

UNEP/OzL.Pro/ExCom/83/7  
 1 May 2019

**COUNTRY PROGRAMME DATA AND PROSPECTS FOR COMPLIANCE**

# **Introduction**

# A total of 147 countries are currently classified as Article 5 (A5) Parties, including the Republic of Korea, Singapore, and the United Arab Emirates. The three countries[[1]](#footnote-1) have been urged not to request funding from the Multilateral Fund for the phase-out of their ODS consumption and production (where applicable), and therefore are not required to submit the mandatory progress report on the implementation of country programmes (CP).[[2]](#footnote-2) However, data from these countries is included in some parts of the report to ensure a global analysis of ODS production and consumption trends.

# Parties are encouraged to submit their Article (A7) data by 30 June, and no later than 30 September (decision XV/15). In addition, A5 parties are required to submit CP data eight weeks prior to the first meeting of the year of the Executive Committee, if possible, and no later than 1 May (decision 74/9(b)(iv)). Table 1 summarizes data reports submitted by A5 Parties between 2013 and 2018. All countries that submitted requests for funding to the 83rd meeting also submitted 2018 CP data, except Afghanistan, Bangladesh, Bhutan, Botswana, Burkina Faso, Chile, China, Cote d’Ivoire, Cuba, Djibouti, Eswatini (the Kingdom of), Gabon, Gambia (the), Guinea-Bissau, Honduras, Kuwait, Lebanon, Liberia, Mali, Mongolia, Morocco, Mozambique, Myanmar, Nicaragua, Nigeria, Pakistan, Philippines (the), Serbia, Sierra Leone, South Africa, Suriname, United Republic of Tanzania, Uruguay, Zambia and Zimbabwe.

**Table 1. A7 and CP reports submitted by A5 Parties (as of 9 April 2019)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Data** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** |
| A7 | 147 | 147 | 147 | 147 | 146 | 18 |
| CP | 144\* | 143\*\* | 143\*\* | 143\*\* | 143\*\* | 41 |

\* Except for the Central African Republic as there are 145 A5 countries.

\*\* Except for Yemen as there are 144 A5 countries (excluding Croatia).

Scope of the document

# This document consists of the following three parts:

## Part I: Status of and prospects for compliance of A5 countries: This section presents a summary of the status of licensing and quota systems, and the results of the analysis of the status of compliance with the 2013 freeze for HCFCs, the final phase-out of methyl bromide (MB) and TCA and the 10 per cent reduction of HCFCs by 2015, in the consumption and production sectors. It assumes that the latest consumption reported under A7 or CP reports has taken into account the phase-out from completed projects[[3]](#footnote-3)

## Part II: A5 countries subject to decisions by the Parties on compliance

## Part III: Data on the implementation of CPs for HCFCs[[4]](#footnote-4): This section presents an analysis on the data contained in CP data reports, including HCFC production versus consumption, sector distribution of HCFCs, other information extracted from CP reports and issues related to CP data reports (as only 41 CP data reports for 2018 were submitted as of 9 April 2019, the analysis is made only up to 2017[[5]](#footnote-5))

Part IV: Revised CP data report format

Recommendation

# This document also includes the following three annexes:

Annex I: MB consumption for quarantine and pre‑shipment (QPS) applications

Annex II: HCFC analysis

Annex III: Revised CP data report format for 2020 and beyond

PART I: STATUS OF AND PROSPECTS FOR COMPLIANCE OF A5 COUNTRIES

# **Licensing and quota systems**

# All countries have established licensing systems pursuant to Article 4B of the Montreal Protocol. With respect to HCFC licensing and quota systems, all Article 5 countries confirmed that an enforceable national system was in place and capable of ensuring the country’s compliance with the Montreal Protocol HCFC phase-out schedule.

**Production and consumption**

# The complete phase-out of production and consumption of MB and TCA for all A5 countries occurred on 1 January 2015, except for those countries where critical uses for MB were approved by the Parties. Therefore, Annex C Group I (HCFCs) substances are the only substances under the Montreal Protocol where consumption and production is still allowed.

Production sector

# MB is produced in China.[[6]](#footnote-6) An MB production closure phase-out plan was approved for China, providing for the country to produce at levels lower than those allowed under the Montreal Protocol.[[7]](#footnote-7) In 2017, 55.7 ODP tonnes of MB were produced in China, in line with decision XXVIII/7.

# There are seven A5 countries that produced HCFCs, as shown in Table 2. The aggregated production in 2017 was 27 per cent below the aggregated production baseline.

**Table 2. HCFC production reported by A5 countries under A7 data (ODP tonnes)**

| **Party** | **2017**  **consumption** | **Baseline** | **% reduction** |
| --- | --- | --- | --- |
| Argentina | 100.3 | 224.6 | 55.4 |
| China | 21,670.5 | 29,122.0 | 25.6 |
| Democratic People's Republic of Korea | 24.8 | 27.6 | 10.1 |
| India | 1,789.5 | 2,399.5 | 25.4 |
| Mexico | 190.1 | 697.0 | 72.7 |
| Republic of Korea | 305.6 | 395.1 | 22.6 |
| Venezuela (Bolivarian Republic of) | 15.0 | 123.1 | 87.8 |
| **Total** | **24,095.8** | **32,988.9** | **27.0** |

# The levels of the three main HCFCs produced in A5 countries are shown in Table 3. An HCFC production phase-out management plan (HPPMP) was approved for China.[[8]](#footnote-8)

# **Table 3. Production levels of the three main HCFCs (A7, CP, ODP tonnes)**

| **Party** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018\*** | **Baseline** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **HCFC-22** |  |  |  |  |  |  |  |  |  |  |
| Argentina | 233.8 | 221.0 | 230.5 | 107.3 | 125.7 | 134.5 | 95.8 | 100.3 | 65.6 | 224.6 |
| China | 17,124.6 | 17,968.1 | 20,050.1 | 15,866.9 | 16,497.0 | 13,391.0 | 14,086.3 | 13,445.7 |  | 29,122.0\*\* |
| Democratic People's Republic of Korea | 27.4 | 26.4 | 28.7 | 31.8 | 28.9 | 27.4 | 24.8 | 24.8 |  | 27.6 |
| India | 2,236.8 | 1,504.0 | 1,565.4 | 1,352.1 | 1,465.7 | 1,727.6 | 1,665.5 | 1,789.5 |  | 2,399.5 |
| Mexico | 694.0 | 649.7 | 298.3 | 317.1 | 223.5 | 160.9 | 166.8 | 190.1 | 424.5 | 697.0 |
| Republic of Korea | 414.9 | 392.4 | 306.7 | 357.6 | 364.7 | 348.9 | 240.3 | 305.6 |  | 395.1 |
| Venezuela (Bolivarian Republic of) | 119.2 | 134.3 | 160.3 | 121.2 | 86.1 | 37.2 | 14.3 | 15.0 |  | 123.1 |
| Total HCFC-22 | 20,850.8 | 20,895.9 | 22,639.9 | 18,153.9 | 18,791.7 | 15,827.6 | 16,293.8 | 15,871.0 | 490.1 | 32,988.9 |
| **HCFC-141b** |  |  |  |  |  |  |  |  |  |  |
| China | 10,874.3 | 12,311.5 | 12,884.4 | 9,583.6 | 9,560.2 | 7,246.5 | 7,278.2 | 7,076.8 |  | \*\* |
| **HCFC-142b** |  |  |  |  |  |  |  |  |  |  |
| China | 1,979.2 | 1,759.8 | 1,440.4 | 1,102.0 | 1,076.8 | 1,224.3 | 1,110.5 | 1,115.5 |  | \*\* |
| **Total** | **33,704.2** | **34,967.1** | **36,964.7** | **28,839.6** | **29,428.7** | **24,298.3** | **24,682.6** | **24,063.3** | **490.1** | **32,988.9** |

\* Country programme data.

\*\* The HCFC production baseline is 29,122 ODP tonnes and includes all HCFCs produced by China, mainly HCFC‑22, HCFC‑141b and HCFC‑142b, and to a lesser extent HCFC-123 and HCFC-124.

Consumption sector

# *MB and TCA*

# Only three A5 countries[[9]](#footnote-9) have reported MB consumption above the 2015 Montreal Protocol compliance target in 2017 or 2018, as shown in Table 4. The Parties approved consumption of MB for critical uses for these countries.

**Table 4. MB consumption reported by A5 countries under A7 data (ODP tonnes)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Source** | **Year of latest consumption** | **Baseline** | **Latest consumption** |
| China\* | A7 | 2017 | 1,102.1 | 54.0 |
| South Africa\*\* | A7 | 2017 | 602.7 | 33.0 |

**\*** Allowable level of consumption of 55.79 ODP tonnes for 2017 per decision XXVIII/7 and 52.34 ODP tonnes for 2018 per decision XXIX/6.

**\*\*** Allowable level of consumption of 35.46 ODP tonnes for 2017 per decision XXVIII/7 and 27.39 ODP tonnes for 2018 per decision XXIX/6.

# Thirty-eight A5 countries reported MB consumption and two A5 countries reported MB production for QPS applications under A7 data, as shown in Annex I to the present document. The consumption for these countries is not eligible for funding.

# All A5 countries have reported zero consumption of TCA in 2016, 2017 or 2018.

*HCFC consumption*

# A total of 147 A5 countries have an established HCFC baseline for compliance, with an aggregated latest consumption level of 24,398.8 ODP tonnes (379,083.5 mt) of HCFCs, as shown in Table 5. The main HCFCs are: HCFC‑22 (66.7 per cent of the total consumption measured in ODP tonnes), HCFC-141b (28.6 per cent) and HCFC-142b (4.4 per cent).

**Table 5. Baseline and latest HCFC consumption data by type of HCFC under A7 data**

| **HCFC** | **Baseline** | | **Consumption** | | **% of total** |
| --- | --- | --- | --- | --- | --- |
| **Metric tonnes** | **ODP tonnes** | **Metric tonnes** | **ODP tonnes** | **(ODP tonnes)** |
| HCFC-123 | 2,337.0 | 46.7 | 2,614.7 | 52.3 | 0.2 |
| HCFC-124 | 1,270.7 | 28.0 | 474.6 | 10.4 | 0.0 |
| HCFC-141b | 107,871.6 | 11,865.9 | 63,473.2 | 6,982.1 | 28.6 |
| HCFC-142b | 33,195.5 | 2,157.7 | 16,628.8 | 1,080.9 | 4.4 |
| HCFC-22 | 394,654.7 | 21,706.0 | 295,823.0 | 16,270.3 | 66.7 |
| HCFC-225 | 30.4 | 2.1 | 26.2 | 1.8 | 0.0 |
| HCFC-225ca | 70.0 | 1.8 | 42.7 | 1.1 | 0.0 |
| HCFC-225cb | 20.9 | 0.7 | 0.3 | 0.0 | 0.0 |
| **Total** | **539,450.8** | **35,808.9** | **379,083.5** | **24,398.8** | **100.0** |
| HCFC-141b polyol\* | 5,283.6 | 581.2 | 4,690.8 | 516.0 |  |

\* HCFC-141b contained in imported pre-blended polyols, only available in CP data.

*HPMPs*

# All 145 countries[[10]](#footnote-10) have received financial assistance for the preparation of project proposals to phase out HCFCs. As a result, the Executive Committee has approved stage I of HPMPs for 144 countries and stage II for 34 countries, at a total value of US $1.36 billion (approved in principle) of which US $802.54 million has been disbursed to address compliance with the Montreal Protocol control levels as follows:

## Three countries (one low-volume-consuming (LVC) (Antigua and Barbuda) and two non‑LVC countries (Qatar and Yemen)) to address compliance up to 2015. Although these countries have not submitted a request for stage II, they are in compliance with the Montreal Protocol;

## One hundred and seven countries (62 LVC and 33 non-LVC countries, and the 12 Pacific Island Countries (PICs)) to address compliance up to 2020;

## Twenty-two countries to address compliance up to 2025; and

## Twelve LVC countries (Bhutan, Cambodia, Croatia[[11]](#footnote-11), Guyana, Kenya, Kyrgyzstan, Maldives, Mauritius, Namibia, Papua New Guinea, Saint Vincent and the Grenadines, and Seychelles), to completely phase out HCFCs between 2020 and 2035.

# Annex II to the present document includes an analysis of the latest reported HCFC consumption data and control measures addressed by approved HPMPs.

# One A5 country (Syrian Arab Republic[[12]](#footnote-12)) does not have an approved HPMP. However, funding was approved for the phase-out of 12.9 ODP tonnes of HCFC in the refrigeration and air-conditioning sector[[13]](#footnote-13) as a stand-alone project outside its HPMP, representing 9.6 per cent of the baseline of 135.0 ODP tonnes.

*Remaining HCFC consumption*

# Implementation of approved stages I and II of the HPMPs will result in the phase-out of approximately 61.5 per cent of the starting point for aggregate reduction of HCFC consumption and 86 per cent of the consumption of HCFC‑141b contained in imported pre-blended polyols. Table 6 shows the aggregate remaining HCFC consumption[[14]](#footnote-14) by type of HCFC in all A5 countries.

**Table 6. Total remaining HCFC consumption by substance (ODP tonnes)\***

| **HCFC** | **Baseline** | **Starting point** | **Approved** | **Remaining** | **% of approved** |
| --- | --- | --- | --- | --- | --- |
| HCFC-123 | 32.22 | 30.25 | 3.12 | 27.13 | 10.31 |
| HCFC-124 | 26.57 | 26.2 | 0.49 | 25.71 | 1.87 |
| HCFC-141 | 1.9 | 0.94 | 0.94 | 0.00 | 100.00 |
| HCFC-141b | 10,689.14 | 10,685.24 | 10,572.39 | 112.85 | 98.94 |
| HCFC-142b | 1,996.91 | 2,016.79 | 1,297.41 | 719.38 | 64.33 |
| HCFC-21 | 1.5 | 0.74 | 0.74 | 0 | 100.00 |
| HCFC-22 | 20,349.42 | 19,878.08 | 8,198.77 | 11,679.31 | 41.25 |
| HCFC-225 | 4.12 | 2.82 | 1.13 | 1.69 | 40.07 |
| HCFC-225ca | 0.5 | 0.42 | 0 | 0.42 | 0.00 |
| HCFC-225cb | 0.7 | 0.68 | 0 | 0.68 | 0.00 |
| **Total** | **33,102.98** | **32,642.16** | **20,074.99** | **12,567.17** | **61.50** |
| HCFC-141b polyol\*\* | 53.2 | 653.71 | 559.39 | 94.32 | 85.57 |

\* As of the 82nd meeting.

\*\* HCFC-141b contained in imported pre-blended polyols.

## **PART II: A5 COUNTRIES SUBJECT TO DECISIONS ON COMPLIANCE**

# At their Thirtieth Meeting, the Parties did not find any Article 5 countries in non-compliance with their obligations under the Montreal Protocol.

**PART III: DATA ON THE IMPLEMENTATION OF CPs FOR HCFCs**

# Since the 82nd meeting, country programme data has been revised for several countries based on the reviews of the Secretariat regarding data discrepancies with Article 7, project proposals and/or verification reports. The revisions have been reflected in the following tables.

**HCFC production versus consumption**

# Since 2010, the reported levels of the three main HCFCs produced in A5 countries have been above the levels of consumption except for HCFC‑141b in 2010, and HCFC‑142b in 2011, as shown in Table 7.

**Table 7. HCFC production versus consumption of the three main HCFCs (ODP tonnes)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **HCFC** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** |
| **Production** | | | | | | | | |
| HCFC-22 | 20,817.8 | 21,665.7 | 23,552.4 | 18,769.0 | 20,266.4 | 16,782.6 | 16,191.2 | 15,725.9 |
| HCFC-141b | 10,762.0 | 12,311.5 | 12,884.4 | 9,583.6 | 9,560.2 | 7,246.5 | 7,278.2 | 7,076.8 |
| HCFC-142b | 1,979.2 | 1,759.8 | 1,440.4 | 1,102.0 | 1,076.8 | 1,224.3 | 1,110.5 | 1,115.5 |
| **Consumption** | | | | | | | | |
| HCFC-22 | 20,783.8 | 19,847.6 | 22,572.0 | 17,805.6 | 17,486.6 | 15,186.8 | 15,395.4 | 15,089.9 |
| HCFC-141b | 10,846.7 | 11,978.2 | 11,735.9 | 8,981.3 | 8,752.9 | 6,771.4 | 6,383.7 | 6,311.1 |
| HCFC-142b | 1,977.3 | 1,827.9 | 1,439.3 | 1,014.5 | 770.0 | 889.8 | 725.4 | 773.5 |
| **Production – consumption** | | | | | | | | |
| HCFC-22 | 34.0 | 1,818.1 | 980.4 | 963.4 | 2,779.8 | 1,595.8 | 795.8 | 636.0 |
| HCFC-141b | -84.7 | 333.3 | 1,148.5 | 602.3 | 807.3 | 475.1 | 894.5 | 765.7 |
| HCFC-142b | 1.90 | -68.1 | 1.1 | 87.5 | 306.8 | 334.5 | 385.1 | 342.0 |

**Sector distribution of HCFC consumption**

# Table 8 presents the sector distribution of aggregated HCFC consumption for the period 2009 to 2017, where countries are grouped as follows: China, as the largest consumer (and producer) of HCFCs; the 14 largest consuming countries (excluding China); and all other countries. In 2017, the three sectors with the largest consumption of HCFCs (measured in ODP tonnes) were the foam (37.2 per cent of the total), refrigeration servicing sectors (31.6 per cent) and the refrigeration manufacturing (29.1 per cent). As the phase-out of HCFCs in the foam and refrigeration manufacturing sectors progresses, the refrigeration servicing sector becomes more relevant.

**Table 8. Sector distribution of HCFC consumption by group of countries (ODP tonnes)**

| **Sector** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **China** | | | | | | | | | | |
| Aerosol |  | 59.6 | 70.5 | 95.4 | 137.8 | 186.2 | 180.4 | 189.4 |  |
| Foam | 7,475.8 | 8,388.5 | 9,576.0 | 9,031.0 | 7,473.9 | 7,404.0 | 5,522.7 | 5,872.8 | 6,220.8 |
| Fire-fighting |  |  |  |  |  |  |  |  |  |
| Refrigeration manufacturing | 6,227.6 | 6,795.0 | 6,740.3 | 6,586.7 | 6,014.3 | 5,602.0 | 4,951.7 | 5,107.1 | 5,106.2 |
| Refrigeration servicing | 3,814.0 | 3,982.0 | 3,827.0 | 4,857.8 | 3,103.8 | 3,161.7 | 2,412.0 | 2,638.3 | 2,881.4 |
| Solvent | 467.0 | 497.1 | 514.1 | 524.1 | 466.0 | 484.8 | 418.5 | 413.4 | 397.0 |
| Tobacco | 12.8 | 11.7 |  |  |  |  |  |  |  |
| **Total for China** | **17,997.1** | **19,733.8** | **20,727.8** | **21,094.9** | **17,195.8** | **16,838.7** | **13,485.3** | **14,221.1** | **14,605.4** |
| **14 largest A5 consuming countries\*** | | | | | | | | | | |
| Aerosol | 76.3 | 76.8 | 82.8 | 75.0 | 123.8 | 119.5 | 87.3 | 42.4 | 5.5 |
| Foam | 3,115.2 | 3,759.0 | 3,517.3 | 3,867.4 | 2,645.6 | 2,342.3 | 2,077.0 | 1,572.7 | 1,501.9 |
| Fire-fighting | 4.6 | 14.8 | 9.8 | 6.0 | 5.4 | 4.0 | 4.0 | 4.2 | 4.9 |
| Refrigeration manufacturing | 2,556.7 | 3,024.6 | 2,674.2 | 3,142.9 | 2,233.7 | 2,111.7 | 1,862.6 | 1,473.8 | 1,292.4 |
| Refrigeration servicing | 2,120.5 | 3,382.8 | 3,246.7 | 4,213.6 | 3,029.3 | 3,142.8 | 3,148.6 | 3,262.9 | 2,805.8 |
| Solvent | 0.0 | 43.3 | 80.0 | 76.3 | 43.3 | 38.5 | 37.1 | 29.6 | 53.9 |
| Tobacco |  |  |  |  |  |  |  |  |  |
| **Total 14 largest consuming countries** | **7,873.3** | **10,301.3** | **9,610.8** | **11,381.3** | **8,081.1** | **7,758.9** | **7,216.7** | **6,385.6** | **5,664.5** |
| **129 remaining A5 countries** | | | | | | | | | | |
| Aerosol | 0.1 | 1.4 | 0.1 | 0.2 | 0.7 | 0.4 | 0.3 | 0.1 | 0.5 |
| Foam | 1,361.7 | 1,079.0 | 1,061.5 | 1,266.0 | 963.2 | 903.8 | 859.0 | 818.6 | 722.5 |
| Fire-fighting | 2.9 | 8.2 | 9.4 | 13.3 | 8.8 | 11.3 | 14.1 | 11.1 | 7.7 |
| Refrigeration manufacturing | 600.8 | 636.9 | 703.8 | 401.4 | 314.3 | 289.4 | 248.3 | 235.6 | 224.7 |
| Refrigeration servicing | 2,144.3 | 2,477.2 | 2,178.1 | 2,361.7 | 1,984.3 | 1,909.9 | 1,757.1 | 1,592.3 | 1,504.3 |
| Solvent | 33.5 | 9.2 | 38.0 | 34.1 | 5.2 | 3.5 | 4.9 | 5.1 | 3.1 |
| Tobacco |  |  |  |  |  |  |  |  |  |
| **Total 129 remaining A5 countries** | **4,143.3** | **4,211.9** | **3,990.8** | **4,076.7** | **3,276.3** | **3,118.2** | **2,883.7** | **2,662.8** | **2,462.8** |
| **All A5 countries** | | | | | | | | | | |
| Aerosol | 76.4 | 137.8 | 153.4 | 170.5 | 262.2 | 306.1 | 268.0 | 232.0 | 6.0 |
| Foam | 11,952.7 | 13,226.4 | 14,154.8 | 14,164.4 | 11,082.6 | 10,650.1 | 8,458.8 | 8,264.1 | 8,445.2 |
| Fire-fighting | 7.5 | 23.1 | 19.1 | 19.4 | 14.2 | 15.3 | 18.1 | 15.2 | 12.6 |
| Refrigeration manufacturing | 9,385.1 | 10,456.5 | 10,118.3 | 10,131.0 | 8,562.2 | 8,003.0 | 7,062.7 | 6,816.5 | 6,623.3 |
| Refrigeration servicing | 8,078.8 | 9,842.0 | 9,251.8 | 11,433.1 | 8,117.4 | 8,214.4 | 7,317.7 | 7,493.5 | 7,191.6 |
| Solvent | 500.5 | 549.5 | 632.0 | 634.5 | 514.5 | 526.9 | 460.4 | 448.2 | 454.0 |
| Tobacco | 12.8 | 11.7 |  |  |  |  |  |  |  |
| **Total all A5 countries** | **30,013.7** | **34,247.0** | **34,329.4** | **36,552.9** | **28,553.2** | **27,715.9** | **23,585.8** | **23,269.5** | **22,732.7** |
| Percent of total for China (%) | 60.0 | 57.6 | 60.4 | 57.7 | 60.2 | 60.8 | 57.2 | 61.1 | 64.3 |
| Percent of total for 14 largest A5 consuming countries (%) | 26.2 | 30.1 | 28.0 | 31.1 | 28.3 | 28.0 | 30.6 | 27.5 | 24.9 |
| Percent of total for 129 remaining A5 countries (%) | 13.8 | 12.3 | 11.6 | 11.2 | 11.5 | 11.3 | 12.2 | 11.4 | 10.8 |

# \*Argentina, Brazil, Egypt, India, Indonesia, Iran (Islamic Republic of), Kuwait, Malaysia, Mexico, Nigeria, Saudi Arabia, South Africa, Thailand and Turkey.

# The sector distribution of the three main HCFCs consumed in A5 countries is presented in Table 9. The analysis shows a sustained reduction in the overall consumption of these substances.

# **Table 9. Sector distribution of the main HCFCs consumed in A5 countries (ODP tonnes)**

| **Sector** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **HCFC-22** |  |  |  |  |  |  |  |  |  |
| Aerosol | 42.4 | 95.7 | 103.9 | 124.9 | 116.4 | 150.0 | 134.2 | 132.0 | 0.3\*\*\*\* |
| Foam\* | 1,590.2 | 1,772.9 | 1,725.7 | 2,079.2 | 1,805.6 | 1,749.5 | 1,177.3 | 1,518.5 | 1,687.2 |
| Fire-fighting | 0.0 | 11.1 | 6.2 | 0.1 | 0.1 | 0.1 | 0.1 |  |  |
| Refrigeration manufacturing | 8,610.2 | 9,641.4 | 9,270.7 | 9,475.6 | 8,012.7 | 7,531.6 | 6,746.9 | 6,590.0 | 6,338.2 |
| Refrigeration servicing | 7,518.1 | 9,262.5 | 8,711.8 | 10,863.2 | 7,870.8 | 8,055.0 | 7,127.7 | 7,154.4 | 7,063.8 |
| Solvent | 32.2 | 0.3 | 29.3 | 29.0 |  | 0.3 | 0.7 | 0.6 | 0.4 |
| Tobacco |  |  |  |  |  |  |  |  |  |
| **Total HCFC-22** | **17,793.0** | **20,783.8** | **19,847.6** | **22,572.0** | **17,805.6** | **17,486.6** | **15,186.8** | **15,395.4** | **15,089.9** |
| **HCFC-141b** |  |  |  |  |  |  |  |  |  |
| Aerosol | 34.1 | 41.3 | 49.4 | 45.4 | 145.8 | 156.0 | 132.0 | 99.9 | 5.7\*\*\*\* |
| Foam | 7,947.9 | 9,376.2 | 10,412.3 | 10,355.0 | 7,712.9 | 7,554.8 | 5,828.1 | 5,522.9 | 5,547.5 |
| Fire-fighting |  | 4.2 | 6.0 | 9.3 | 6.7 | 7.6 | 9.3 | 5.2 | 6.3 |
| Refrigeration manufacturing\*\* | 749.0 | 789.6 | 814.7 | 629.6 | 529.6 | 447.9 | 294.2 | 204.8 | 264.9 |
| Refrigeration servicing | 125.9 | 77.7 | 98.7 | 96.4 | 75.7 | 65.5 | 53.6 | 107.6 | 35.9 |
| Solvent | 466.5 | 546.0 | 597.1 | 600.2 | 510.6 | 521.0 | 454.4 | 443.3 | 450.8 |
| Tobacco | 12.8 | 11.7 |  |  |  |  |  |  |  |
| **Total HCFC-141b** | **9,336.1** | **10,846.7** | **11,978.2** | **11,735.9** | **8,981.3** | **8,752.9** | **6,771.4** | **6,383.7** | **6,311.1** |
| **HCFC-142b** |  |  |  |  |  |  |  |  |  |
| Aerosol | 0.0 | 0.2 | 0.1 | 0.2 | 0.0 | 0.0 | 1.8 | 0.0 | 0.0 |
| Foam\*\*\* | 1,605.5 | 1,503.9 | 1,401.7 | 990.2 | 863.7 | 697.0 | 773.8 | 608.3 | 701.0 |
| Fire-fighting |  |  |  |  |  |  |  |  |  |
| Refrigeration manufacturing | 3.8 | 6.5 | 11.1 | 7.8 | 6.5 | 8.0 | 7.2 | 6.9 | 6.1 |
| Refrigeration servicing | 396.9 | 466.0 | 414.7 | 441.2 | 144.4 | 64.9 | 106.9 | 110.1 | 66.5 |
| Solvent | 0.7 | 0.6 | 0.3 | 0.2 |  |  |  |  |  |
| Tobacco |  |  |  |  |  |  |  |  |  |
| **Total HCFC-142b** | **2,006.9** | **1,977.3** | **1,827.9** | **1,439.3** | **1,014.5** | **770.0** | **889.8** | **725.4** | **773.5** |
| **Other HCFCs** | 877.7 | 639.3 | 675.7 | 805.6 | 751.7 | 706.4 | 737.8 | 765.0 | 558.2 |
| **Total** | **30,013.7** | **34,247.0** | **34,329.4** | **36,552.9** | **28,553.2** | **27,715.9** | **23,585.8** | **23,269.5** | **22,732.7** |

\* Used as co-blowing agent.

\*\* Used for insulation of refrigeration equipment.

\*\*\* Used for the production of extruded polystyrene foam.

\*\*\*\* The steep reduction between 2016 and 2017 is due to reduction of consumption in one country (China).

**Prices of HCFCs, HFCs and alternatives**

# The average prices of HCFCs, HFCs and alternatives reported by A5 countries since 2009 are summarized in Table 10[[15]](#footnote-15). The average prices provided by A5 countries are mainly from retailers and suppliers, which can include taxes and transportation costs. However, the price data in project proposals is freight on board (FOB)[[16]](#footnote-16) that is usually obtained from importers.

# At the 79th meeting, the Executive Committee requested the Secretariat to include in the “Overview of issues identified during project review” document issued at each meeting a summary of the prices of the controlled substances and the alternatives to be phased in, as communicated by enterprises requesting funding in any new project proposals, including clarification of any differences between those and the prices reported in the CP data reports (decision 79/4(c)).

**Table 10. Average price of HCFCs, HFCs and alternatives**

| **Substance** | **Average price (US $/kg)** | | | | | | | | | **Range (US $/kg)** | **Countries reporting price (2017)** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** |
| HCFC-22 | 7.35 | 8.61 | 9.28 | 10.06 | 9.24 | 10.08 | 10.07 | 9.25 | 10.18 | 1.45 (Thailand) to 42.00 (Oman) | 108 |
| HCFC-141b | 5.00 | 6.02 | 6.73 | 6.73 | 6.65 | 7.77 | 7.08 | 10.00 | 9.40 | 2.82 (China) to 32.08 (Belize) | 28 |
| Isobutane (HC‑600a) | 24.36 | 21.08 | 20.97 | 20.49 | 20.20 | 18.02 | 15.23 | 15.98 | 15.80 | 1.04 (China) to 60.00  (Cote d’Ivoire) | 66 |
| Propane (HC‑290) | 20.53 | 21.79 | 22.23 | 15.60 | 14.38 | 21.26 | 19.08 | 16.13 | 16.48 | 2.00 (Mexico) to 56.00 (Paraguay) | 36 |
| HFC-134a | 12.52 | 15.14 | 16.64 | 14.96 | 13.65 | 13.30 | 14.26 | 12.83 | 13.94 | 2.80 (Thailand) to 109.00 (Oman) | 108 |
| R-404A | 16.13 | 18.67 | 20.68 | 18.71 | 15.41 | 15.11 | 15.42 | 15.32 | 15.97 | 3.22 (Dominican Republic) to 60.00 (Eritrea) | 104 |
| R-407C | 16.95 | 20.80 | 21.36 | 19.04 | 16.06 | 15.19 | 13.97 | 12.71 | 13.94 | 3.20 (Iran (Islamic Republic of) and Thailand) to 60.00 (Cote d’Ivoire) | 86 |
| R-410A | 16.44 | 20.26 | 21.70 | 19.91 | 16.05 | 15.28 | 14.61 | 16.44 | 15.47 | 3.00 (Cameroon) to 65.00 (Eritrea) | 104 |
| R-507A | 17.48 | 17.55 | 20.78 | 15.84 | 13.59 | 12.21 | 11.65 | 11.76 | 13.33 | 3.22 (Dominican Republic (the)) to 39.00 (Cabo Verde) | 52 |

\* All zero entries were excluded.

**Issues related to CP data reports**

Timely submission of CP data reports

# In reviewing the timely submission of the CP data reports, the Secretariat noted progress for the year 2017 compared to 2016 as shown in Table 11. The Secretariat noted the efforts made by UNEP in following up on the submission of outstanding CP data reports, and keeping the Secretariat informed on progress on a regular basis.

**Table 11. Monthly rates of submission of CP data reports (as at 9 April 2019)**

| **Month** | **2011** | | **2012** | | **2013** | | **2014** | | **2015** | | **2016** | | **2017** | | **2018** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No\*** | **(%)\*** | **No\*** | **(%)\*** | **No\*** | **(%)\*** | **No\*** | **(%)\*** | **No\*** | **(%)\*** | **No\*** | **(%)\*** | **No\*** | **(%)\*** | **No\*** | **(%)\*** |
| January | 1 | 0.70 | 1 | 0.69 |  |  |  |  | 1 | 0.69 |  |  | 3 | 2.08 |  |  |
| February | 1 | 1.40 |  |  | 1 | 0.69 | 2 | 1.39 | 5 | 4.17 | 9 | 6.25 | 1 | 2.78 | 7 | 4.86 |
| March | 3 | 3.50 | 4 | 3.47 | 3 | 2.76 | 15 | 11.81 | 33 | 27.08 | 9 | 12.50 | 8 | 8.33 | 14 | 14.58 |
| April | 20 | 17.48 | 20 | 16.67 | 38 | 28.97 | 48 | 45.14 | 27 | 45.83 | 49 | 46.53 | 60 | 50.00 | 20 | 28.47 |
| May | 35 | 41.96 | 36 | 42.36 | 35 | 53.10 | 24 | 61.81 | 22 | 61.11 | 26 | 64.58 | 39 | 77.08 |  |  |
| June | 18 | 54.55 | 17 | 54.17 | 11 | 60.69 | 18 | 74.31 | 14 | 70.83 | 10 | 71.53 | 15 | 87.50 |  |  |
| July | 9 | 60.84 | 8 | 59.72 | 6 | 64.83 | 9 | 80.56 | 8 | 76.39 | 7 | 76.39 | 3 | 89.58 |  |  |
| August | 7 | 65.73 | 7 | 64.58 | 6 | 68.97 | 3 | 82.64 | 5 | 79.86 | 2 | 77.78 | 7 | 94.44 |  |  |
| September | 21 | 80.42 | 13 | 73.61 | 22 | 84.14 | 7 | 87.50 | 8 | 85.42 | 19 | 90.97 | 4 | 97.22 |  |  |
| October | 8 | 86.01 | 17 | 85.42 | 12 | 92.41 | 9 | 93.75 | 8 | 90.97 | 7 | 95.83 | 1 | 97.92 |  |  |
| November | 4 | 88.81 | 1 | 86.11 | 2 | 93.79 |  |  | 1 | 91.67 | 2 | 97.22 | 1 | 98.61 |  |  |
| December |  |  | 1 | 86.81 |  |  | 2 | 95.14 |  |  |  |  |  |  |  |  |
| After Dec. | 16 | 100.00 | 18 | 99.31 | 8 | 99.31 | 6 | 99.31 | 11 | 99.31 | 3 | 99.31 | 1 | 99.31 |  |  |
| **Total** | **143** |  | **143** |  | **144** |  | **143** |  | **143** |  | **143** |  | **143** |  | **41** |  |
| **Outstanding** | **0** |  | **1** |  | **1** |  | **1** |  | **1** |  | **1** |  | **1** |  | **103** |  |

(\*) No.: Number of A5 countries reporting. (%): cumulative reporting.

# The Executive Committee may wish to request the Secretariat to send letters to the Governments of countries with outstanding 2013 (Central African Republic (the)) and 2014 to 2017 (Yemen) CP data reports, and urge them to submit their CP data reports as soon as possible, as delays affect the ability of the Secretariat to have comprehensive data on ODS consumption and production levels.

Data discrepancies between CP data reports and A7 data

# In line with decision 82/7(c)(ii), 2015 data discrepancies between CP and Article 7 data for Syrian Arab Republic has been resolved.

# **PART IV: REVISED CP DATA REPORT FORMAT**

# Background

# The main template of the CP data report format currently used was adopted at the 46th meeting (decision 46/39). Since then, the format has been adjusted over time to adapt to the needs of the Multilateral Fund. The most recent updates related to:

## Including information relevant to the HCFC phase-out, and whether HCFC control measures were included in licensing systems (decision 60/4(b)(iv));

## Removing CFC, CTC and halon, and including a larger number of HCFCs and HCFC-141b contained in imported pre-blended polyols, starting with the 2012 CP data report due on 1 May 2013 (decision 63/4(b)(ii)); and

## Streamlining the report by not requiring information on Section B (regulatory, administrative and supportive actions), and parts of Sections C (training and recovery, recycling and reuse) and D (other qualitative information excluding licence and quota system) (decision 76/7(c)).

# At its 76th meeting, the Executive Committee also decided to consider revising the CP data report format at a future meeting, on the basis of the outcome of the surveys of ODS alternatives and the discussions on the HFC amendment (decision 76/7(d)).

# At its 81st meeting, the Executive Committee requested the Secretariat to prepare for consideration at the 83rd meeting, a draft of a revised CP data report format, incorporating Annex F substances, taking into account the revised forms for reporting data under Article 7 of the Montreal Protocol to be considered by the Thirtieth Meeting of the Parties[[17]](#footnote-17) (decision 81/4(b)(iii)).

# In response to decision 81/4(b)(iii), the Secretariat has prepared the draft revised CP data report format.

# Accordingly, the revised format included the main sectors and subsectors where HFCs are consumed, the most commonly HFC blends used, and the list of the 18 HFCs listed in Groups I and II of Annex F.

# The Secretariat is also proposing for consideration by the Executive Committee to remove from the CP data format reporting of use of Annex B Group III (TCA) and Annex E substances (methyl bromide) following the same approach it used at its 63rd meeting, when other ODSs (i.e., CFC, CTC and halon) that had reached the compliance phase-out year were removed.

# Information on prices of controlled substances and alternatives was maintained in the CP data format with space to include Free on Board (FOB) price and retail prices, and information on energy prices[[18]](#footnote-18) was included.

# At the Inter-agency coordination meeting,[[19]](#footnote-19) the revised CP data report format was presented to bilateral and implementing agencies for their inputs. Concerns were expressed about inclusion of HFC-23 uses and emissions. Implementing agencies suggested that if HFC-23 were to be funded in the future, reporting emissions might be necessary. Based on these concerns, sections on HFC-23 uses and emissions were also added into the draft revised CP data report format following the approach under Article 7 data reporting as approved at the Thirtieth Meeting of the Parties.

# The revised CP data report format contains six sections for consideration by the Executive Committee, as described in in Table 12. Annex III to the present report contains the actual sections of the CP data report.

# **Table 12. Revised CP data report format**

| **Section** | **Descriptions** |
| --- | --- |
| Annex C, Group I - Data on controlled substances | Data reporting for Annex C, Group I (HCFC) controlled substances |
| Annex F - Data on controlled substances | Data reporting for Annex F (HFC) controlled substances including HFC-23 (use) and HFC in imported pre‑blended polyol. The total quantity of the blend/mixture should be reported and not the quantities of each of their individual constituents |
| Price of HCFC, ODS alternatives and energy | Average estimated prices. Freight on board (FOB) price of substances usually obtained from importers; supplier and retailer price data can include taxes and transportation costs |
| Annex F, Group II - Data on HFC-23 generation | Quantification of HFC-23 by-product generation. The amounts of production or generated HFC-23 that is captured for use, feedstock, destruction or storage |
| Annex F, Group II - Data on HFC-23 emissions | Emissions of HFC-23, 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 from each manufacturing facility |
| Comments by bilateral/implementing agencies | Comments by bilateral and implementing agencies |

# The guidelines and the online reporting tool for the CP data will be developed after the approval of the draft revised CP data report format. During the development of the online reporting tool, Article 5 countries can submit the CP data using the Excel template. For countries that have ratified the Kigali Amendment, CP data reporting is mandatory for Annex F and will be implemented in 2020 for 2019 data reporting. For countries that have not ratified the Kigali Amendment, they are encouraged to submit data on Annex F on a voluntary basis.

**RECOMMENDATION**

# The Executive Committee may wish:

## To note:

### The information on country programme (CP) data and prospects for compliance contained in document UNEP/OzL.Pro/ExCom/83/7, including:

### That 143 countries had submitted 2017 CP data, 122 of them using the web‑based system;

### That, as at 9 April 2019, Yemen had not submitted 2014 to 2017 CP data;

## To request:

### The Secretariat to send letters to the Governments of countries with outstanding 2013 (Central African Republic (the)), 2014 (Yemen), 2015 (Yemen), 2016 (Yemen) and 2017 (Yemen) CP data reports, urging them to submit their reports as soon as possible; and

## To approve the draft revised format of CP data reports contained in Annex III to the present document, and request the Secretariat to finalize the “Practical Manual for Country Programme Data Reporting”, noting that the revised format will be used starting 2020 for 2019 CP data reporting.

**Annex I**

**MB CONSUMPTION AND PRODUCTION FOR QPS APPLICATIONS**

|  |  |  |
| --- | --- | --- |
| **Country** | **Year of Latest Consumption** | **QPS (ODP tonnes)** |
| **Consumption** |  |  |
| Argentina | 2017 | 24.12 |
| Brazil | 2017 | 17.03 |
| Chile | 2017 | 60.05 |
| China | 2017 | 816.42 |
| Costa Rica | 2017 | 24.00 |
| Dominican Republic (the) | 2018 | 13.20 |
| Egypt | 2017 | 282.00 |
| El Salvador | 2017 | 136.60 |
| Fiji | 2017 | 6.48 |
| Guatemala | 2017 | 14.58 |
| Honduras | 2017 | 19.20 |
| India | 2017 | 830.64 |
| Indonesia | 2018 | 53.70 |
| Iran (Islamic Republic of) | 2017 | 6.00 |
| Jamaica | 2017 | 1.80 |
| Jordan | 2017 | 6.00 |
| Kenya | 2017 | 5.28 |
| Kiribati | 2017 | 0.03 |
| Malaysia | 2017 | 105.60 |
| Mexico | 2017 | 300.89 |
| Nicaragua | 2017 | 11.52 |
| Pakistan | 2017 | 106.80 |
| Papua New Guinea | 2017 | 5.10 |
| Peru | 2017 | 1.20 |
| Philippines (the) | 2017 | 14.30 |
| Republic of Korea | 2017 | 269.52 |
| Saudi Arabia | 2017 | 7.20 |
| Singapore | 2017 | 39.84 |
| Solomon Islands | 2017 | 0.30 |
| South Africa | 2017 | 9.83 |
| Sri Lanka | 2017 | 17.00 |
| Suriname | 2017 | 0.60 |
| Thailand | 2017 | 112.86 |
| Turkey | 2017 | 41.58 |
| United Arab Emirates | 2017 | 25.80 |
| Uruguay | 2017 | 17.48 |
| Vanuatu | 2017 | 0.24 |
| Viet Nam | 2017 | 562.38 |
| **Production** |  |  |
| China | 2017 | 972.76 |
| India | 2017 | 1,906.81 |

**Annex II**

**HCFC ANALYSIS\***

| **Country** | **Source \*\*\*\*\*** | **Year of latest consumption** | **Baseline (ODP t)** | **Latest consumption** | **% over freeze** | **% over 10% reduction** | **Control addressed by HPMPs** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Afghanistan | A7 | 2017 | 23.6 | 18.5 | 0.0% | 0.0% | 35% by 2020 |
| Albania | A7 | 2017 | 6.0 | 3.0 | 0.0% | 0.0% | 35% by 2020 |
| Algeria | A7 | 2017 | 62.1 | 28.5 | 0.0% | 0.0% | 20% by 2017 |
| Angola | A7 | 2017 | 16.0 | 10.5 | 0.0% | 0.0% | 10% by 2015 and 67.5% by 2025 |
| Antigua and Barbuda | A7 | 2017 | 0.3 | 0.0 | 0.0% | 0.0% | 10% by 2015 |
| Argentina | CP | 2018 | 400.7 | 169.9 | 0.0% | 0.0% | 17.5% by 2017 and 50% by 2022 |
| Armenia | A7 | 2017 | 7.0 | 0.9 | 0.0% | 0.0% | 10% by 2015 and 66.6% by 2020 |
| Bahamas (the) | A7 | 2017 | 4.8 | 2.8 | 0.0% | 0.0% | 35% by 2020 |
| Bahrain | A7 | 2018 | 51.9 | 40.7 | 0.0% | 0.0% | 39% by 2023 |
| Bangladesh | A7 | 2017 | 72.6 | 63.3 | 0.0% | 0.0% | 30% by 2018 and 67.5% by 2025 |
| Barbados | A7 | 2018 | 3.7 | 1.4 | 0.0% | 0.0% | 35% by 2020 |
| Belize | A7 | 2017 | 2.8 | 2.0 | 0.0% | 0.0% | 35% by 2020 |
| Benin | CP | 2018 | 23.8 | 12.7 | 0.0% | 0.0% | 35% by 2020 |
| Bhutan | A7 | 2017 | 0.3 | 0.1 | 0.0% | 0.0% | 100% by 2025 |
| Bolivia (Plurinational State of) | A7 | 2017 | 6.1 | 2.1 | 0.0% | 0.0% | 35% by 2020 |
| Bosnia and Herzegovina | A7 | 2017 | 4.7 | 2.4 | 0.0% | 0.0% | 35% by 2020 |
| Botswana | A7 | 2017 | 11.0 | 8.6 | 0.0% | 0.0% | 35% by 2020 |
| Brazil | A7 | 2017 | 1,327.3 | 837.3 | 0.0% | 0.0% | 10% by 2015, 35% by 2020 and 45% by 2021 |
| Brunei Darussalam | CP | 2018 | 6.1 | 3.2 | 0.0% | 0.0% | 35% by 2020 |
| Burkina Faso | A7 | 2017 | 28.9 | 13.0 | 0.0% | 0.0% | 35% by 2020 |
| Burundi | A7 | 2017 | 7.2 | 2.1 | 0.0% | 0.0% | 35% by 2020 |
| Cabo Verde | CP | 2018 | 1.1 | 0.1 | 0.0% | 0.0% | 35% by 2020 |
| Cambodia | CP | 2018 | 15.0 | 5.0 | 0.0% | 0.0% | 100% by 2035 |
| Cameroon | A7 | 2018 | 88.8 | 38.1 | 0.0% | 0.0% | 20% by 2017 and 75% by 2025 |
| Central African Republic (the) | A7 | 2017 | 12.0 | 9.6 | 0.0% | 0.0% | 35% by 2020 |
| Chad | CP | 2018 | 16.1 | 10.3 | 0.0% | 0.0% | 35% by 2020 |
| Chile | A7 | 2017 | 87.5 | 66.2 | 0.0% | 0.0% | 10% by 2015, 45% by 2020 and 65% by 2021 |
| China | A7 | 2017 | 19,269.0 | 14,604.7 | 0.0% | 0.0% | 10% by 2015 and 37.6% by 2020 |
| Colombia | CP | 2018 | 225.6 | 78.2 | 0.0% | 0.0% | 10% by 2015, 60% by 2020 and 65% by 2021 |
| Comoros (the) | A7 | 2018 | 0.1 | 0.1 | 0.0% | 0.0% | 35% by 2020 |
| Congo (the) | A7 | 2017 | 10.1 | 7.7 | 0.0% | 0.0% | 35% by 2020 |
| Cook Islands (the) | CP | 2018 | 0.1 | 0.0 | 0.0% | 0.0% | 35% by 2020 |
| Costa Rica | A7 | 2017 | 14.1 | 10.1 | 0.0% | 0.0% | 35% by 2020 |
| Cote d'Ivoire | A7 | 2017 | 63.8 | 47.1 | 0.0% | 0.0% | 35% by 2020 |
| Cuba | A7 | 2017 | 16.9 | 9.6 | 0.0% | 0.0% | 35% by 2020 |
| Democratic People's Republic of Korea (the)\*\* | A7 | 2017 | 78.0 | 69.2 | 0.0% | 0.0% | 15% by 2018 |
| Democratic Republic of the Congo (the) | CP | 2018 | 66.2 | 4.0 | 0.0% | 0.0% | 10% by 2017 |
| Djibouti | A7 | 2017 | 0.7 | 0.5 | 0.0% | 0.0% | 35% by 2020 |
| Dominica | A7 | 2017 | 0.4 | 0.1 | 0.0% | 0.0% | 35% by 2020 |
| Dominican Republic (the) | A7 | 2018 | 51.2 | 33.1 | 0.0% | 0.0% | 10% by 2015 and 40% by 2020 |
| Ecuador | A7 | 2018 | 23.5 | 15.5 | 0.0% | 0.0% | 35% by 2020 |
| Egypt | CP | 2018 | 386.3 | 285.6 | 0.0% | 0.0% | 25% by 2018 and 67.5% by 2025 |
| El Salvador | A7 | 2017 | 11.7 | 6.4 | 0.0% | 0.0% | 35% by 2020 |
| Equatorial Guinea | A7 | 2017 | 6.3 | 0.0 | 0.0% | 0.0% | 35% by 2020 |
| Eritrea | A7 | 2017 | 1.1 | 0.9 | 0.0% | 0.0% | 35% by 2020 |
| Eswatini (the Kingdom of) | A7 | 2017 | 1.7 | 0.8 | 0.0% | 0.0% | 35% by 2020 |
| Ethiopia | A7 | 2018 | 5.5 | 4.0 | 0.0% | 0.0% | 35% by 2020 |
| Fiji | A7 | 2017 | 5.7 | 3.7 | 0.0% | 0.0% | 35% by 2020 |
| Gabon | A7 | 2017 | 30.2 | 19.8 | 0.0% | 0.0% | 35% by 2020 |
| Gambia (the) | A7 | 2017 | 1.5 | 0.4 | 0.0% | 0.0% | 35% by 2020 |
| Georgia | CP | 2018 | 5.3 | 1.9 | 0.0% | 0.0% | 35% by 2020 |
| Ghana | A7 | 2017 | 57.3 | 19.5 | 0.0% | 0.0% | 35% by 2020 |
| Grenada | A7 | 2017 | 0.8 | 0.2 | 0.0% | 0.0% | 35% by 2020 |
| Guatemala | A7 | 2017 | 8.3 | 3.4 | 0.0% | 0.0% | 35% by 2020 |
| Guinea | A7 | 2017 | 22.6 | 2.5 | 0.0% | 0.0% | 35% by 2020 |
| Guinea-Bissau | A7 | 2017 | 2.8 | 2.0 | 0.0% | 0.0% | 35% by 2020 |
| Guyana | CP | 2018 | 1.8 | 1.1 | 0.0% | 0.0% | 10% by 2015, 97.5% by 2025 and 100% by 2030 |
| Haiti | A7 | 2017 | 3.6 | 2.2 | 0.0% | 0.0% | 35% by 2020 |
| Honduras | A7 | 2017 | 19.9 | 10.8 | 0.0% | 0.0% | 35% by 2020 |
| India | A7 | 2017 | 1,608.2 | 806.5 | 0.0% | 0.0% | 10% by 2015, 48% by 2020, 50% by 2021, 56% by 2022 and 60% by 2023 |
| Indonesia | A7 | 2018 | 403.9 | 235.6 | 0.0% | 0.0% | 20% by 2018, 37.5% by 2020 and 55% by 2023 |
| Iran (Islamic Republic of) | CP | 2018 | 380.5 | 163.0 | 0.0% | 0.0% | 10% by 2015 and 75% by 2023 |
| Iraq | A7 | 2018 | 108.4 | 92.7 | 0.0% | 0.0% | 13.82% by 2017 |
| Jamaica | A7 | 2017 | 16.3 | 4.0 | 0.0% | 0.0% | 35% by 2020 |
| Jordan | A7 | 2017 | 83.0 | 25.2 | 0.0% | 0.0% | 20% by 2017 and 50% by 2022 |
| Kenya | A7 | 2018 | 52.2 | 4.4 | 0.0% | 0.0% | 21.1% by 2017 and 100% by 2030 |
| Kiribati | A7 | 2017 | 0.1 | 0.0 | 0.0% | 0.0% | 35% by 2020 |
| Kuwait | A7 | 2017 | 418.6 | 295.9 | 0.0% | 0.0% | 39.2% by 2018 |
| Kyrgyzstan | A7 | 2017 | 4.1 | 1.4 | 0.0% | 0.0% | 10% by 2015, 97.5% by 2020 and 100% by 2025 |
| Lao People's Democratic Republic (the) | A7 | 2017 | 2.3 | 0.6 | 0.0% | 0.0% | 35% by 2020 |
| Lebanon | A7 | 2017 | 73.5 | 55.2 | 0.0% | 0.0% | 18% by 2017, 50% by 2020 and 75% by 2025 |
| Lesotho | A7 | 2017 | 3.5 | 0.7 | 0.0% | 0.0% | 35% by 2020 |
| Liberia | A7 | 2017 | 5.3 | 2.3 | 0.0% | 0.0% | 35% by 2020 |
| Libya\*\*\* | A7 | 2017 | 118.4 | 117.7 | 0.0% | 10.5% | 10% by 2018 |
| Madagascar | A7 | 2017 | 24.9 | 10.7 | 0.0% | 0.0% | 35% by 2020 |
| Malawi | CP | 2018 | 10.8 | 5.6 | 0.0% | 0.0% | 35% by 2020 |
| Malaysia | A7 | 2017 | 515.8 | 235.8 | 0.0% | 0.0% | 15% by 2016, 22.4% by 2019, 35% by 2020, 40% by 2021 and 42.9% by 2022 |
| Maldives | A7 | 2017 | 4.6 | 2.4 | 0.0% | 0.0% | 100% by 2020 |
| Mali | A7 | 2017 | 15.0 | 9.1 | 0.0% | 0.0% | 35% by 2020 |
| Marshall Islands (the) | A7 | 2017 | 0.2 | 0.0 | 0.0% | 0.0% | 35% by 2020 |
| Mauritania | A7 | 2017 | 20.5 | 16.0 | 0.0% | 0.0% | 67.5% by 2025 |
| Mauritius | A7 | 2017 | 8.0 | 5.8 | 0.0% | 0.0% | 100% by 2030 |
| Mexico | CP | 2018 | 1,148.8 | 321.1 | 0.0% | 0.0% | 30% by 2018 and 67.5% by 2022 |
| Micronesia (Federated States of) | A7 | 2017 | 0.2 | 0.0 | 0.0% | 0.0% | 35% by 2020 |
| Mongolia | A7 | 2017 | 1.4 | 0.6 | 0.0% | 0.0% | 35% by 2020 |
| Montenegro | A7 | 2018 | 0.8 | 0.2 | 0.0% | 0.0% | 35% by 2020 |
| Morocco | A7 | 2017 | 51.4 | 32.6 | 0.0% | 0.0% | 20% by 2017 |
| Mozambique | A7 | 2017 | 8.7 | 5.0 | 0.0% | 0.0% | 35% by 2020 |
| Myanmar | A7 | 2017 | 4.3 | 3.6 | 0.0% | 0.0% | 35% by 2020 |
| Namibia | A7 | 2017 | 8.4 | 2.7 | 0.0% | 0.0% | 100% by 2025 |
| Nauru | A7 | 2018 | 0.0 | 0.0 | 0.0% | 0.0% | 35% by 2020 |
| Nepal | A7 | 2017 | 1.1 | 0.6 | 0.0% | 0.0% | 35% by 2020 |
| Nicaragua | A7 | 2017 | 6.8 | 4.2 | 0.0% | 0.0% | 35% by 2020 |
| Niger (the) | A7 | 2017 | 16.0 | 11.9 | 0.0% | 0.0% | 35% by 2020 |
| Nigeria | A7 | 2017 | 344.9 | 265.8 | 0.0% | 0.0% | 10% by 2015, 35% by 2020 and 51.35% by 2023 |
| Niue | A7 | 2017 | 0.0 | 0.0 | 0.0% | 0.0% | 35% by 2020 |
| North Macedonia | CP | 2018 | 1.8 | 0.3 | 0.0% | 0.0% | 35% by 2020 |
| Oman | A7 | 2018 | 31.5 | 19.2 | 0.0% | 0.0% | 10% by 2015 and 35% by 2020 |
| Pakistan | A7 | 2017 | 248.1 | 206.8 | 0.0% | 0.0% | 10% by 2015 and 50% by 2020 |
| Palau | CP | 2018 | 0.2 | 0.1 | 0.0% | 0.0% | 35% by 2020 |
| Panama | CP | 2018 | 24.8 | 16.3 | 0.0% | 0.0% | 10% by 2015 and 35% by 2020 |
| Papua New Guinea | A7 | 2017 | 3.3 | 2.1 | 0.0% | 0.0% | 100% by 2025 |
| Paraguay | CP | 2018 | 18.0 | 12.9 | 0.0% | 0.0% | 35% by 2020 |
| Peru | CP | 2018 | 26.9 | 19.8 | 0.0% | 0.0% | 10% by 2015 and 67.5% by 2025 |
| Philippines (the) | A7 | 2017 | 162.0 | 112.3 | 0.0% | 0.0% | 10% by 2015, 35% by 2020 and 50% by 2021 |
| Qatar | A7 | 2017 | 86.9 | 68.5 | 0.0% | 0.0% | 20% by 2015 |
| Republic of Moldova (the) | A7 | 2017 | 1.0 | 0.0 | 0.0% | 0.0% | 10% by 2015 and 35% by 2020 |
| Rwanda | A7 | 2017 | 4.1 | 2.5 | 0.0% | 0.0% | 35% by 2020 |
| Saint Kitts and Nevis | A7 | 2017 | 0.5 | 0.2 | 0.0% | 0.0% | 35% by 2020 |
| Saint Lucia | A7 | 2017 | 1.1 | 0.6 | 0.0% | 0.0% | 35% by 2020 |
| Saint Vincent and the Grenadines | A7 | 2018 | 0.3 | 0.0 | 0.0% | 0.0% | 100% by 2025 |
| Samoa | A7 | 2018 | 0.3 | 0.0 | 0.0% | 0.0% | 35% by 2020 |
| Sao Tome and Principe | A7 | 2017 | 2.2 | 0.1 | 0.0% | 0.0% | 35% by 2020 |
| Saudi Arabia | A7 | 2017 | 1,468.7 | 1,060.2 | 0.0% | 0.0% | 40% by 2020 |
| Senegal | CP | 2018 | 36.2 | 15.1 | 0.0% | 0.0% | 35% by 2020 |
| Serbia | A7 | 2017 | 8.4 | 6.7 | 0.0% | 0.0% | 35% by 2020 |
| Seychelles | A7 | 2018 | 1.4 | 0.1 | 0.0% | 0.0% | 100% by 2025 |
| Sierra Leone | A7 | 2017 | 1.7 | 0.6 | 0.0% | 0.0% | 35% by 2020 |
| Solomon Islands | CP | 2018 | 2.0 | 0.2 | 0.0% | 0.0% | 35% by 2020 |
| Somalia | A7 | 2017 | 45.1 | 15.4 | 0.0% | 0.0% | 35% by 2020 |
| South Africa | A7 | 2017 | 369.7 | 122.2 | 0.0% | 0.0% | 35% by 2020 |
| South Sudan | A7 | 2017 | 4.1 | 2.9 | 0.0% | 0.0% | 35% by 2020 |
| Sri Lanka | A7 | 2017 | 13.9 | 9.1 | 0.0% | 0.0% | 35% by 2020 |
| Sudan (the) | CP | 2018 | 52.7 | 36.6 | 0.0% | 0.0% | 30% by 2017 and 75% by 2020 |
| Suriname | A7 | 2017 | 2.0 | 1.2 | 0.0% | 0.0% | 35% by 2020 |
| Syrian Arab Republic\*\*\*\* | A7 | 2017 | 135.0 | 98.4 | 0.0% | 0.0% |  |
| Thailand | A7 | 2017 | 927.6 | 404.6 | 0.0% | 0.0% | 15% by 2018, 55.8% by 2019, 57.9% by 2020 and 61.8% by 2023 |
| Timor-Leste | A7 | 2017 | 0.5 | 0.3 | 0.0% | 0.0% | 10% by 2015 and 78% by 2025 |
| Togo | A7 | 2018 | 20.0 | 14.2 | 0.0% | 0.0% | 35% by 2020 |
| Tonga | CP | 2018 | 0.1 | 0.0 | 0.0% | 0.0% | 35% by 2020 |
| Trinidad and Tobago | A7 | 2017 | 46.0 | 12.2 | 0.0% | 0.0% | 35% by 2020 |
| Tunisia | A7 | 2018 | 40.7 | 25.9 | 0.0% | 0.0% | 15% by 2018 |
| Turkey | A7 | 2017 | 551.5 | 18.3 | 0.0% | 0.0% | 86.4% by 2017 |
| Turkmenistan | A7 | 2017 | 6.8 | 2.6 | 0.0% | 0.0% | 35% by 2020 |
| Tuvalu | A7 | 2017 | 0.1 | 0.0 | 0.0% | 0.0% | 35% by 2020 |
| Uganda | A7 | 2017 | 0.2 | 0.0 | 0.0% | 0.0% | 35% by 2020 |
| United Republic of Tanzania (the) | A7 | 2017 | 1.7 | 1.2 | 0.0% | 0.0% | 35% by 2020 |
| Uruguay | A7 | 2017 | 23.4 | 16.7 | 0.0% | 0.0% | 10% by 2015 and 35% by 2020 |
| Vanuatu | A7 | 2017 | 0.3 | 0.0 | 0.0% | 0.0% | 35% by 2020 |
| Venezuela (Bolivarian Republic of) | A7 | 2017 | 207.0 | 17.1 | 0.0% | 0.0% | 10% by 2015 and 42% by 2020 |
| Viet Nam | A7 | 2017 | 221.2 | 197.6 | 0.0% | 0.0% | 10% by 2015 and 35% by 2020 |
| Yemen | A7 | 2016 | 158.2 | 92.3 | 0.0% | 0.0% | 15% by 2015 |
| Zambia | A7 | 2017 | 5.0 | 2.5 | 0.0% | 0.0% | 35% by 2020 |
| Zimbabwe | A7 | 2017 | 17.8 | 10.7 | 0.0% | 0.0% | 35% by 2020 |

(\*) Excluding the Republic of Korea, Singapore, and the United Arab Emirates which do not request assistance from the Multilateral Fund for their phase-out of ODSs.

(\*\*) The Democratic People's Republic of Korea’s latest consumption is below the consumption set in the plan of action in decision XXVI/15.

(\*\*\*) Libya’s latest consumption is below the consumption set in the plan of action in decision XXVII/11.

(\*\*\*\*) HPMP not yet approved.

(\*\*\*\*\*) CP data excluding HCFC-141b contained in imported pre-blended polyol.

**Annex III**

**REVISED COUNTRY PROGRAMME DATA REPORT FORMAT FOR 2020 AND BEYOND**

1. The aggregated HCFC baseline for compliance for the three countries amounts to 2,681.2 ODP tonnes. In addition, the Republic of Korea produces HCFC-22 with a baseline of 395.1 ODP tonnes. [↑](#footnote-ref-1)
2. CP data reports represent the sole source of information on the sector distribution of controlled substances in A5 countries. [↑](#footnote-ref-2)
3. Completed projects had up to December 2017 phased out 281,138 ODP tonnes of consumption and 201,277 ODP tonnes of production. The completed projects were valued at US $2.5 billion out of an approved total of approximately US $3.3 billion. [↑](#footnote-ref-3)
4. The Executive Committee requested the Secretariat to assess the HCFC compliance requirements for all A5 countries in the document Status reports and compliance, to serve as a guide for preparation of the business plan of the Multilateral Fund (decision 67/6(c)). [↑](#footnote-ref-4)
5. The analysis in document UNEP/OzL.Pro/ExCom/82/9 was also based on data reported for 2017. [↑](#footnote-ref-5)
6. The Republic of Korea also produced MB. [↑](#footnote-ref-6)
7. Decision 47/54. The Agreement between the Government and the Executive Committee allows China to produce MB for QPS applications, feedstock and critical uses approved by the Parties. [↑](#footnote-ref-7)
8. UNEP/OzL.Pro/ExCom/68/SGP-InS/2 and Add.1. Stage II for the HPPMP for China will continue to be discussed at the 83rd meeting by the Sub-group on the Production Sector. [↑](#footnote-ref-8)
9. A total of 100 A5 countries received financial assistance from the Multilateral Fund to phase out consumption and production (two countries) of MB. [↑](#footnote-ref-9)
10. Including Croatia. [↑](#footnote-ref-10)
11. Croatia became a non-Article 5 country in 2014, and completely phased out HCFCs by 2015. [↑](#footnote-ref-11)
12. Submission of stage I of the HPMP for Syrian Arab Republic has been included in the 2020 business plan. [↑](#footnote-ref-12)
13. Decision 62/39. [↑](#footnote-ref-13)
14. The remaining HCFC consumption eligible for funding depends on the starting point for aggregate reductions in HCFC consumption selected by each Article 5 country in their HPMP. [↑](#footnote-ref-14)
15. Several of the CP data reports submitted by Article 5 countries contain price data for both ODS and alternative substances. This information is provided on voluntary basis. [↑](#footnote-ref-15)
16. Decision 68/4(b)(iv) requested Governments to report, on a voluntary basis, the average import FOB price for each ODS and ODS substitute in the revised CP format. [↑](#footnote-ref-16)
17. Annex III of document UNEP/OzL.Pro.30/11 [↑](#footnote-ref-17)
18. As per paragraphs 61 and 63 of document UNEP/OzL.Pro/ExCom/74/56. [↑](#footnote-ref-18)
19. Montreal, 5-7 March 2019. [↑](#footnote-ref-19)