in imported pre-blended polyols should be reported only under foam sector, and not under other sectors.

17. Where the data involves a blend of two or more substances, the quantities of the individual components of controlled substances should be indicated separately. The amounts of each substance should be calculated based on the percentages in the composition, and the total quantity should be indicated in the appropriate row for each substance.

18. For Annex C substances (HCFCs), if the country is importing or have uses of controlled substances other than those listed, data should be entered in rows "Other".

19. Methyl bromide use is divided into two categories, quarantine and pre-shipment uses ("QPS") and non-quarantine and pre-shipment uses ("Non-QPS"). These amounts should be reported in the relevant columns under the "Methyl bromide" heading. The total amount of "QPS" and "Non-QPS" should also be reported under the "Import/Export/Production" columns. For countries with approved consumption of methyl bromide for critical uses approved by the Parties to the Montreal Protocol, these data can be explained in the "Remarks" column.

20. For "Import quotas", the information required is whether the country has established an import quota for each controlled substance for the reporting year. For example, if during the reporting year, the country has issued licenses for import of an actual amount of a controlled substance, this amount should be entered in the column "Import quotas".

21. In the case where imports of a specific controlled substance are banned, the date of the ban should be provided in the "If imports are banned, indicate date ban commenced" column.

22. Additional information on each controlled substance should be reported in the "Remarks" column.

Section B. Annex F

23. This section is used to report data on Annex F (HFCs) controlled substances including HFC-23 (use) and HFCs contained in imported pre-blended polyols, as shown in the table below:

SECTION B. ANNEX F - DATA ON CONTROLLED SUBSTANCES (METRIC TONNES)

NOTE: Data entry is required in UNSHADED cells only

Substance	Use by Sector														Import	Export	Production	Import quotas	If imports are banned, indicate date ban commenced (DD/MM/YYYY)	Remarks[4]
	Aerosol		Foam		Fire Fighting	Refrigeration						Solvent	Other[3]	TOTAL						
						Manufacturing			Servicing											
	MDI	Other	PU	XPS		Other	AC	MAC	Other	AC	MAC									
Annex F																				
Blends (Mixtured of Controlled Substances)[1]																				
R-404A (HFC-125=44%, HFC-134a=4%, HFC-143a=52%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
R-407A (HFC-32=20%,HFC-125=40%,HFC-134a=40%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
R-407C (HFC-32=23%,HFC-125=25%, HFC-134a=52%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
R-410A (HFC-32=50%, HFC-125=50%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
R-507A (HFC-125=50%, HFC-143a=50%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
R-508B (HFC-23=46%, PFC-116=54%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Others:[2]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Others:[2]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Sub-Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		
Controlled Substances																				
HFC-32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-134	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-134a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-143	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-143a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-152	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-152a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-227ea	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-236cb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-236ea	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-236fa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-245ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-245fa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-365mfc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-43-10mee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-23 (use)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Sub-Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		
Others																				
HFC-245fa in imported pre-blended polyol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
HFC-365mfc in imported pre-blended polyo	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Sub-Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		
TOTAL	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		

1 When reporting blends/mixtures, reporting of controlled substances should not be duplicated. For the CP report, countries should report use of individual controlled substances and quantities of blends/mixtures used, separately, while ensuring that the amounts of controlled substances are not reported more than once.

2 If a non-standard blend not listed in the above table is used, please indicate the percentage of each constituent controlled substance of the blend being reported in the remarks column.

3 Uses in other sectors that do not fall specifically within the listed sectors in the table.

4 Provide explanation if total sector use and consumption (import-export+production) is different (e.g, stockpiling).

24. When reporting blends/mixtures of controlled substances, reporting each controlled substance in the blends/mixtures should not be duplicated. Countries should separately report the use of individual pure controlled substances and the quantities contained in blends or mixtures used, and should ensure that the amounts of controlled substances are not reported more than once.

25. The total quantity of HFC-blends should be reported and not the quantities of each of their individual HFCs.

26. If a blend/mixture not listed in the above table is used, the name of the blend/mixture should be indicated in the "Others" row and the percentage of each constituent controlled substance of the reported blend should be indicated in the "Remarks" column.

27. Data should be provided **in metric tonnes only** and not in CO_2-equivalent.

28. Each controlled substance should be broken down into its specific sector use, such as for aerosol, foam, fire fighting, refrigeration (manufacturing and servicing), solvent and others. Uses in sectors that do not fall specifically within the listed sectors should be reported in the "Other" column. All "Use by Sector" columns should be added up to get a TOTAL for each substance.

29. For the refrigeration manufacturing and servicing sectors, data should be provided separately for the air-conditioning (AC) and mobile air-conditioning (MAC) subsectors. Data for other subsectors should be provided in the "Other" column.

30. For the aerosol sector, data should be provided for metered dose inhaler (MDI) subsector. Data for other subsectors under aerosol should be provided in the "Other" column.

31. HFC-23 data should be provided only for use and production. HFC-23 destroyed and used as feedstock should not be included in the production. This is explained in section D and E below.

32. When pure controlled substances or blends/mixtures thereof are imported into the country or exported from the country, data should be reported in the appropriate column.

33. When pure controlled substances or blends/mixtures thereof are produced in the country, Section B1 should be filled prior to Section B. An explanation of the methodology for filling in this data is provided under Section B1.

34. In cases where imports of controlled substances are used for production, these quantities need to be explained in the "Remarks" column; total import quantities should be reported in the "Import" column of Section B.

35. For "Import quotas", the information required is whether the country has established an import quota for each controlled substance for the reporting year. For example, if during the reporting year licenses have been issued for importation of an actual amount of controlled substances, the actual amount should be entered in the column "Import quotas".

36. In cases where imports of a specific controlled substance are banned, the date of the ban should be provided in the "If imports are banned, indicate date ban commenced" column.

Section B1. Annex F (production of controlled substances)

37. This section is used to report production data on Annex F (HFC) controlled substances, including HFC-23 (use) as shown in the table below:

SECTION B1. ANNEX F - DATA ON PRODUCTION OF CONTROLLED SUBSTANCES (METRIC TONNES)

NOTE: Data entry is required in UNSHADED cells only

Substances	Pure	Blends								Total	Remarks
		R-404A	R-407A	R-407C	R-410A	R-507A	R-508B	Others[1]	Others[1]		
Annex F											
Controlled Substances											
HFC-32	0.00		0.00	0.00	0.00			0.00	0.00	0.00	
HFC-41	0.00							0.00	0.00	0.00	
HFC-125	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	
HFC-134	0.00							0.00	0.00	0.00	
HFC-134a	0.00	0.00	0.00	0.00				0.00	0.00	0.00	
HFC-143	0.00							0.00	0.00	0.00	
HFC-143a	0.00	0.00				0.00		0.00	0.00	0.00	
HFC-152	0.00							0.00	0.00	0.00	
HFC-152a	0.00							0.00	0.00	0.00	
HFC-227ea	0.00							0.00	0.00	0.00	
HFC-236cb	0.00							0.00	0.00	0.00	
HFC-236ea	0.00							0.00	0.00	0.00	
HFC-236fa	0.00							0.00	0.00	0.00	
HFC-245ca	0.00							0.00	0.00	0.00	
HFC-245fa	0.00							0.00	0.00	0.00	
HFC-365mfc	0.00							0.00	0.00	0.00	
HFC-43-10mee	0.00							0.00	0.00	0.00	
HFC-23 (use)	0.00						0.00	0.00	0.00	0.00	
TOTAL	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	

1 Please include blends that are produced using controlled substance in separate columns; include use data for these blends in Section B.

Note:

Please include individual component quantity for each of the blends (e.g., HFC-125 in R-410A) in the relevant cells, when blends are produced in the country.

When blends are imported in the country and/or exported from the country, please include that data in Section B against appropriate row.

Please ensure accurate calculation of components when blends are produced, based on standard composition ratios.

38. If a country is producing Annex F (HFCs) controlled substances, this section is required in order to fill in Section B.

39. Data should be provided in **metric tonnes only** and not in CO_2-equivalent.

40. The quantity of each component for each of the blends/mixtures should be provided in the relevant cells, if blends/mixtures are produced in the country.

41. If a blend/mixture not listed in the above table is used, please indicate the name of the blend/mixture in the "Others" row and indicate the percentage of each constituent controlled substance of the reported blend in the "Remarks" column.

42. If blends/mixtures are produced, accurate calculation of the components should be provided, based on the standard composition ratios listed in Appendix I.

43. For production of pure controlled substances, the amount in column "Pure (A)" should be included in the "Production" column of Section B under individual controlled substances.

44. For production of blends/mixtures of controlled substances, the amount in row "TOTAL (B)" should be included in the "Production" column of Section B under individual blends/mixtures.

45. HFC-23 destroyed and used as feedstock should not be included in production.

Section C. Prices of HCFCs, HFCs, alternatives and energy

46. This section is used to report the prices of HCFCs, HFCs, alternatives and energy, as shown in the table below:

SECTION C: PRICE OF HCFCs, HFCs, ALTERNATIVES AND ENERGY

SECTION C.1. AVERAGE ESTIMATED PRICE OF HCFCs, HFCs AND ALTERNATIVES (US $/kg)

Description	Previous year price (prefilled - online submission, if available)	FOB prices	Retail prices	Remarks
HCFCs				
HCFC-22	0.00	0.00	0.00	
HCFC-141b	0.00	0.00	0.00	
HCFC-142b	0.00	0.00	0.00	
HCFC-123	0.00	0.00	0.00	
HCFC-124	0.00	0.00	0.00	
HCFC-133	0.00	0.00	0.00	
HCFC-225	0.00	0.00	0.00	
HCFC-225ca	0.00	0.00	0.00	
HCFC-225cb	0.00	0.00	0.00	
HCFC-141b in imported pre-blended polyol	0.00	0.00	0.00	
HFCs				
HFC-23 (use)	0.00	0.00	0.00	
HFC-32	0.00	0.00	0.00	
HFC-41	0.00	0.00	0.00	
HFC-125	0.00	0.00	0.00	
HFC-134	0.00	0.00	0.00	
HFC-134a	0.00	0.00	0.00	
HFC-143	0.00	0.00	0.00	
HFC-143a	0.00	0.00	0.00	
HFC-152	0.00	0.00	0.00	
HFC-152a	0.00	0.00	0.00	
HFC-227ea	0.00	0.00	0.00	
HFC-236cb	0.00	0.00	0.00	
HFC-236ea	0.00	0.00	0.00	
HFC-236fa	0.00	0.00	0.00	
HFC-245ca	0.00	0.00	0.00	
HFC-245fa	0.00	0.00	0.00	
HFC-365mfc	0.00	0.00	0.00	
HFC-43-10mee	0.00	0.00	0.00	
HFC-245fa in imported pre-blended polyol	0.00	0.00	0.00	
HFC-365mfc in imported pre-blended polyol	0.00	0.00	0.00	
R-404A	0.00	0.00	0.00	
R-407A	0.00	0.00	0.00	
R-407C	0.00	0.00	0.00	
R-410A	0.00	0.00	0.00	
R-507A	0.00	0.00	0.00	
R-508B	0.00	0.00	0.00	
Alternatives				
Isobutane (HC-600a)	0.00	0.00	0.00	
Propane (HC-290)	0.00	0.00	0.00	
Pentane	0.00	0.00	0.00	
Cyclopentane	0.00	0.00	0.00	
Methyl formate	0.00	0.00	0.00	
Other alternatives (Optional):	0.00	0.00	0.00	
	0.00	0.00	0.00	

SECTION C.2. AVERAGE ESTIMATED PRICE OF ENERGY COST US $/KWH (OR US $ PER UNIT) , IF AVAILABLE

Description	Previous year price (prefilled - online submission, if available)	kWH per capita[1]	US $/KWH (or US $ per unit)	Remarks
	0.00	0.00	0.00	
	0.00	0.00	0.00	

1 http://data.worldbank.org/indicator/EG.USE.ELEC.KH.PC could be visited for data collection

47. Data should be provided for retail and freight on board (FOB) prices. Regarding FOB prices, the Executive Committee has requested the Governments to report, on a voluntary basis, the average import FOB price for each controlled substance and controlled substances substitute in the revised CP format (decision 68/4(b)(iv)).

48. In Section C.1, the average estimated retail prices of HCFCs, HFCs and alternatives should be provided, in US dollars per kilogramme. Most suppliers of alternatives will have a price list, and it can be collected, and the average price calculated. If the amount is in local currency, official rates of currency

exchange should be used when converting the prices to US dollars. This will be helpful to compare the pricing gathered with existing global prices of substances to observe price differences.

49. In Section C.2, the average estimated price of energy costs should be provided in kilowatt per hour, if available.

50. Additional information can be provided in the "Remarks" column.

Section D. Annex F, Group II – Data on HFC-23 generation

51. This section should be provided if the country generated HFC-23 from any facility that produced (manufactured) Annex C, Group I or Annex F substances.

SECTION D. ANNEX F, GROUP II - DATA ON HFC-23 GENERATION (METRIC TONNES)

NOTE: Fill in this form only if your country generated HFC-23 from any facility that produced (manufactured) Annex C Group I or Annex F substances

	Captured for all uses[1]	Captured for feedstock uses within your country[2]	Captured for destruction[2]
HFC-23[1]			

1 HFC-23 generation that is captured, whether for destruction, feedstock or any other use, shall be reported in this form

2 Amounts of HFC-23 captured for destruction or feedstock use will not be counted as production as per Article 1 of the Montreal Protocol.

52. The total HFC-23 by-products captured for all uses, i.e. destruction, feedstock or any other use should be reported in this section. Amounts of HFC-23 by-products captured for destruction or feedstock use will not be counted as production as per Article 1 of the Montreal Protocol.

53. In providing data on "Captured for all uses", the quantity for "Captured for feedstock uses within your country", or "Captured for destruction" should not be deducted. The column on production "Pure (A)" in Section B1 for HFC-23 (use) should include the data on HFC-23 captured for all uses minus the amount captured for feedstock uses within the country and the amount used for destruction.

Section E. Annex F, Group II (HFC-23 emissions)

54. This section should be provided only for countries that had generated HFC-23 from any facility that produced (manufactured) Annex C, Group I or Annex F substances. The information required in the columns that are shaded in grey is provided on a voluntary basis.

SECTION E. ANNEX F, GROUP II - DATA ON HFC-23 EMISSIONS (METRIC TONNES)

NOTE: Fill in this form only if your country generated HFC-23 from any facility that produced (manufactured) Annex C Group I or Annex F substances

	Columns shaded in grey are voluntary							
Facility name or identifier	Total amount generated[1]	Amount generated and captured[2]			Amount used for feedstock without prior capture[3]	Amount destroyed without prior capture[4]	Amount of generated emissions	Remarks
		For all uses	For feedstock use in your country	For destruction				
Total	0.00	0.00	0.00	0.00	0.00	0.00		

1 "Total amount generated" refers to the total amount whether captured or not. The sum of these amounts is not to be reported under Section D.

2 The sums of these amounts are to be reported under Section D.

3 Amount converted to other substances in the facility. The sum of these amounts is not to be reported under Section D.

4 Amount destroyed in the facility.

54. If there were no emissions from a production facility, that production facility should be included in the data form and zero should be reported in the emissions column. The "Total amount generated" of HFC-23 refers to the total amount, whether captured or not; this amount should not be reported under Section D. It is the total amount for each column under "Amount generated and captured" that should be reported under Section D.

55. The "Amount used for feedstock without prior capture" column refers to the amount converted to other substances in the specified facilities, and the sum of those amounts should not be reported under Section D.

56. The "Amount destroyed without prior capture" column refers to the amounts destroyed in the specified facilities and the sum of those amounts should not be reported under Section D.

Section F: Comments by the bilateral/implementing agency

57. This section is very important. Countries should send the completed forms to the relevant bilateral or implementing agency to ensure the accuracy of the data, by, for example, cross-checking the consumption and production data reported in the CP data forms against the consumption and production data reported on ongoing projects proposals or sector plans.

Appendix I

Composition of blends (mixtures of controlled substances)[2]

Mixtures	Composition											
	Component 1		Component 2		Component 3		Component 4		Component 5		Component 6	
Zeotropic mixtures												
R-401A	HCFC-124	34%	HCFC-22	53%	HFC-152a	13%						
R-401B	HCFC-124	28%	HCFC-22	61%	HFC-152a	11%						
R-401C	HCFC-124	52%	HCFC-22	33%	HFC-152a	15%						
R-402A	HC-290	2%	HCFC-22	38%	HFC-125	60%						
R-402B	HC-290	2%	HCFC-22	60%	HFC-125	38%						
R-403A	HC-290	5%	HCFC-22	75%	PFC-218	20%						
R-403B	HC-290	5%	HCFC-22	56%	PFC-218	39%						
R-404A	HFC-125	44%	HFC-134a	4%	HFC-143a	52%						
R-405A	HCFC-142b	6%	HCFC-22	45%	HFC-152a	7%	PFC-C318	43%				
R-406A	HC-600a	4%	HCFC-142b	41%	HCFC-22	55%						
R-407A	HFC-125	40%	HFC-134a	40%	HFC-32	20%						
R-407B	HFC-125	70%	HFC-134a	20%	HFC-32	10%						
R-407C	HFC-125	25%	HFC-134a	52%	HFC-32	23%						
R-407D	HFC-125	15%	HFC-134a	70%	HFC-32	15%						
R-407E	HFC-125	15%	HFC-134a	60%	HFC-32	25%						
R-407F	HFC-125	30%	HFC-134a	40%	HFC-32	30%						
R-407G	HFC-125	2.50%	HFC-134a	95%	HFC-32	2.5%						
R-408A	HCFC-22	47%	HFC-125	7%	HFC-143a	46%						
R-409A	HCFC-124	25%	HCFC-142b	15%	HCFC-22	60%						
R-409B	HCFC-124	25%	HCFC-142b	10%	HCFC-22	65%						
R-410A	HFC-125	50%	HFC-32	50%								
R-410B	HFC-125	55%	HFC-32	45%								
R-411A	HO-1270	1.50%	HCFC-22	87.50%	HFC-152a	11%						
R-411B	HO-1270	3%	HCFC-22	94%	HFC-152a	3%						
R-412A	HCFC-142b	25%	HCFC-22	70%	PFC-218	5%						
R-413A	HC-600a	3%	HFC-134a	88%	PFC-218	9%						
R-414A	HC-600a	4%	HCFC-124	28.50%	HCFC-142b	16.5%	HCFC-22	51%				
R-414B	HC-600a	1.50%	HCFC-124	39%	HCFC-142b	9.50%	HCFC-22	50%				
R-415A	HCFC-22	82%	HFC-152a	18%								
R-415B	HCFC-22	25%	HFC-152a	75%								
R-416A	HC-600	1.50%	HCFC-124	39.50%	HFC-134a	59%						
R-417A	HC-600	3.40%	HFC-125	46.60%	HFC-134a	50%						
R-417B	HC-600	2.70%	HFC-125	79%	HFC-134a	18.3%						
R-417C	HC-600	1.70%	HFC-125	19.50%	HFC-134a	78.8%						
R-418A	HC-290	1.50%	HCFC-22	96%	HFC-152a	2.5%						
R-419A	HCE-170	4%	HFC-125	77%	HFC-134a	19%						
R-419B	HCE-170	3.50%	HFC-125	48.50%	HFC-134a	48%						
R-420A	HCFC-142b	12%	HFC-134a	88%								
R-421A	HFC-125	58%	HFC-134a	42%								
R-421B	HFC-125	85%	HFC-134a	15%								
R-422A	HC-600a	3.40%	HFC-125	85.10%	HFC-134a	11.5%						
R-422B	HC-600a	3%	HFC-125	55%	HFC-134a	42%						
R-422C	HC-600a	3%	HFC-125	82%	HFC-134a	15%						
R-422D	HC-600a	3.40%	HFC-125	65.10%	HFC-134a	31.5%						
R-422E	HC-600a	2.70%	HFC-125	58%	HFC-134a	39.3%						
R-423A	HFC-134a	52.50%	HFC-227ea	47.50%								
R-424A	HC-600	1%	HC-600a	0.90%	HC-601a	0.6%	HFC-125	50.5%	HFC-134a	47%		
R-425A	HFC-134a	69.50%	HFC-227ea	12%	HFC-32	18.5%						
R-426A	HC-600	1.30%	HC-601a	0.60%	HFC-125	5.10%	HFC-134a	93%				
R-427A	HFC-125	25%	HFC-134a	50%	HFC-143a	10%	HFC-32	15%				
R-428A	HC-290	0.60%	HC-600a	1.90%	HFC-125	77.5%	HFC-143a	20%				
R-429A	HC-600a	30%	HCE-170	60%	HFC-152a	10%						
R-430A	HC-600a	24%	HFC-152a	76%								
R-431A	HC-290	71%	HFC-152a	29%								

[2] UNEP/OzL.Pro.30/11, Annex III, Appendix I, Section 11.

Mixtures	Composition											
	Component 1		Component 2		Component 3		Component 4		Component 5		Component 6	
R-434A	HC-600a	2.80%	HFC-125	63.20%	HFC-134a	16%	HFC-143a	18%				
R-435A	HCE-170	80%	HFC-152a	20%								
R-437A	HC-600	1.40%	HC-601	0.60%	HFC-125	19.5%	HFC-134a	78.5%				
R-438A	HC-600	1.70%	HC-601a	0.60%	HFC-125	45%	HFC-134a	44.20%	HFC-32	8.5%		
R-439A	HC-600a	3%	HFC-125	47%	HFC-32	50%						
R-440A	HC-290	0.60%	HFC-134a	1.60%	HFC-152a	97.8%						
R-442A	HFC-125	31%	HFC-134a	30%	HFC-152a	3%	HFC-227ea	5%	HFC-32	31%		
R-444A	HFC-152a	5%	HFC-32	12%	HFO-1234ze (E)	83%						
R-444B	HFC-152a	10%	HFC-32	41.50%	HFO-1234ze (E)	48.50%						
R-445A	HFC-134a	9%	R-744	6%	HFO-1234ze (E)	85%						
R-446A	HC-600	3%	HFC-32	68%	HFO-1234ze (E)	29%						
R-447A	HFC-125	3.50%	HFC-32	68%	HFO-1234ze (E)	28.50%						
R-447B	HFC-125	8%	HFC-32	68%	HFO-1234ze (E)	24%						
R-448A	HFC-125	26%	HFC-134a	21%	HFO-1234ze (E)	7%	HFO-1234yf	20%	HFC-32	26%		
R-449A	HFC-125	24.70%	HFC-134a	25.70%	HFC-32	24.30%	HFO-1234yf	25.3%				
R-449B	HFC-125	24.30%	HFC-134a	27.30%	HFC-32	25.20%	HFO-1234yf	23.2%				
R-449C	HFC-125	20%	HFC-134a	29%	HFC-32	20%	HFO-1234yf	31%				
R-450A	HFC-134a	42%	HFO-1234ze (E)	58%								
R-451A	HFC-134a	10.20%	HFO-1234yf	89.80%								
R-451B	HFC-134a	11.20%	HFO-1234yf	88.80%								
R-452A	HFC-125	59%	HFC-32	11%	HFO-1234yf	30%						
R-452B	HFC-125	7%	HFC-32	67%	HFO-1234yf	26%						
R-452C	HFC-125	61%	HFC-32	12.50%	HFO-1234yf	26.5%						
R-453A	HC-600	0.60%	HC-601a	0.60%	HFC-125	20%	HFC-134a	53.80%	HFC-227ea	5%	HFC-32	20%
R-454A	HFC-32	35%	HFO-1234yf	65%								
R-454B	HFC-32	68.90%	HFO-1234yf	31.10%								
R-454C	HFC-32	21.50%	HFO-1234yf	78.50%								
R-455A	HFC-32	21.50%	HFO-1234yf	75.50%	R-744	3%						
R-456A	HFC-134a	45%	HFC-32	6%	HFO-1234ze (E)	49%						
R-457A	HFC-152a	12%	HFC-32	18%	HFO-1234yf	70%						
R-458A	HFC-125	4%	HFC-134a	61.40%	HFC-227ea	13.5%	HFC-236fa	0.60%	HFC-32	20.50%		
R-459A	HFC-32	68%	HFO-1234yf	26%	HFO-1234ze (E)	6%						
R-459B	HFC-32	21%	HFO-1234yf	69%	HFO-1234ze (E)	10%						
R-460A	HFC-125	52%	HFC-134a	14%	HFO-1234ze (E)	22%	HFC-32	12%				
R-460B	HFC-125	25%	HFC-134a	20%	HFO-1234ze (E)	27%	HFC-32	28%				
Azeotropic mixtures												
R-500	CFC-12	73.80%	HFC-152a	26.2%								
R-501	CFC-12	25%	HCFC-22	75%								
R-502	CFC-115	51.20%	HCFC-22	48.8%								
R-503	CFC-13	59.90%	HFC-23	40.10%								
R-504	CFC-115	51.80%	HFC-32	48.20%								
R-505	CFC-12	78%	HCFC-31	22%								
R-506	CFC-114	45%	HCFC-31	55%								
R-507A (AZ-50)	HFC-125	50%	HFC-143a	50%								
R-508A	HFC-23	39%	PFC-116	61%								

Mixtures	Composition											
	Component 1		Component 2		Component 3		Component 4		Component 5		Component 6	
R-508B	HFC-23	46%	PFC-116	54%								
R-509 (TP5R2)	HCFC-22	46%	PFC-218	54%								
R-509A	HCFC-22	44%	PFC-218	56%								
R-512A	HFC-134a	5%	HFC-152a	95%								
R-513A (XP10/DR-11)	HFC-134a	44%	HFO-1234yf	56%								
R-513B	HFC-134a	41.50%	HFO-1234yf	58.50%								
R-515A	HFC-227ea	12%	HFO-1234ze (E)	88%								
Other mixtures												
FX 20	HFC-125	45%	HCFC-22	55%								
FX 55	HCFC-22	60%	HCFC-142b	40%								
D 136	HCFC-22	50%	HCFC-124	47%	HC-600a	3%						
Daikin Blend	HFC-23	2%	HFC-32	28%	HCFC-124	70%						
FRIGC	HCFC-124	39%	HCFC-134a	59%	HC-600a	2%						
Free Zone	HCFC-142b	19%	HFC-134a	79%	Lubricant	2%						
GHG-HP	HCFC-22	65%	HCFC-142b	31%	HC-600a	4%						
GHG-X5	HCFC-22	41%	HCFC-142b	15%	HFC-227ea	40%	HC-600a	4%				
NARM-502	HCFC-22	90%	HFC-152a	5%	HFC-23	5%						
NASF-S-III[3]	HCFC-22	82%	HCFC-123	4.75%	HCFC-124	9.50%	HC-600a	3.75%				

[3] A halon alternative.