BRIEFING NOTE on Exemption Mechanisms under the Montreal Protocol

1. Scope of the briefing note

In 2015, at their Twenty-Seventh Meeting, the parties decided in decision XXVII/1 entitled "Dubai pathway on HFCs" to *"work within the Montreal Protocol to an HFC amendment in 2016 by first resolving challenges by generating solutions in the contact group on the feasibility and ways of managing HFCs"*. One of the challenges identified by parties is the *"exemption process and a mechanism for periodic review of alternatives including the consideration of availability or lack of availability of alternatives in all sectors in A5 countries and special needs for high ambient countries, based on all the elements listed in paragraph 1(a) of decision XXVI/9"*.

Decision XXII/1 further endorsed the concept of the need for an exemption for high ambient temperature countries.[1]

The purpose of this briefing note is to provide background information on the manner in which exemptions have been treated under the Montreal Protocol. The note:

- Describes the different exemption mechanisms utilized under the Montreal Protocol with reference to the relevant provisions of the Protocol and the decisions of the parties and the criteria upon which exemptions are granted;
- Outlines the existing key features of the Montreal Protocol that could help parties address the lack of alternatives and review the development of technologies and the availability of alternatives; and
- Describes the elements relevant to exemptions that have been raised in the amendment proposals submitted by a number of parties[2].

The information presented in this note is intended only as background for the parties. It is not meant to be exhaustive nor in any way prescriptive.

2. Different mechanisms for applications that lacked alternatives

The Montreal Protocol has developed and used various exemption mechanisms to address lack of suitable alternatives or allowed continuation of use where appropriate. Through such mechanisms the Montreal Protocol has ensured that the functioning of society is not disrupted while at the same time ensuring effective protection of the ozone layer.

In all cases, exemptions are granted by the Meetings of the Parties (MOPs). The different types of exemptions are:

- Essential use and critical use exemptions, authorized for specific named parties and quantities[3] after the total phase-out of controlled substances;

[1] Annex II, decision XXVII/1 on the Dubai pathway on HFCs

[2] The North American proposal put forward by Canada, Mexico and the United States of America: http://conf.montreal-protocol.org/meeting/oewg/oewg-37/presession/English/OEWG-37-3E.pdf; The Indian proposal put forward by India: http://conf.montreal-protocol.org/meeting/oewg/oewg-37/presession/English/OEWG-37-4E.pdf; The European Union proposal put forward by the European Union on behalf of its 29 member States: http://conf.montreal-protocol.org/meeting/oewg/oewg-37/presession/English/OEWG-37-5E.pdf; and the Island States proposal put forward by Kiribati, Marshal Islands, Mauritius, Micronesia (Federated States of), Palau, Philippines, Samoa and Solomon Islands: http://conf.montreal-protocol.org/meeting/oewg/oewg-37/presession/English/OEWG-37-6E.pdf

- Global exemption for laboratory & analytical uses, authorized for specific categories of uses; and
- Exemptions for process agent uses, authorized for specific applications.

In addition to the above categories of exemptions, a special mechanism was agreed by the parties for some parties with high consumption of methyl bromide used for fumigation of high-moisture dates. This mechanism enabled those parties to continue that use without risking being in non-compliance with the required reduction steps in the control measures until alternatives became available. All the exemptions are regarded as temporary and are subject to periodic review. Parties with exemptions are expected to minimize the use and emissions of the exempted controlled substances. Exemptions are eliminated when suitable alternatives become available.

Apart from the above, there are also situations where controlled substances are used as feedstock in chemical processes and in quarantine and pre-shipment applications. Controlled substances used for these purposes are excluded from the calculation of production and consumption. In the case of feedstock, the rationale for the exclusion was that the controlled substances used as feedstock would undergo chemical transformations and would therefore not be emitted to destroy the ozone layer. The rationale in the case of quarantine and pre-shipment use was the efficacy of methyl bromide in controlling quarantine pests and preventing spread of such pests that could have huge economic and environmental consequences.

2.1 Exemptions authorized for specific parties, uses and quantities of ODS

Essential use exemptions

For non-Article 5 parties, the control measures for CFCs, other fully halogenated CFCs, carbon tetrachloride and methyl chloroform (Articles 2A, 2C, 2D and 2E, respectively[4]) as well as for hydrobromofluorocarbons (Article 2G[5]) required a total phase-out of the production and consumption of those substances by I January 1996 and for halons (Article 2B[6]) by 1 January 1994. For Article 5 parties the phase out dates were many years later. The control measures included a provision permitting, after the total phase-out, the level of production and consumption necessary to satisfy uses agreed by the parties to be essential (see Box 1).

Box 1: Criteria for essentiality and conditions for authorizing essential use (paragraph 1 (a) and (b), Decision IV/25, 4th Meeting of the Parties (1992))

Use of a controlled substance should qualify as essential only if:

- It is necessary for health, safety or is critical for the functioning of society (encompassing cultural and intellectual aspects); and
- There are no available technically and economically feasible alternatives or substitutes that are acceptable from the standpoint of environment and health.

Production and consumption, if any, of controlled substances for essential uses should be permitted only if:

- All economically feasible steps have been taken to minimize the essential use and any associated emission of the controlled substance; and
- The controlled substance is not available in sufficient quantity and quality from existing stocks of banked or recycled controlled substances, also bearing in mind the developing countries' need for controlled substances.

[3] The Ozone Secretariat's online Data Access Centre holds a list of parties that have received authorisations for essential and critical uses, and the quantity of substances authorised.

[4] As adjusted and/or amended by the parties at their Second Meeting (London 1990), Fourth Meeting (Copenhagen 1992), and Eleventh Meeting (Beijing 1999).

[5] Included in the Copenhagen Amendment, 1992

[6] As adjusted by the parties at their Second Meeting (London 1990)

Requests for essential use exemptions by parties are considered annually.

- Parties submit essential use nominations by a set deadline and the nominations are then evaluated[7] by relevant Technical Option Committee(s) of the Technology and Economic Assessment Panel (TEAP)[8] based on the criteria and procedures in decision IV/25, supplemented by several further decisions of the parties on procedures and requirements[9].
- TEAP makes recommendations on the nominations for consideration by the parties.
- An essential use exemption is granted by the Meeting of the Parties to the nominating party for a specific quantity of a specific ODS for a specific time period of normally one year.
- A party granted an essential use exemption may produce or import the specified ozone depleting substance (ODS).

The ODS produced or imported for the authorised essential use must be reported in an accounting framework report that indicates how much was acquired, how much was used and how much remains as stocks. Essential use exemptions have been granted to parties for uses such as for metered-dose inhalers (MDIs), specific solvent uses, fire protection and aerospace industry applications. In 2016, the only essential use exemption requested is for carbon tetrachloride for a certain laboratory and analytical use.

In adopting controls for HCFCs, the parties did not include a provision for essential use exemptions but instead adopted a decision on a process that would allow future consideration of the need for essential use exemptions and possible adjustments to the allowance for servicing and further consideration of basic domestic needs[10]. In decision XXVII/5 adopted in 2015, the parties requested TEAP to conduct a study in 2016 on non-Article 5 issues related to essential uses, servicing and basic domestic needs if required at all[11] to enable better understanding of the issues so that the parties can take appropriate actions.

Critical use exemptions

Methyl bromide phase-out provisions (Article 2H and Article 5)[12] also permit production and consumption levels necessary to satisfy uses that are agreed by the parties to be critical uses. The criteria for determining whether a use is critical are set out in decision IX/6 (1997) (see Box 2).

Box 2: Criteria and conditions for authorizing critical use (paragraph 1(a) and 1(b), decision IX/6, 9th Meeting of the Parties (1997))

Use of methyl bromide should qualify as "critical" only if the nominating Party determines that:

- The specific use is critical because the lack of availability of methyl bromide for that use would result in a significant market disruption; and
- There are no technically and economically feasible alternatives or substitutes available to the user that are acceptable from the standpoint of environment and health and are suitable to the crops and circumstances of the nomination.

Production and consumption, if any, of methyl bromide for critical uses should be permitted only if:

- All technically and economically feasible steps have been taken to minimize the critical use and any

[7] The process of evaluation involves iterations between the TEAP and the nominating parties.

[8] The assessment is carried out by the relevant Technical Options Committee (TOC), e.g. Medical TOC for medical uses, and Chemicals (TOC) for aerospace uses. The two TOCs have been merged to form the Medical and Chemicals TOC. The TEAP makes the recommendation to the Meeting of the Parties.

[9] The relevant decisions that supplemented decision IV/25 on the procedures and requirements include decisions VIII/10, VIII/11, IX/19, XII/2, XV/5, XVI/12, XVII/5, XVIII/7, XVIII/16, XIX/13, and XX/3.

[10] Decision XIX/6 on "Adjustments to the Montreal Protocol with regard to Annex C, Group I, substances HCFCs

[11] Decision XXVII/5, 2015

[12] As adjusted by the Ninth Meeting of the Parties, Montreal, 1997

associated emission of methyl bromide;

- Methyl bromide is not available in sufficient quantity and quality from existing stocks of banked or recycled methyl bromide, also bearing in mind the developing countries' need for methyl bromide; and
- It is demonstrated that an appropriate effort is being made to evaluate, commercialize and secure national regulatory approval of alternatives and substitutes, taking into consideration the circumstances of the particular nomination and the special needs of Article 5 Parties, including lack of financial and expert resources, institutional capacity, and information. Non-Article 5 Parties must demonstrate that research programmes are in place to develop and deploy alternatives and substitutes. Article 5 Parties must demonstrate that feasible alternatives shall be adopted as soon as they are confirmed as suitable to the Party's specific conditions and/or that they have applied to the Multilateral Fund or other sources for assistance in identifying, evaluating, adapting and demonstrating such options.

The same decision requests TEAP to review nominations and make recommendations based on the above criteria. Over the years, the parties have taken several decisions[13] to supplement the criteria and procedure for granting critical uses, setting out additional requirements for parties submitting nominations and relevant information as well as requirements for the TEAP and its Methyl Bromide Technical Options Committee (MBTOC) in evaluating the nominations[14].

Similar to the essential use exemptions, the critical use exemptions are only applicable after the phase-out date. Critical use exemptions have been granted on an annual basis and have been authorized[15] only for specific locations where alternatives were not effective, not registered or not feasible and available to end-users, taking into account the specific local circumstances. Any requests for exemptions are assessed annually by TEAP and its MBTOC, and the Meeting of the Parties then takes a decision authorizing the exempted amounts with specific conditions, as appropriate.

The parties that were granted exemptions are required to report the production and consumption of methyl bromide for the authorized uses in their annual data report. In addition, those parties submit an accounting framework report indicating how much methyl bromide was acquired, how much was used and how much remains in stocks.

2.2 Global exemption for laboratory and analytical (L&A) uses

The parties have used a mechanism of a general, blanket exemption, called a global exemption, for ODS for laboratory and analytical uses which do not have alternatives. TEAP has been reviewing alternatives to L&A uses. Specific uses are removed from the global exemption by decisions of the parties once TEAP confirms that suitable alternatives are available.

Decision VI/9 (1994) defines a set of conditions that should be applied to exempt certain laboratory and analytical uses.[16] These were initially authorized for 2 years, i.e. 1996 and 1997, then by subsequent decisions of the parties[17] the global exemption was extended and specific applications were removed[18] as alternatives became available. Most recently, by decision XXVI/5 (2014), the global exemption was extended until 31 December 2021.

[13] Most notable decisions that impacted how the nominations should be composed, what additional information were required, and how they should be submitted and evaluated include decisions Ex.I/3, 4, 5 as well as decisions XVI/3, XVI/4, and XVI/6.

[14] The sensitivity and complexity of the issue led to the adoption of an elaborate set of working procedures and terms of reference for the MBTOC, as well as requirements for the nominating parties (see decisions XVI/4, Ex.1/4).

[15] Exemptions have been granted for uses such as soil fumigation for various crops (e.g. tomatoes, peppers melons) and nurseries (e.g. strawberries), and for fumigating commodities (e.g. cut flowers, ham and rice) and structures (e.g. flour mills and food processors).

[16] The conditions are contained in Annex II of the report of the Sixth Meeting of the Parties, 1994

[17] Decisions X/19, XV/8, XIX/18, XXI/6, XXII/7, XXIII/6 and XXVI/5

[18] Decisions VII/11, XI/15 and XIX/18

TEAP reviews annually the development and availability of L&A procedures that can be performed without using controlled substances[19], and reports to the parties.

Uses that are no longer exempted as part of the global exemption might still qualify and be authorized by the Meeting of the Parties for essential use exemption following the process described above.

2.3 Exemptions for process agent uses

In the mid-1990s, assessments were carried out by the TEAP and its Process Agent Task Force on the process agent uses of ozone depleting substances[20] and availability of alternatives. Parties also asked TEAP for recommendations on modalities and criteria for the continued use of controlled substances as process agents and on restricting their emissions. Based on that work, parties defined the process agent exemption in 1998 by decision X/14 that set the conditions for exemptions and defined the reporting requirements. The decision established Table A that lists process agent applications for which the controlled substances used are exempted from the calculation of production and consumption (Box 3).

Box 3: Some conditions for process agent use exemption (Decision X/14, 10th Meeting of the Parties (1998))

- The plants and installation were to be in operation before 1 January 1999 and the exemption to apply from 1 January 2002 provided that:
  - For non-Article 5 parties the emissions of controlled substances used had to be reduced to insignificant levels as specified in Table B that listed the make-up quantities and maximum emissions allowable;
  - For Article 5 parties the emissions of controlled substances used were to be reduced to levels agreed by the Executive Committee to be reasonably achievable in a cost-effective manner without undue abandonment of infrastructure.
- Parties were not to install or commission new plants using controlled substances as process agents after 30 June 1999, unless they were deemed essential according to essential use criteria under decision IV/25.

The incremental costs of a range of cost-effective measures, including, for example, process conversions, plant closures, emission control technologies and industrial rationalization (see section 3) were to be eligible for funding under the Multilateral Fund, in accordance with the rules and guidelines of the Executive Committee to be developed (decision X/14, paragraphs 5 and 6). Process-agent related projects/activities under the Multilateral Fund were implemented with a carbon tetrachloride phase-out, and a total of about US$120 million has been expended for process-agent related projects.

Decision X/14 also required that parties report[21] each year on their use of controlled substances as process agents including levels of emissions and containment technologies; and to include in their annual data report quantities of controlled substances produced or imported for process agent applications.

Process agent uses, availability of alternatives and emission reduction efforts and technologies are reviewed regularly by the TEAP. Tables A (applications) and B (make-up and emissions) of decision X/14 have been revised several times in subsequent decisions[22], based on the review and recommendations of the TEAP. Currently, there are 14 process use applications that are exempted and four parties that have process agent uses (Tables A and B, decision XXIII/7).

[19] In the case of methyl bromide L&A uses, parties have adopted in decision XVIII/15 a list of L&A uses for which methyl bromide may be used and TEAP monitors and reports on the methyl bromide L&A uses in every odd year.

[20] For the purposes of the Montreal Protocol, TEAP defined process agent as controlled substance that, because of its unique chemical and/or physical properties, facilitates an intended chemical reaction and/or inhibits an unintended chemical reaction (TEAP Process Agent Task Force report, April 1997). At the same time, the parties understand "process agents", for the purposes of decisions X/14, to mean the use of controlled substances listed in Table A.

[21] Decision XXI/3 (2009) clarified that annual reporting obligation will not apply once a party informs the Secretariat that they do not use controlled substances as process agents, until they start doing so.

[22] Table A of decision X/14 that lists exempted process agents uses were revised in decisions XV/6, XVII/7, XIX/15, XXI/3, XXII/8, and XXIII/7; Table B was revised in the three latter decisions. Two Article 5 parties having process agent applications were included in table B in 2010 with a specific make-up quantities and maximum emissions for each party.

2.4 Methyl bromide for high-moisture dates

In 2003, the parties adopted decision XV/12 on how to deal with a special case whereby methyl bromide was used for high moisture dates for which the MBTOC had explicitly acknowledged that there were no alternatives. A unique mechanism was devised in recognition of the fact that parties which consume a high percentage of their methyl bromide for high-moisture dates would not be able to comply with the reduction steps of the control measures for methyl bromide without production losses for that important cash crop for their countries. The key provisions of Decision XV/12 are summarized in Box 4.

Box 4: Key provisions of decision XV/12

- The Implementation Committee and the Meeting of the Parties should defer the consideration of compliance status of countries that use over 80% of methyl bromide consumption on high-moisture dates until two years after TEAP formally finds that alternatives to methyl bromide are available for this particular use;
- The relevant parties should not increase consumption of methyl bromide on products other than high-moisture dates beyond 2002 levels and to also minimize the use of methyl bromide for dates to the extent necessary for ensuring effective control of pests.
- The Executive Committee was requested to consider appropriate demonstration projects for alternatives on high-moisture dates, and to ensure that the results of those projects are shared with the TEAP.

Over the years, only one party exceeded its consumption limit and requested for the application of decision XV/12 for the years 2002, 2003, 2004 and 2005. In 2013 and 2014, the TEAP indicated that alternatives for high-moisture dates were available.

3. Other key features of the Montreal Protocol that helped parties to cope with lack of alternatives by ensuring ODS supply

Several decisions of the Meeting of the Parties have recognized the needs of parties, especially Article 5 parties, to access sufficient supplies of controlled substances to meet their needs as controlled substances are phased out. A report entitled, *"Meeting the needs of Article 5 parties for controlled substances during the grace and phase-out periods"*[23] was prepared by the Executive Committee of the Interim Multilateral Fund, and considered by the parties in 1992. Based on that report, the parties were requested under decision IV/29 to promote an adequate supply of controlled substances in order to meet the needs of the Article 5 parties.

Subsequent to decision IV/29, several other decisions[24] requested both TEAP and the Executive Committee to study whether the supply of ozone depleting substances would be sufficient to meet the quantity needed by Article 5 parties[25]. A good example is the case of ensuring supply of CFCs for manufacture of metered-dose inhalers (MDIs). Over the years TEAP carried out a number of studies[26] on the need for, feasibility of, optimal timing of, and quantities for a campaign production[27] of CFCs for MDIs for both Article 5 and non-Article 5 parties. While the campaign production was not authorized by decisions of the parties, the needs for controlled substances were met by using available stocks and through additional production by parties including by Article 5 parties.[28]

[23] UNEP/OzL.Pro/ExCom/8/25 and Add.1

[24] Decisions V/16, X/15, XV/2

[25] Decision IV/30 requested ExCom to estimate, on an ongoing basis, the amount of HCFCs required by A5 parties and the production available to meet those needs; and decision X/15 requested TEAP to assess the quantities of controlled substances that may be required and produced by Article 5 parties for 1999-2000 and the quantities that need to be produced and exported by non-Article 5 for the basic domestic needs of Article 5 parties for the same period.

[26] Decisions VIII/9, XII/2, XIII/10, XVIII/16, and XX/4.

[27] Campaign production means producing a bulk of controlled substances to satisfy needs for the future (i.e. on a campaign basis) rather than producing small quantities on a yearly basis.

[28] CFCs to satisfy essential use exemptions from 2010 onwards were supplied by European Union, USA, China and India.

Important mechanisms of the Montreal Protocol that help ensure supply of controlled substances include the provisions for basic domestic needs and industrial rationalization. Those are briefly described in Box 5.

Box 5: Ensuring supply of controlled substances

Basic domestic needs

Each production reduction step in the control measures under Articles 2 and 5 of the Montreal Protocol provides for a percentage (usually 10% or 15%) production allowance over and above the level of required reduction in order to satisfy the basic domestic needs of Article 5 parties. The term "basic domestic needs" is understood as not to allow production of products containing controlled substances to expand for the purpose of supplying other countries[29].

Supply of controlled substances for basic domestic needs could be used to cover some domestic uses for which alternatives are not available.

Industrial rationalization

Another mechanism of the Montreal Protocol that helped to ensure supply of controlled substances is "industrial rationalization". This mechanism allows transfer of all or a portion of the calculated level of production from one party to another for the purpose of achieving economic efficiencies or responding to anticipated shortfalls in supply as a result of plant closures[30]. The increase in the production of one country has to match the corresponding reduction in another country[31]. Article 2, paragraph 5, provides that any party may transfer to another party any portion of its calculated level of production set out under the control measures as long as the production limits set out in the control measures are not exceeded for that group of controlled substances[32].

In addition to the above mentioned mechanisms, the grouping of controlled substances by types of chemicals (e.g. Annex A, Group I comprises 5 commonly used CFCs; Annex A, Group II comprises 3 halons, Annex C, Group I comprises 34 HCFCs) provides parties with some flexibility to first phase-out the substances for which there are alternatives, thus helping to ensure the supply of controlled substances for applications where there are no suitable alternatives.

Moreover, in recognition of the special needs and situations, Article 5 parties were entitled to delay the compliance with the control measures for several years depending on the group of substances. Past experience in the Montreal Protocol has shown that alternatives were developed and tested for almost all applications by the time of the phase-out date for Article 5 parties. Hence, there has been relatively small number of essential/critical use exemptions needed by Article 5 parties.

4. Assessment of the status of alternatives

Decision XXVII/1 calls for "*a mechanism for periodic review of alternatives including the consideration of availability or lack of availability of alternatives in all sectors in Article 5 countries and special needs for high ambient countries*." Periodic technical reviews of the availability of alternatives have long been a cornerstone of the Protocol. Three Assessment Panels[33] of renowned scientists and experts from both Article 5 and non-Article 5 parties were established under the Montreal Protocol[34], pursuant to Article 6, to carry out assessments of the latest available scientific, environmental, technical and economic information. Article 6 requires parties to assess the control measures based on these assessments. Decision XXVII/8 calls for a next assessment by the three Panels by 31 December 2018.

[29] Decision I/12C on clarification of the definition of controlled substances.

[30] Article 1, paragraph 8, of the Montreal Protocol.

[31] Decision I/12D, clarification of terms and definitions: industrial rationalization

[32] This provision applies to all the controlled substances except for hydrobromofluorocarbons (HBFCs) controlled under Article 2G with only one control step for total phase-out by 1996.

[33] Scientific Assessment Panel, Environmental Effects Assessment Panel, and Technology and Economic Assessment Panel.

[34] Decision 1/3 of the First Meeting of the Parties (1989) established the Panels (initially there were four panels, later the technology and economic panels were merged into one).

The Technology and Economic Assessment Panel (TEAP) and its five Technical Options Committees (TOCs) that examine the major ozone depleting substances' sectors[35] provide annual progress reports on the development and adoption of alternatives to ozone depleting substances and carry out other tasks requested by parties, related to technologies and economics of the ozone depleting substances phase-out. Regular reviews of the status of alternatives enable identification of sectors lacking alternatives as well as availability of alternatives.

TEAP's reports have provided parties with the necessary information regarding specific sectors and applications where alternatives are lacking to enable exemptions to be evaluated and, where necessary, authorized, and to keep under close review the development and feasibility of alternatives in order to enable exemptions to be eliminated.

5. Exemption provisions included in the proposed amendments

The common and varying elements of the exemption provisions in the proposed amendments are summarized in Table 1.

Table 1: Provisions relevant to exemptions or ensuring supplies of HFCs included in the amendment proposals

Common elements	
Phasing-down rather than phasing-out HFCs so that some HFCs will remain available for use in sectors where alternatives are difficult to adopt. Proposals indicate that 10% or 15% of the baseline amounts could remain at the end of the phase-down schedule (Articles 2 & 5)	
Starting HFC reductions early in non-A5 parties to drive the development, adoption and testing of additional low-GWP alternatives (Article 2) coupled with the delayed HFC phase-down schedule for Article 5 parties, allowing time for improved availability of proven alternatives and the development of additional alternatives relevant to Article 5 parties (Article 5)	
Allowing transfer of production rights for industrial rationalization (Articles 2 & 5)	
Assessing and reviewing control measures for HFCs on the basis of periodic assessment of latest information on science, environmental effects, technologies and economics (Article 6)	
Varying elements	
North American proposal	Implementing a technology review by 2025 for non-Article 5 parties and by 2030 for Article 5 parties, to consider possible changes to HFC reduction schedules based on progress in alternatives (the draft decision) Allowing additional production for basic domestic needs of Article 5 parties
Indian proposal	Allowing exemptions for HFCs for manufacturing MDIs and other medical applications Providing for essential use exemptions applicable to all parties No control on feedstock applications of HFCs Allowing additional production for basic domestic needs of Article 5 parties
European Union proposal	Applying a different and more flexible commitment design that involve both HCFCs and HFCs for Article 5 parties, taking into account their needs and situations, so that they have more flexibility in the phase-down
Island States proposal	Allowing additional production for basic domestic needs of Article 5 parties

[35] Chemicals, medical use, foams, halons, methyl bromide, refrigeration and air-conditioning.

6. Summary

- Various exemption mechanisms have been developed and used under the Montreal Protocol:
    - Essential use and critical use exemptions are authorized for specific named parties and quantities and occur at the time when a phase-out is mandated;
    - Global exemption for laboratory & analytical uses authorized for specific categories of uses; and
    - Exemptions for process agent uses authorized for specific applications.
- A special mechanism was devised for parties with high level of consumption of methyl bromide for high-moisture dates to continue that use temporarily without risking being in non-compliance with the required reduction steps until alternatives became available.
- Additional features of the Montreal Protocol help to ensure supply of controlled substances for exempted applications. These are: allowing additional production to satisfy the basic domestic needs of Article 5 parties, industrial rationalization and flexibility through grouping of substances.
- The three Assessment Panels of the Montreal Protocol provide assessments on the latest information on the science, environmental effects and technology and economics relevant to ozone layer depletion and protection. The Technology and Economic Assessment Panel (TEAP) and its five technical options committees (TOCs) keep under close review the development and feasibility of alternatives and in this way provide the best available technical information for parties to use in deciding when or if an exemption should be eliminated.
- The parties have already recognized the need to provide for exemptions for high ambient temperature countries and included this as an endorsed concept in Annex II of Decision XXVII/1.