# AGENDA OF 44<sup>th</sup> MEETING OF THE EMPOWERED STEERING COMMITTEE FOR IMPLEMENTATION OF THE MONTREAL PROTOCOL

Date	:	27 <sup>th</sup> December 2021
Time	:	4:30 P.M.
Venue	:	<b>Kaveri Conference Hall,</b> Prithvi Block, 4th Floor Ministry of Environment, Forest and Climate Change Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi – 110 003
Item No. 1	:	Confirmation of Minutes of the 43 <sup>rd</sup> meeting of the Empowered Steering Committee (ESC) held on 21 <sup>st</sup> January 2020.
Item No. 2	:	Action taken report on the decisions of the 43 <sup>rd</sup> meeting of the ESC.
Item No. 3	:	Report on Ratification of Kigali Amendment to the Montreal Protocol for phase down of Hydrofluorocarbons (HFCs), by India.
Item No. 4		Review of Progress of Implementation of HCFC Phase out Management Plan (HPMP) stage-II, comprising the following:
		<ul> <li>(i) Technology conversion in foam and air-conditioning manufacturing Sectors – UNDP implementing agency and lead agency for HPMP Stage-II.</li> <li>(ii) Enabling Activities- UN Environment implementing agency.</li> <li>(iii) RAC Servicing Sector – GIZ Proklima, Government of Germany Implementing agency.</li> </ul>
Item No. 5	:	Status Report on complete Phase out of HCFC 141-b, an Ozone Depleting Chemical, in manufacturing of rigid polyurethane foam as on 1 <sup>st</sup> January 2020, in line with the Ozone Depleting Substances (Regulation and Control) Rules 2000, as amended in 2014.
Item No. 6	:	Status report on implementation of the recommendations of the India Cooling Action Plan (ICAP).

Item No. 7		Ex-post facto approval for the following projects submitted to the Multilateral Fund (MLF) for Implementation of the Montreal Protocol for consideration and approval by the Executive Committee (Ex-Com) of the MLF.
		<ul> <li>(i) Funding request for preparation of Stage-III of the HCFC Phase out Management Plan (HPMP Stage-III) submitted to the MLF for consideration and approval at the 87<sup>th</sup> meeting held in June 2021.</li> <li>(ii) Institutional Strengthening Project (Phase 13) submitted to the MLF for consideration and approval at the 88<sup>th</sup> meeting held in November 2021.</li> <li>(iii) Funding request for the Implementation of Enabling Activities for Phase down of Hydrofluorocarbons (HFCs) under the Kigali Amendment to the Montreal Protocol submitted to the MLF for consideration and approval at the 88<sup>th</sup> meeting held in November 2021.</li> </ul>
ltem No. 8	:	Ex-Post facto approval for the following research projects submitted to the Secretariat of the Vienna Convention and Montreal Protocol – The Ozone Secretariat, as part of the financing research and systematic observation activities related to the Vienna Convention in developing countries:
		<ul> <li>(i) Impact of trace gases emissions changes on the stratospheric ozone layer and the present day and future climate over South Asia.</li> <li>(ii) Capacity Building and Awareness Workshop on Stratospheric and Tropospheric Ozone Measurements and Calibration of Ozone Measuring Equipment.</li> </ul>
ltem No. 9	:	Ex-Post Facto approval of data on production, import, export and consumption of Ozone Depleting Substances submitted to the Ozone Secretariat under Article 7 of the Montreal Protocol and Country Programme Progress Report (CPPR) comprising Ozone depleting substance wise data to the Multilateral Fund Secretariat for the year 2019 submitted during September 2020 and for the year 2020 submitted during September 2021.

Item No. 10	:	Ex-Post Facto approval of the customs and excise duty exemption granted to five enterprises under the Fiscal Incentive Scheme.
Item No. 11	:	Status report on implementation of the Project on Upskilling of air-conditioner service technicians, implemented through a Memorandum of Agreement between the MoEF&CC and the Ministry of Skill Development and Entrepreneurship (MSDE), under the Pradhan Mantri Kaushal Vikas Yojana.
Item No. 12	:	Report on outcomes of the Montreal Protocol Meetings:
		<ul> <li>(i) Meeting of Parties (MOP) to the Montreal Protocol.</li> <li>(ii) Executive Committee (Ex-Com) of the Multilateral Fund (MLF).</li> <li>(iii) Open Ended Working Group of the Parties to the Montreal Protocol.</li> </ul>
Item No. 13	:	Reporting items:
		<ul> <li>(i) Issuance of quota order for HCFC-22 Production for non-feedstock applications for the years 2020 and 2021 in line with the Montreal Protocol phase out schedule and as per the provisions of Ozone Depleting Substances (Regulation and Control) Rules 2000, as amended in 2014.</li> <li>(ii) Nomination of Mr. Rajendra Shende, Former Head, UNEP OzonAction branch as senior expert member to the Technology and Economic Assessment Panel (TEAP) of the Montreal Protocol, for the years 2021 and 2022.</li> <li>(iii) Participation of India in the Asia-Pacific Regional Ozone-2- Climate Art contest 2021-2022 organized by UNEP.</li> <li>(iv) Celebration of World Ozone Day for the year 2021.</li> <li>(v) Relocation of office of the Ozone Cell, MoEF&amp;CC from India Habitat Centre to 1<sup>st</sup> Floor, 9, Institutional Area, Lodhi Road New Delhi.</li> </ul>
Item No. 14	:	Any other item with permission of the Chair.

## ANNOTATED AGENDA OF $44^{TH}$ MEETING OF THE EMPOWERED STEERING COMMITTEE FOR IMPLEMENTATION OF THE MONTREAL PROTOCOL

### Item No. 1: Confirmation of Minutes of the 43<sup>rd</sup> meeting of the Empowered Steering Committee (ESC) held on 21<sup>st</sup> January 2020.

Minutes of the 43<sup>rd</sup> meeting of the ESC held on 21<sup>st</sup> January 2020 were circulated to all the Members (*Enclosure-1, pages 62-96*). No comments have been received.

#### Proposal for consideration of the ESC

To confirm the minutes of the 43<sup>rd</sup> meeting of the ESC held on 21<sup>st</sup> January, 2020.

# Item No. 2: Action taken report on the decisions of the 43<sup>rd</sup> meeting of the Empowered Steering Committee (ESC).

Subject Matter	Decision of the 43 <sup>rd</sup> ESC	Action taken
Release of balance payment to M/s Indian Polyurethane Association (IPUA) for undertaking survey of enterprises in the foam manufacturing sector for participation in Hydrochlorofluorocarbon (HCFC) Phase out Management Plan (HPMP) Stage II	from IPUA on how only 91 enterprises were found to be eligible out of the list of 413 enterprises provided by IPUA, during reverification carried out by a third	Matter is under consideration. Update will be provided during the meeting.

Action taken report on the decisions of the 43<sup>rd</sup> meeting of the ESC.

Proposal for consideration of the ESC.

To note the above.

### Item No. 3: Report on Ratification of Kigali Amendment to the Montreal Protocol for phase down of Hydrofluorocarbons (HFCs), by India.

#### Background

Hydrofluorocarbons, commonly known as HFCs were introduced as nonozone depleting alternatives to support the timely phase out of chlorofluorocarbons (CFCs) and Hydrochlorofluorocarbons (HCFCs). Use of HFCs is now widespread in air conditioners, refrigerators, aerosols, foams and other products. While these chemicals do not deplete the stratospheric ozone layer, they have high Global Warming Potential (GWP) ranging from 12 to 14,000.

Recognizing the growth in use of HFCs, especially in Refrigeration and Airconditioning (RAC) sector due to increase in urbanization, motor vehicles, industrial activities, etc., the Parties to the Montreal Protocol reached agreement at the 28<sup>th</sup> Meeting of the Parties (MOP) on 15<sup>th</sup> October 2016 in Kigali, Rwanda, to phase down HFCs. Parties agreed to add HFCs to the list of controlled substances and approved a timeline for their gradual reduction by 80-85 per cent by the late 2040s. This agreement is called the Kigali Amendment to the Montreal Protocol.

As per the Kigali Amendment, to the Montreal Protocol, India will complete its phase down of HFCs in 4 steps from 2032 onwards with cumulative reduction of 85% of production and consumption of HFCs by 2047.

#### Ratification of the Kigali Amendment by India

The Union Cabinet in its meeting held on 18 August 2021 approved the proposal of the Ministry of Environment, Forest and Climate Change (MoEF&CC) for Ratification of Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer for phase-down of HFCs by India. It was also decided that a National strategy for phase down of HFCs will be developed by 2023 after required consultation with all the industry stakeholders.

Pursuant to the Cabinet decision, the MoEF&CC has requested the Legal and Treaties Division of the Ministry of External Affairs (MEA), Government of India, to prepare the instrument of Ratification and deposit the same with the depositary. In accordance with Article 20, paragraph 1 of the Vienna Convention for the Protection of the Ozone Layer, The UN Secretary General at New York is the depositary of the Montreal Protocol. Instruments of ratification must be deposited with the depositary to meet the legal requirements for the international ratification procedure. The Kigali Amendment will enter into force for India on the 90<sup>th</sup> day of the deposit of the ratification instrument with the depositary. The instrument of Ratification was deposited by the MEA on 27 September 2021, which shall be the date of Ratification by India and the Kigali Amendment will enter into force for India on 27 December 2021.

#### Benefits

Implementation of HFC phase down under the Kigali Amendment through the adoption of low-GWP and energy-efficient alternative technologies will achieve energy efficiency gains and carbon dioxide emissions reduction - a "climate co-benefit." In addition, the implementation will be in collaboration with various line Ministries of the Government of India with the objective to maximize the economic and social co-benefits, besides environmental gains.

Action will be initiated for development of the said national strategy for phase down of HFCs from January 2023.

#### Proposal for consideration of the ESC

To note the Ratification of the Kigali Amendment to the Montreal Protocol for phase-down of HFCs by India.

- Item No. 4: Review of Progress of Implementation of Hydrochlorofluorocarbon (HCFC) Phase out Management Plan (HPMP) stage-II, comprising the following:
- Item No. 4(i): Technology conversion in Foam and air-conditioning manufacturing Sectors – United Nations Development Program (UNDP) implementing agency and lead agency for HPMP Stage-II

#### Background

The activities under the investment component of HPMP Stage-II comprise the following:

- (i) Technology conversion by the participating foam manufacturing enterprises from HCFC 141b to non-Ozone Depleting and low-Global Warming Potential (GWP) alternative technologies to achieve complete phase out of use of HCFC 141b in foam manufacturing as on 1.1.2020, in accordance with the Ozone Depleting Substances (Regulation and Control) Rules 2000, as amended in 2014, which align domestic regulation with the accelerated phase-out of HCFCs with the Montreal Protocol and in line with the agreement of the Executive Committee (Ex-Com) with Government of India.
- (ii) Technology conversion in 6 large air-conditioning manufacturing enterprises from HCFC-22 to HFC-32, to achieve a phase out of 1140 MT (62.72 ODP tons) of HCFC-22
- (iii) Project management and coordination of overall implementation of HPMP Stage-II including the enabling activities implemented by UN Environment Program (UNEP) and Refrigeration and Air-Conditioning (RAC) servicing sector activities by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) Proklima, Government of Germany.

The activities relating to the investment component are implemented by UNDP, as lead agency, in close cooperation with the Ozone Cell, Ministry of Environment, Forest & Climate Change (MoEF&CC).

# Salient features of the decision of the Ex-Com of the Multilateral Fund (MLF) with respect to the investment component of HPMP Stage-II, approved by

#### Foam Sector

- (i) Tonnage to be phased out in eligible enterprises as per agreement with Ex-Com of the MLF 3166 MT
- (ii) Cost effectiveness US\$7.58 per kg of HCFC 141b to be phased out

- (iii) Funding for stage II of the HPMP to be reduced at a rate of \$7.58/kg if tonnage to be phased out in eligible enterprises is less than 3,166 metric tonne
- (iv) To provide a list of enterprises assisted including HCFC 141b consumption to be phased out, technology adopted and incremental costs of conversion

#### RAC Sector

- (i) No further funding for heat exchangers at the assisted enterprises in future stages of the HPMP.
- (ii) Any increase in consumption on the non-converted line for the assisted enterprises in relation to the level of consumption at the time of signature of the Memorandum of Agreement (MOA) between the enterprise and the Government, would not be funded by the MLF.

#### Progress on Implementation

#### Foam Manufacturing Sector

In the foam manufacturing sector, a total of 207 enterprises were found eligible by the third-party appointed by UNDP, the lead implementing agency for HPMP Stage II. Out of 207 enterprises, 47 enterprises have not sought support under HPMP Stage II for technology conversion to non-HCFC 141b technology and the balance 160 enterprises are participating in HPMP Stage II.

The enterprises have been included in HPMP Stage II after establishing eligibility of the enterprises by third party verification agency, technical review and clearance by UNDP, Montreal Protocol Unit, Bangkok, followed by approval of the Secretary, MoEF&CC. The participating enterprises in HPMP Stage II entered into a performance based MOA with the Ozone Cell, MoEF&CC. The MOA contains the legal obligations as well as the schedule of milestones linked to release of funding.

Based on the verification of the eligibility of foam manufacturing enterprises by third party appointed by the UNDP, it was determined that the total tonnage to be phased out in the 160 enterprises eligible for funding was 2,630.11 MT of HCFC-141b, which is 535.89 MT less than the 3,166 MT approved for phase-out.

### Allocation of Funding to the Participating foam manufacturing enterprises under HPMP Stage-II

The foam sector plan was submitted to the MLF covering 4814 metric tons i.e. 529.54 ODP tons covering 413 enterprises, based on survey carried out by the Indian Polyurethane Association (IPUA), against which the Ex-Com

approved the eligible consumption for funding as 3166 Metric tons and 348.26 ODP tons, which is 65.76%. Accordingly, the enterprise-wise funding was calculated on pro-rata basis using the factor of 65.76%. While finalising the MOA with the participating enterprises, it was incorporated in the MOA that while the enterprise would phase out the consumption verified by the third party, the funding would be at the rate of USD 7.58/kg based on the lower value of consumption of HCFC 141b, from among the verified consumption and that of the survey consumption, after applying a factor of 65.76%. Keeping in view that the use of HCFC 141 b by foam manufacturing industry has closed as on 1<sup>st</sup> January 2020 under the Ozone Depleting Substances (Regulation and Control) Amendment Rules, 2014, no further enterprises could be included after 31.12.2019.

Considering the principle of lower value of consumption of HCFC 141b, from among the verified consumption and that of the survey consumption and noting that a factor of 65.76% was applied earlier, further funding to the extent of 34.24% was allocated to such enterprises where the factor of 65.76% was applied, based on the recommendation of UNDP, Montreal Protocol Unit (MPU) and with the approval of Secretary MoEF&CC and Chairman, Empowered Steering Committee (ESC).

While considering the third tranche of funding, the Ex-Com of the MLF at is its 86<sup>th</sup> meeting held from 16-27 November 2020, against the approved US\$24 million for the foam manufacturing sector under HPMP Stage-II for phase out of 3166 MT of HCFC 141b, adjusted the associated reduction in funding for 535.89 MT, amounting to US\$4,062,046. Accordingly, the final funding for the foam sector under HPMP Stage-II is US\$19,936,234.

Keeping in view that the final funding for the foam sector under HPMP Stage-II is US\$19,936,234 @ US\$7.58/kg for phase out of 2630.11 MT, which is the verified consumption by M/s PWC and considering that amount already allocated to these 160 enterprises works out to US\$16,022,234, a balance amount available is US\$3,914,000. UNDP, Montreal Protocol and Chemicals Unit through a proposal to Ozone Cell, MoEF&CC proposed for further allocation of US\$ 3,287,715 taking into account the earlier approved principle of funding based on lower consumption from among the survey and third party (M/s PWC) verified figures and considering the principles of Ex-Com decision at the 86<sup>th</sup> meeting referred above, and the remaining amount of US\$626,142 to finance research scholars from leading academic institutes for carrying out work on low global warming potential alternatives. The proposal is under examination in the ministry and once a decision is taken on the same, the matter will be reported to the next meeting of the ESC.

The completion of the specific identified milestones for each of the participating enterprise as per MOA requires a third-party verification on-site to ensure successful completion of deliverables/ milestones as per the MOA by the participating enterprise. The documentation and third-party

verification reports for completion of milestones are technically reviewed by UNDP, MPU before endorsements are made by Ozone Cell, MoEF&CC for release of milestone linked payments, as follows:

Enterprise-wise category based upon HCFC 141 b consumption in MT	Number of Milestones and verification schedule
>5 MT	5 milestones, 3 physical site verifications for third, fourth and fifth milestone
>1 MT and up to 5 MT	3 milestones, 1 physical site verification before final instalment release
Upto 1 MT	2 milestones, 1 physical site verification before final instalment release

The implementation activities follow a conversion plan contained in the terms of reference and technical proposal forming part of the MOA signed with the participating enterprises.

Competency Enhancement of System Houses and Micro, Small and Medium Enterprises (MSME) in foam manufacturing sector

A Memorandum of Agreement (MOA) has been signed between the Central Institute of Petrochemicals Engineering & Technology (CIPET), Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, Govt. of India and the Project Management Unit, Ozone Cell, MoEF&CC, Government of India for competency enhancement of foam manufacturing enterprises especially MSMEs participating in HPMP. CIPET is a premier institute in the country in the area of plastic engineering and technology and has emerged as a global institution renowned for research and development in the niche areas of polymer science and technology and high-quality education and skill development in the field of plastics. The agreement between CIPET and Ozone Cell, MoEF&CC shall facilitate the sustaining of achieved phase out of HCFC-141b in the foam manufacturing sector in the country, by 1.1.2020.

A Technical Assistance facility has been established at Laboratory for Advanced Research in Polymeric Materials (LARPM) CIPET, Bhubaneshwar for providing training and testing facilities to System Houses and foam manufacturing enterprises covered under HPMP stage II. The technical assistance facility at CIPET could be used for viz. (i) customizing trials, (ii) evaluation, testing, (iii) modification/validation of non- HCFC formulations for applications, and (iv) technical resources and training centre.

### Progress of technology conversion by the foam manufacturing enterprises

133 out of the 160 participating enterprises have completed the technology conversion activities and have shifted to non HCFC and low GWP

alternatives. The third party on boarded by UNDP completed physical site verification of 124 enterprises and have confirmed in the verification reports that all these enterprises have met the milestones and deliverables as per the MOA. Physical site verification followed by submission of verification reports for the balance enterprises will be completed soon.

The Ozone Cell along with CIPET and UNDP MPU would work closely with the remaining participating enterprises to get the pending activities completed.

#### RAC Manufacturing Sector

In the RAC sector, six AC manufacturers are participating in the HPMP Stage II. The process followed for RAC manufacturing enterprises under HPMP Stage- II is similar to that followed for foam manufacturing. The requisite due diligence with respect to physical existence of enterprise on the ground at designated address, eligibility for securing funding as per MLF guidelines was done by third party verification agency commissioned by UNDP. The enterprise-wise reports and supporting documents were technically reviewed by UNDP MPU and forwarded to Ozone Cell, MoEF&CC with recommendation for further necessary action. The Ozone Cell, MoEF&CC, based on the recommendations of UNDP MPU subsequently entered MOA with each of the eligible enterprise. MOAs has been signed with five (5) of the six (6) RAC manufacturing enterprises.

The completion of the specific identified milestones for each of the participating enterprise as per MOA requires a third-party verification for onsite verification to ensure successful completion of deliverables/milestones as per the MOA by the participating enterprise. The documentation and third-party verification reports for completion of milestones are technically reviewed by UNDP, MPU before endorsements are made by Ozone Cell, MoEF&CC for release of milestone linked payments. The implementation activities follow a conversion plan contained in the terms of reference and technical proposal forming part of the MOA signed with the participating enterprises.

#### Progress of RAC sector conversion

Three enterprises (M/s Blue Star Limited, M/s Voltas Limited and M/s Epack Durables Solutions Private Limited) have completed the technology conversion activities and have shifted to Hydrofluorocarbon (HFC)-32 technology. The third party on boarded by UNDP completed physical site verification of all the 3 enterprises and have confirmed in the verification reports that that all these enterprises have met the milestones and deliverables as per the MOA. The status of the remaining 3 enterprises (M/s Zamil Air conditioners, M/s Videocon Industries Limited and M/s LEEL Electricals Limited (formerly known as Lloyd Electric & Engineering Limited), is as follows:

- a) With reference to M/s Zamil Air conditioners, it may be mentioned that M/s Subros Limited has acquired the entire manufacturing line/equipment from M/s Zamil air conditioners. The documentation concerning acquisition of manufacturing line by M/s Subros Limited have been verified by M/s PriceWaterhouse Coopers (PWC), the third-party agency appointed by UNDP, which has recommended that M/s Subros Limited can be considered for participation in HPMP Stage-II, in place of M/s Zamil air conditioners. Noting that the Indian shareholding of Subros Ltd is 66.11%, in accordance with the funding guidelines of the MLF, M/s Subros would be entitled to 66.11% of the funding approved for M/s Zamil Air-conditioning. After seeking the required concurrence from the MLF Secretariat through UNDP, the lead implementing agency, M/s Subros Limited was included in HPMP Stage-II in place of M/s Zamil Air conditioners with the approval of Secretary, MoEF&CC and Chairman, ESC. MOA has been signed with M/s Subros Limited and the technology conversion is in progress.
- b) With reference to Videocon Industries Limited, the MoA could not be operationalized as the enterprise is under corporate insolvency resolution process.
- c) Regarding LEEL Electricals Limited (formerly known as Lloyd Electric & Engineering Limited), the MoA has been signed and an amount of US\$195,470 has been released towards first installment of 20% of the incremental capital cost, which is on signing of MoA as per schedule of payments and milestones of the MoA. Since then, there has been no progress in the project. It is understood that the signatory of the MOA, Mr. A.K. Roy, Director, LEEL Electricals Limited is no longer with the enterprise. Since the enterprise is under corporate insolvency resolution process. Ozone Cell has taken up the matter with the Interim Resolution Professional (*Enclosure-2, pages 97-101*) to take appropriate action on an urgent basis for refund of the amount of US\$ US\$195,470 released towards first installment of 20% of the incremental capital cost to M/s M/s LEEL Electricals Limited (formerly Lloyd Electric & Engineering Limited), in order to return the same to the Multilateral Fund. Matter is being followed up.

The Ozone Cell, in cooperation with the Refrigeration and Air-conditioning Manufacturers Association (RAMA) is exploring the possibility to include additional enterprises in place of M/s Videocon Limited and M/s LEEL Electricals Limited, to utilise the money allocated for technology conversion in the Air conditioning manufacturing sector under HPMP Stage-II.

#### Third tranche of funding for HPMP Stage-II

The third tranche funding request for HPMP Stage-II along with the tranche implementation plan was submitted for consideration of the 86<sup>th</sup> meeting of the Ex-Com of the MLF held in November 2020 through UNDP, the lead implementing agency for HPMP Stage-II, with the approval of Secretary, MoEF&CC and Chairman, ESC. The Ex-Com approved the third tranche for US\$14,792,059 and the corresponding 2021-22 tranche implementation plan. Out of this amount, the associated reduction in funding for 535.89 MT, amounting to US\$4,062,046, explained above shall be adjusted.

#### Achievement of 1.1.2020 reduction target for HCFCs

In line with the accelerated phase out schedule of the Montreal Protocol for HCFCs, against the target of 35% reduction in the production and consumption of HCFCs from the baseline, India has successfully achieved the reduction in the consumption and production of HCFCs by 44% from the baseline, which has been confirmed through an Independent verification conducted by UNDP, the lead implementing agency for HPMP Stage-II.

#### Proposal for consideration of the ESC.

- (i) To note the progress of implementation of Technology conversion in Foam and air-conditioning manufacturing Sectors under HPMP Stage-II.
- (ii) To accord ex-post facto approval for further funding to the extent of 34.24% allocated to such enterprises, where the factor of 65.76% was applied, based on the recommendation of UNDP, MPU and with the approval of Secretary MoEF&CC and Chairman, ESC.
- (iii) To accord ex-post facto approval for the third tranche funding request for HPMP Stage-II along with the tranche implementation plan submitted for consideration of the 86<sup>th</sup> meeting of the Ex-Com of the MLF held in November 2020 with the approval of Secretary, MoEF&CC and Chairman, ESC.
- (vi) To propose the way forward in case of M/s LEEL Electricals Limited (formerly known as Lloyd Electric & Engineering Limited) for recovery of US\$195,470 released towards first installment of 20% of the incremental capital cost, which is on signing of MoA as per schedule of payments and milestones of the MoA.

#### Item No. 4(ii): Review of Progress of Implementation of HCFC Phase out Management Plan (HPMP) Stage-II for the enabling activities, for which UN Environment Program (UNEP) is the implementing agency

#### Background

The enabling activities forming part of HPMP Stage-II are implemented by the UNEP in close cooperation with the Ozone Cell. The enabling activities comprise awareness and capacity building for the servicing sector, building sector interventions, enforcement training, trade controls, policy and regulation to be implemented till December 2022. An amount of US\$900,000 has been approved by the Executive Committee (Ex-Com) of the Multilateral Fund (MLF) for the enabling activities under HPMP Stage-II.

The implementation of enabling activities is operationalized through agreements signed between the Ozone Cell, Ministry of Environment, Forest and Climate Change (MoEF&CC) and UNEP, listing out the activities to be carried out and the associated budget. The execution of the agreed activities is done by the Project Management Unit (PMU), Ozone Cell by associating agencies having the required expertise in the area, with the approval of Secretary (EF&CC) as Chairman, Empowered Steering Committee (ESC).

#### **Progress on Implementation**

#### Implementation of tranche 1 of HPMP Stage-II:

The following activities have been undertaken as part of tranche 1 of the enabling activities under HPMP Stage-II

#### 1. Enforcement Capacity Building

Activities relating to the policy and enforcement component are being implemented in association with the National Academy of Customs Indirect Taxes and Narcotics (NACIN), the apex institute of Government of India for capacity building by imparting training in the field of indirect taxes, drug laws and environment protection, through a Memorandum of Agreement (MoA) between the PMU, Ozone Cell and NACIN for the following activities:

- a) Training of trainers and capacity building workshops for customs and enforcement officers comprising the following:
  - Online refresher course on 2<sup>nd</sup> February 2021 for trainers trained under HPMP Stage-I, to enable trainers for taking session in future as trainers under HPMP Stage-II.
- b) Supervisory Officers Workshop on 23-24 March, 2021 at NACIN Hyderabad and 26-27 August, 2021 at NACIN, Delhi including practical hands-on-session on identification of Refrigerants

- c) Border dialogue with neighboring countries on specific Ozone Depleting Substance (ODS) trade related aspects.
- d) Sensitizing field customs formations regarding prohibition of its import of HCFC-141b in the country. Towards enforcing import ban on HCFC-141b starting from 1.1.2020, a special module was introduced in customs trainings.
- e) Awareness on harmonized system codes for pure ODS and ODS containing mixtures.
- f) Hands on session on identification of refrigerants.
- g) Country handbook on the national regulations for Monitoring and controlling production and use of ODSs in India was updated.

#### 2. Energy Efficiency in RAC Service Sector Practices

Ozone Cell, MoEF&CC in association with Energy Efficiency Services Limited (EESL) is implementing the activities related to energy efficiency in Refrigeration and Air-conditioning (RAC) Service sector. The activities include development and publication of awareness material on linkage of energy efficiency and servicing practices for RAC products and dissemination of the same amongst the RAC dealers and service technicians. As part of implementation, 10 workshops for RAC dealers and other relevant Stakeholders via Video Conference have been conducted over the period January to August 2021.

Awareness material comprising the following was designed, developed and disseminated to service technicians throughout the country through the training programmes organized by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), as part of HPMP Stage-II implementation:

- a) 18,000 Posters on "Good Service Practices for Room Air-Conditioners" and "Copper Tube operations" as part of Good Service Practices.
- b) 30,000 flyers containing information on how to become an environmental-friendly service technician.
- c) 20,000 multi-color stickers on Good Service Practices for Room Air-Conditioners for awareness generation for RAC dealer's consumers.
- d) 700 copies of pocket handbook "Quick guide" on good servicing practices on handling flammable refrigerants.
- e) A booklet on Good Servicing Practices for energy efficient operation of Room Air-conditioners was developed and released on 16<sup>th</sup> September, 2021 during the World Ozone Day.

### 3. Studies on key issues relating to Montreal Protocol implementation

Following studies have been completed:

- Application of non-ODS and low-Global Warming Potential (GWP) alternatives in Cold Chain Sector in India in association with M/s Pricewaterhouse Coopers Ltd
- b) Public Procurement Policies for RAC Equipment Using Non-ODS based refrigerants in association with The Energy and Resources Institute (TERI)
- c) Application of non-ODS and low-GWP alternatives in Building Sector in India in association with Alliance for Energy Efficient Economy

The first two of the above three study reports were published and launched on 16<sup>th</sup> September 2021 on the World Ozone Day and were widely disseminated. The third report will be published by end December 2021.

The following studies being conducted shall be completed and published by March 2022.

- a) Service sector enterprises/ technicians in RAC sector in association with NTPC School of Business.
- b) Reduction of Green House Gas (GHG) emissions due to implementation of Vienna Convention and Montreal Protocol in association with TERI.
- c) Assistance for the development of national standards to be framed by Bureau of Indian Standards (BIS) for low-GWP Refrigerants in association with Indian institute of Technology (IIT), Delhi.

#### 4. Development and dissemination of knowledge products

Knowledge products comprising (i) booklet on good servicing practices for flammable refrigerants a quick guide and (ii) booklet on efficient and sustainable cooling: energy efficiency and RAC servicing sector, have been brought out and disseminated widely, including to government vocational training institutes.

#### Implementation of tranche 2 and tranche 3 of HPMP Stage-II activities:

As part of implementation of tranche 2, Ozone Cell has signed a MOA with Construction Industry Development Council (CIDC) to implement the activities related to Good Management Practices for energy efficient buildings by introducing Passive Cooling designs, to reduce operational costs, improve health and comfort and promote use of non-HCFC and low-GWP alternatives.

As part of implementation of the HPMP Stage-II project for tranche 2 and 3, the following activities have been identified for seeking project proposal from the various agencies/institutes/think-tanks etc for undertaking the activities:

- a) Study on Good Management Practices for Cold Storage (warehouse) infrastructure used in e-commerce business highlighting application of non-HCFC and low Global Warming Potential (GWP) refrigerant based energy efficient cooling systems.
- b) Study on Public Procurement policies for hiring trained and certified Refrigeration and Air-conditioning (RAC) service technicians.
- c) Promoting energy efficiency in RAC serve sector through awareness workshops and development of knowledge products
- d) Development of quarterly e-newsletter for RAC service technicians (8 issues) on the importance of good servicing practices including handling of different types of refrigerants, related safety issues and updates on refrigerant transition under the Montreal Protocol.

The Request for Proposals (RfPs) for the activities mentioned above have been developed and has been uploaded on the Ozone Cell website for inviting proposal for undertaking the activities.

#### Activities Planned for 2022

During the year 2022, activities relating to tranche 2 and tranche 3 will be implemented. The identified thrust areas including studies to be initiated will be in line with emerging requirements, the policy decisions of the Montreal Protocol and the implementation of the recommendations of the India Cooling action Plan (ICAP), the details of which after finalization and approval of Secretary, MoEF&CC and Chairman, ESC, will be put up in the next meeting of the ESC.

#### Proposal for consideration of the ESC

- (i) To note the following:
  - a) Progress of implementation of enabling activities under HPMP Stage-II
  - b) Partner agencies associated in implementation of enabling activities under HPMP Stage-II through a MoA signed between PMU, Ozone Cell and the concerned agency with the approval of Secretary MoEF&CC and Chairman, ESC.
- (ii) To accord Ex-Post facto approval for the Project Cooperation Agreement signed between Ozone Cell and UNEP for the amount of USD 252,000 for tranche 2 (at *Enclosure-3, pages 102-124)*, Small Scale Funding Agreement (SSFA) for the amount of USD 180,000 for tranche 3 at *Enclosure-4, pages 125-145* and amendments to SSFAs signed under tranche 1 at *Enclosure-5, pages 146-148* for implementing the enabling activities under HPMP Stage-II.

#### Item No. 4(iii): Refrigeration and Air-Conditioning (RAC) Servicing Sector – Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) Proklima, Government of Germany Implementing agency

#### Background

The activities in the RAC servicing sector under Hydrochlorofluorocarbon (HCFC) Phase-out Management Plan (HPMP) Stage-II are being undertaken by GIZ, Proklima, Government of Germany, in cooperation with the Ozone Cell, MoEF&CC through an agreement signed between Ozone Cell, MoEF&CC and GIZ Proklima. The activities under the RAC servicing sector, as part of HPMP Stage-II comprise the following:

- Training of 17000 RAC service technicians by December 2022 on good practices relating to installation and servicing, including of R-32, a flammable refrigerant and included as an alternative for technology conversion in the air-conditioning manufacturing sector under HPMP Stage-II
- (ii) Support to Industrial Training Institutes (ITIs) through inclusion of alternatives in RAC syllabus including training of ITI instructors on handling alternatives during installation and servicing
- (iii) Design and development of a certification system for RAC service technicians
- (iv) Upgrade existing training infrastructure including feasibility of establishing a state-of-the-art RAC training centre
- (v) Support UN Environment Program (UNEP) in the implementation of awareness and capacity building activities
- (vi) Awareness among end users on safety aspects relating to alternative refrigerants and utilising the services of trained technicians

#### Progress on Implementation

- (i) Sixty Trainers have been trained through Training of Trainers (TOT) Programmes, with at least 3 trainers for each of the 15 training partners across the country
- (ii) Training of 9500 RAC service technicians has been completed. Training of balance 7500 RAC service technicians will be completed by December 2022, the due date of completion of the project
- (iii) Developed following knowledge products, printed and widely disseminated, including among the training partners across the country

- a) Training material including handbook for RAC service technicians in English and Hindi. Translation in other popular regional languages is in progress
- b) Trainers and technicians handbooks on good service practices and installation of room air-conditioners with HCFC 22 and flammable refrigerants
- (iv) Developed a concept note for the national implementation of a certification system and discussed in Stakeholder Consultation workshop. Proceedings of the workshop prepared and widely disseminated. Further work on the recommendations of the workshop is in progress
- (v) Organised training program for instructors of ITIs. Syllabus for RAC service trade has been updated to include alternative refrigerants including flammable refrigerants and good service practices.
- (vi) Discussions initiated with institutions like Central Public Works Department (CPWD), Delhi Metro for conducting training on good servicing practices. Modalities including structure of training are being worked out.

#### Proposal for consideration of the ESC

- (i) To note the progress of implementation of activities in the RAC servicing sector under HPMP Stage-II
- (ii) To accord Ex-Post Facto approval of the amendment to the agreement signed between GIZ Proklima and Ozone Cell, MoEF&CC, for extending the duration of implementation of the project, which was initially for 3 years, which expired in April 2021, till December 2022, the timeline for completing the HPMP Stage-II Project. The Agreement is at *Enclosure-6, page 149.*

Item No. 5: Status Report on complete Phase out of Hydrochlorofluorocarbon (HCFC) 141-b, an Ozone Depleting Chemical, in manufacturing of rigid polyurethane foam as on 1<sup>st</sup> January 2020, in line with the Ozone Depleting Substances (Regulation and Control) Rules 2000, as amended in 2014 and 2019

#### Background

In accordance with the Ozone Depleting Substances (Regulation and Control) Rules 2000, as amended in 2014, which align domestic regulation with the accelerated phase-out of HCFCs with the Montreal Protocol, the use of HCFC-141b, a chemical used as a blowing agent in manufacturing of rigid polyurethane foam, needs to be phased out by 1.1.2020. Further, vide Decision 77/43 of the Executive Committee (Ex-Com) of the Multilateral Fund (MLF), approving India's HCFC Phase out Management Plan (HPMP) Stage-II and the agreement of the Ex-Com with Government of India, complete phase out of HCFC-141b needs to be achieved in the country by 1.1.2020.

The use of HCFC-141b in the country was in the foam manufacturing sector only and not for other purpose. It may also be mentioned that HCFC-141b was not produced in the country and all the domestic requirements were met through imports. The import of Ozone Depleting Substance (ODSs) can be affected only under license issued by Directorate General of Foreign Trade (DGFT), based on the recommendation of Ozone Cell.

Noting that nearly, 50% of the consumption of ozone depleting chemicals in the country was attributable to HCFC 141 b in the foam sector and taking into account the provisions of the Ozone Depleting Substances (Regulation and Control) Rules relating to phase out of HCFC 141b, Stage-II of the HPMP has been structured to address complete phase out of use of HCFC 141b and include all eligible enterprises for technology conversion to alternative non-ODS and low-Global Warming Potential (GWP) technologies, with financial support in the form of incremental costs from the MLF.

#### Complete phase out of use of HCFC 141b

Around 175 foam manufacturing enterprises have been included under HPMP, of which 15 enterprises were covered under Stage-I and remaining 160 enterprises are covered under stage II of HPMP for phase out of use of HCFC 141b and conversion to alternative non-ODS and low-GWP technologies.

The complete phase out of HCFC 141 b from the country in foam sector is among the first at this scale in Article 5 parties (developing countries) under the Montreal Protocol. With the 2019 Amendment of the Ozone Depleting Substances (Regulation and Control) Rules notification, prohibiting the import of HCFC 141b, the country has completely phased out use of HCFC 141b and simultaneously, the use of HCFC 141 b by foam manufacturing industry has also been closed as on 1<sup>st</sup> January 2020.

The third party appointed by United Nations Development Program (UNDP), the lead implementing agency for HPMP Stage-II, carried out physical site verification for the completed foam sector projects under HPMP Stage-II and confirmed that HCFC 141b has been completely phased out in such enterprises and there is no stock of HCFC 141b available at their premises

In addition to the amendment to the Ozone Depleting Substances (Regulation and Control) Rules during 2019, the DGFT, Ministry of Commerce and Industry amended the import policy to ban the import of HCFC 141b in the country

#### Selling/trading of HCFC-141b on the online portal of IndiaMART-reg.

During August 2021 it was found that that India Mart, online B2B marketplace is selling/trading HCFC-141b, which is not in consonance as per India's commitment under the Montreal Protocol as well as national regulations. The information posted by India Mart regarding trading of HCFC-141 b is available in public domain, which can be accessed by the International community, leading to compliance related issue under the Montreal Protocol provisions. Copy is placed at *Enclosure-7, pages 150-156.* 

A communication from Ozone Cell, MoEF&CC was sent to Secretary Department for Promotion of Industry and Internal Trade on 11<sup>th</sup> August 2021, requesting to take appropriate action against the India-MART for displaying prohibited items i.e HCFC-141b for sale. Department for Promotion of Industry and Internal Trade (DPIIT) vide its communication dated 8<sup>th</sup> October, 2021 informed that the Department has taken up the matter with India-MART platform. In this regard, India-MART informed the Department for Promotion of Industry and Internal Trade that they have removed the advertisement related to HCFC-141b from their platforms. DPIIT also informed Ozone Cell that, the department has also directed India-MART for ensuring that no advertisement/listing of HCFC-141b is made on their website in future. However, it may be noted that India Mart, online B2B marketplace is still selling/trading HCFC-141b.

Some observations have also been made by the Standing Committee on Monitoring held on 22<sup>nd</sup> September, 2021 on data provided by DGCIS in respect of certain ODSs. However, no reply has been received in this regard.

#### Proposal for consideration of the ESC:

- (i) To note the status Report on complete Phase out of HCFC 141-b, an Ozone Depleting Chemical, in manufacturing of rigid polyurethane foam as on 1st January 2020, in line with the Ozone Depleting Substances (Regulation and Control) Rules 2000, as amended in 2014 and 2019
- (ii) To note the action taken on selling/trading of HCFC-141b on the online portal of IndiaMART and propose way forward.
- (iii) To propose way forward on the data relating to ODS from DGCIS and DGFT.

#### Item No. 6 : Status report on implementation of the recommendations of the India Cooling Action Plan (ICAP)

#### Background

The Ministry of Environment, Forest and Climate Change (MoEF&CC) has developed and launched the ICAP during March 2019, to provide an integrated vision towards cooling across sectors encompassing inter alia reducing cooling demand, refrigerant transition, enhancing energy efficiency and better technology options with a 20-year time horizon. Linkages of cooling with Sustainable Development Goals are well acknowledged. The cross-sectoral nature of cooling and its use in development of the economy makes provision for cooling an important developmental necessity

India is one of the first countries in the World to have a comprehensive cooling action plan, which has been appreciated internationally as an important policy initiative which has the potential to provide socio-economic and environmental benefits related to reduced refrigerant use, climate change mitigation and Sustainable Development Goals. The United Nations Secretary General in his message on World Ozone day 2019 has highlighted the need for all countries to develop national cooling action plans.

The development of ICAP involved extensive stakeholder consultation and interaction with different Government Ministries/ Departments/ Organizations, Industry and Industry Associations, think tanks, academic and R&D institutions. The ICAP provides short, medium and long-term recommendations across different sectors and proposes synergies with ongoing government programmes and schemes to maximize socio-economic co-benefits.

### Implementation of the Recommendations of ICAP – Space cooling in Buildings

Towards operationalizing the recommendations, six thematic working groups have been constituted, namely (i) Space Cooling in Buildings, (ii) Cold Chain, (iii) Domestic manufacturing and Production Sector – Alternative Refrigerants and technologies, (iv) Servicing Sector, (v) Transport Air conditioning (car, bus, train and Metro Air conditioning and (vi) Research and Development, for developing an action plan for implementing the recommendations through mapping available and anticipated technology options for promoting energy efficiency and reduction of cooling demand along with technical and economic viability, identifying interventions required for synergising with on-going programmes and schemes of the Government of India including identifying the required policy and regulatory interventions.

Space cooling in buildings being the most important and can significantly contribute to achieving the goals in the ICAP, has been prioritized for implementation of the recommendations given in the ICAP. Regarding space cooling in buildings, the ICAP takes a holistic and balanced approach covering both passive and active cooling strategies as well as optimization of cooling loads, encompassing natural and mechanical ventilation in building design, thermal comfort standards specifying pre-setting of temperatures for air-conditioning equipment in commercial built spaces and promoting use of energy efficient refrigerant based appliances, including not in-kind technologies.

The thematic group on space cooling in buildings, during its 6 meetings has come out with a list of action points, to be implemented by various agencies. The action points have been identified after mapping of the recommendations given in the ICAP with the on-going government programmes/schemes handled by different ministries/departments/ agencies of the Government. The action points were discussed in the meeting of Steering Committee held on 3<sup>rd</sup> September 2021 under the Chairmanship of Additional Secretary (Ozone Cell), MoEF&CC, during which the actions points relating to implementation of the recommendations for Space Cooling in Buildings in the ICAP finalized and recommended by the Thematic Working Group, were adopted for implementation.

As part of the Implementation framework proposed in the ICAP, Secretary, MoEF&CC and Chairman, Empowered Steering Committee (ESC), approved the action points finalized by the Steering Committee for implementation.

The publication on the Action points for implementation of the recommendations for Space Cooling in Buildings was launched on the World Ozone Day held on 16<sup>th</sup> September 2021 and widely disseminated. A communication from Secretary, MoEF&CC was also sent to all the concerned line Ministries/Departments associated with implementation of the action points requesting to implement the proposed actions.

#### Proposal for consideration of the ESC

To note on the progress on implementation of the recommendations of the ICAP.

- Item No. 7: Ex-post facto approval for the following projects submitted to the Multilateral Fund (MLF) for Implementation of the Montreal Protocol for consideration and approval by the Executive Committee (Ex-Com) of the MLF.
- Item No. 7(i): Project Preparation funding request for Preparation of Stage-III of the Hydrochlorofluorocarbon (HCFC) Phase out Management Plan (HPMP Stage-III) submitted to the MLF for consideration and approval at the 87<sup>th</sup> meeting held in June 2021

#### Background

The phase out target for HCFCs in the consumption sector in line with the accelerated phase out schedule of the Montreal Protocol is being achieved through implementation of the HPMPs. India has already successfully implemented HPMP Stage I from 2012 to 2016, through which phase out of 341.77 Ozone Depleting Potential (ODP) tons has been achieved from the starting point of 1691.25 ODP tons. The HPMP Stage II is currently under implementation from 2017 to 2022, through which India would phase out HCFC consumption by 60% from the starting point, in line with the target set in the agreement between the MLF and the Government of India.

Stage-III of the HPMP will be last of the HPMPs, to be implemented during the period 2023-2030. As per the Ozone Depleting Substances (Regulation and Control) Rules, as amended in 2014, the manufacture of air-conditioners, manufacture of other Refrigeration and Air-Conditioning (RAC) products (excluding compressors), manufacture of fire extinguisher or fire extinguishing systems and manufacture of all other equipment or products using HCFC is to be phased out by 1.1.2025. Accordingly, the phase out of HCFCs in all manufacturing sectors should be completed by 31.12.2024. The activities in the RAC servicing sector would continue beyond 31.12.2024 and can go on till 2030.

#### HPMP Stage-III

Noting that the implementation of HPMP Stage-III must be commenced from January 2023, by which there will be two years available for completing the technology conversion activities under HPMP Stage-III in all the manufacturing sectors, it is essential that the HPMP Stage-III is submitted to the MLF Secretariat for placing before the Ex-Com during the November 2022 meeting.

The HPMP Stage-III shall involve phase out of remaining HCFCs from the starting point of 1691.25 ODP tons, in the following sectors

- (i) Refrigeration manufacturing
- (ii) Air-conditioning manufacturing
- (iii) Firefighting equipment manufacturing

(iv) RAC Servicing

#### Submission of Funding Request for Preparation of HPMP Stage-III

The proposal for funding request for preparation of HPMP Stage-III has been prepared in line with decision 71/42 of the 72<sup>nd</sup> meeting of the Ex-Com of the MLF which approved the guidelines for funding the preparation of stage-II of HPMPs, and beyond.

For HPMP Stage-I, and HPMP Stage-II, UNDP is lead implementing agency and the UN Environment Program (UNEP) and Deutsche Gesellschaftfür Internationale Zusammenarbeit, (GIZ) Proklima, Government of Germany were cooperating agencies. Similar arrangement has been proposed for HPMP Stage-III. Noting that the RAC servicing sector has consumption of 57% of the total HCFC-22 consumption, it will have a significant funding allocation out of the total funding allocation approved for HPMP Stage-III. GIZ, which has been implementing the servicing sector activities in HPMP Stage-I and Stage-II will have a limitation of funding of maximum 20 percent allowable level for bilateral contribution for the triennium, for which the MLF is replenished as per decision of 5<sup>th</sup> meeting of the Ex-Com of the MLF Noting that for HPMP Stage-III the funding to be approved for the RAC servicing sector will be more than 20% of the GIZ contribution to the MLF, United Nations Development Program (UNDP) will be the cooperating agency along with GIZ for implementing the RAC servicing sector activities under HPMP Stage-III

The funding request indicating the details of implementing agencies to be associated in implementation of HPMP Stage-III was submitted to the MLF with the approval of Secretary, MoEF&CC and Chairman, ESC for placing before the Ex-C during its 87<sup>th</sup> meeting held in June 2021,

#### HPMP Stage-III Preparation

After approval of the preparatory funding by the Ex-Com of the MLF, the Ozone Cell will initiate action to prepare project proposal for HPMP Stage-III. The proposal will be prepared after conducting sectoral surveys for collecting enterprise wise data as per requirements, stakeholder consultations including awareness workshops for making eligible enterprises understand the eligibility criteria, the principles of funding incremental costs for transition to non-HCFC and low-Global Warming Potential (GWP) alternative technologies, collation and analysis of data, development of sectoral phase out strategy and finalisation of the same after consultative workshop. The project preparatory funding will be used for developing the project proposal to be submitted for consideration and approval of the Ex-Com of the MLF.

#### Approval by the Ex-Com of the MLF

The Ex-Com of the MLF in its 87<sup>th</sup> meeting held in June 2021 approved the project preparation funding of US\$450,000 plus implementing agency support costs for preparation of Stage-III of HPMP for India.

#### Further Action taken

To oversee the preparation of HPMP Stage-III, a Committee under the Chairmanship of Joint Secretary (Ozone Cell) MoEF&CC has been constituted with the following constitution:

- (i) Department of Promotion of Industry and Internal Trade (DPIIT).
- (ii) Department of Chemicals and Petrochemicals.
- (iii) Ministry of Micro, Small and Medium Enterprises (MSME).
- (iv) Ministry of Skill Development and Entrepreneurship (MSDE).
- (v) Department of Science and Technology (DST).
- (vi) Additional Director/Scientist 'E', Ozone Cell Member Secretary.

The Terms of Reference of the Committee shall be the following:

- (i) To review the plan of activities and timelines for preparation of HPMP Stage-III.
- (ii) Quarterly review of progress and provide inputs/guidance.
- (iii) Review of draft sectoral strategies for the refrigeration manufacturing, air-conditioning manufacturing and fire-fighting manufacturing sectors.
- (iv) Review of overarching strategy, strategy and plan of action of UNEP for enabling component and GIZ for the RAC servicing sector and provide inputs/guidance
- (v) Review of Draft HPMP Stage-II and provide inputs/guidance
- (vi) Provide guidance/inputs for finalization of HPMP Stage-III based on national stakeholder consultation.

During the first meeting of the Committee held in October 2021, it was agreed that UNDP, as lead implementing agency, may initiate and complete the process for onboarding the consulting firm at the earliest in order to commence the survey of enterprises and establishing eligibility for inclusion in HPMP Stage-III. Consultant has been on boarded and survey of enterprises has commenced.

#### Proposal for consideration of the ESC

(i) To accord Ex-Post Facto approval for funding request submitted to the MLF Secretariat for preparation of Stage III of the HPMP and the implementing agencies to be associated during HPMP Stage-III, through the UNDP, the lead implementing agency for implementation of HPMP in India with the approval of Secretary, MoEF&CC and Chairman, ESC. (ii) To note the action taken and the progress relating to preparation of HPMP Stage-III

#### Item No. 7(ii): Institutional Strengthening Project (ISP) (Phase 13) submitted to the Multilateral Fund (MLF) for consideration and approval at the 88<sup>th</sup> Executive Committee (Ex-Com) meeting held in November 2021

#### Background

Institutional strengthening is an important part of the MLF's activities, to ensure that human and institutional infrastructure is in place to facilitate implementation of Montreal Protocol projects and activities. The main objective of institutional strengthening is to provide necessary resources to Article-5 (developing) countries to enable it to strengthen mechanisms within the country to facilitate implementation of projects for speedy and effective phase-out of the controlled substances as well as to ensure the effective liaison between the country on the one hand, and the Ex-Com, the MLF Secretariat, and the Implementing Agencies on the other. Funding for the ISP is approved to countries on a 2-year cycle based on the renewal request submitted by the country through the implementing agency, including the progress report for the previous cycle. UNDP is the implementing agency for India's ISP.

India has been securing ISP funding from the MLF since 1992 with UNDP as the lead implementing agency. Since then, twelve phases of funding have been received, which is after submission of the progress report on activities undertaken during each phase along with action plan for the next phase, review of the same by the Ex-Com of the MLF, after which the funding for subsequent phase is approved. Phase XII of the ISP is under implementation for the period December 2019 to November 2021 with an approved funding of US\$477,734.

#### Funding request for ISP Phase 13

Funding request for phase 13 of the ISP for the period from December 2021 to November 2023 has been submitted for US\$477,734, with the approval of Secretary, Ministry of Environment, Forest and Climate Change (MoEF&CC) and Chairman, Empowered Steering Committee (ESC), for consideration at the 88<sup>th</sup> meeting of the Ex-Com of the MLF held in November 2021.The Ex-Com has approved the proposal.

#### Proposal for consideration of the ESC

To accord Ex-Post Facto approval for the Funding request for phase 13 of the ISP for US\$477,734, for the period from December 2021 to November 2023, submitted with the approval of Secretary, MoEF&CC and Chairman, ESC.

#### Item No. 7(iii): Funding request for the Implementation of Enabling Activities for Phase down of Hydrofluorocarbons (HFCs) under the Kigali Amendment to the Montreal Protocol

#### Background

The Executive Committee (Ex-Com) of the Multilateral Fund (MLF) during its 79<sup>th</sup> meeting held during 3-7 July, 2017 at Bangkok, Thailand, vide decision 79/46 decided to approve enabling activities for Article-5 (developing countries) for the following:

- (i) To undertake a range of enabling activities to help the National Ozone Units (NOUs) to fulfil their initial obligations regarding HFC phasedown in line with the Kigali Amendment.
- Initial activities including country specific activities aimed at supporting institutional arrangements, review of licensing systems data reporting on HFC production and consumption and demonstration of noninvestment activities.

Vide the above said decision, the following was also decided:

- (i) Funding levels for enabling activities would be based on HCFC baseline in Ozone Depleting Potential (ODP) tons, as per which the level of funding for India would be US\$250,000.
- (ii) The duration of the project for enabling activities should be no more than 18 months, starting from the time of its approval, and balances should be returned to the MLF.

The Union Cabinet in its meeting held on 18<sup>th</sup> August 2021 approved the proposal of the Ministry of Environment, Forest and Climate Change (MoEF&CC) for Ratification of Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer for phase-down of HFCs by India. It was also decided that a National strategy for phase down of HFCs after required consultation with all the industry stakeholders will be developed by 2023. The instrument of Ratification was deposited by the Ministry of External Affairs (MEA), Government of India on 27<sup>th</sup> September 2021, which shall be the date of Ratification by India and the Kigali Amendment will enter into force for India on 27<sup>th</sup> December 2021.

#### Funding request for the Implementation of Enabling Activities for Phase down of HFCs under the Kigali Amendment

A Proposal seeking funding from the MLF for the Implementation of enabling activities for phase down of HFCs under the Kigali Amendment to the Montreal Protocol has been developed and submitted through UNEP as the implementing agency, to the MLF Secretariat for placing before the 88<sup>th</sup>

meeting of the Ex-Com of the MLF held in November 2021. The proposal includes the following components:

- (i) Development of a national strategy including policy framework for the implementation of the Kigali Amendment
- (ii) Establishing a framework for Implementing licensing, quota system and reporting obligations.
- (iii) Outreach and awareness raising.

In line with the Cabinet decision, the national strategy for phase-down of HFCs and framework for licensing and reporting obligations shall be undertaken in due consultations with all the concerned stakeholders. The development of a national policy framework is for gradual phase down of production and consumption of HFCs.

The expected outputs shall comprise the following:

- (i) Increased knowledge and understanding of industry stakeholders on Kigali Amendment.
- (ii) Increased public awareness about benefits of HFC phase down.
- (iii) National strategy for phase-down of production and consumption of HFCs and for implementing licensing and quota systems and reporting obligations.
- (iv) National policy framework for phase-down of production and consumption of HFCs as per the agreed schedule under the Montreal Protocol

#### Approval of Funding Request

The funding request was approved in the 88<sup>th</sup> meeting of the Ex-Com of the MLF held during 22-26 November 2021 for USD 250,000 and the work on the above activities shall commence from January 2022.

#### Proposal for consideration of the ESC

To accord Ex-Post Facto approval for the proposal for funding request of USD 250,000 submitted to the MLF, with UN Environment Program (UNEP) as the implementing agency, for the implementation of enabling Activities for phase down of HFCs under the Kigali Amendment to the Montreal Protocol, submitted with the approval of Secretary, MoEF&CC and Chairman, Empowered Steering Committee (ESC).

- Item No. 8: Ex-Post facto approval for the following research projects submitted to the Secretariat of the Vienna Convention and Montreal Protocol – The Ozone Secretariat, as part of the financing research and systematic observation activities related to the Vienna Convention in developing countries:
  - (i) Impact of trace gases emissions changes on the stratospheric ozone layer and the present day and future climate over South Asia
  - (ii) Capacity Building and Awareness Workshop on Stratospheric and Tropospheric Ozone Measurements and Calibration of Ozone Measuring Equipment

#### Background

The General Trust Fund for Financing Activities on Research and Systematic Observations Relevant to the Vienna Convention was established by decision VI/2 of the Conference of Parties (COP) to the Vienna Convention, in 2002, as an extra-budgetary fund for receiving voluntary contributions from the parties and international organizations for the purpose of financing certain research and systematic observation activities related to the Vienna Convention in developing countries and countries with economies in transition.

In line with the above decision, The Ozone Secretariat invited project proposals relevant to the Vienna Convention, especially improving ozone science within the framework of the following overarching goals identified by the Ozone Research Managers (ORM)

- (i) Improving the understanding and accuracy of future projections of global ozone amounts taking into account increasing Green House Gases (GHGs) and associated changes in climate parameters, recognizing that ozone depletion has been linked to meteorological changes in the stratosphere and troposphere.
- (ii) Developing ability to simulate how the stratospheric ozone layer is coupled to chemical, radiative and dynamical processes in the stratosphere and troposphere and accurate projections.
- (iii) Maintain and enhance existing observation capabilities for climate and ozone layer variables. Recognizing that there is strong coupling between ozone layer behavior and changes in climate, the observations of climate and ozone layer variables should be carried out and analyzed together whenever possible.
- (iv) Capacity building activities in the Montreal Protocol Article 5 countries to expand scientific expertise with the added benefit of expanding the

geographic areas for the measurements and data archival of key variables related to the ozone layer and changing climate.

The project proposals are reviewed and considered for financing by an Advisory Committee, established by the World Meteorological Organisation, in consultation with the Ozone Secretariat, with a funding limit of US \$50,000 per project.

Ozone cell, MoEF&CC forwarded the communication of Ozone Secretariat to all the concerned Ministries/Departments of the Government with request to submit project proposals by their concerned research Institutes, in line with requirement of Ozone Secretariat.

Sr. No.	Name of agency/ institute	Project Title
1	Mizoram University	Carbon Management Practices in Transport Sector of Aizawl Mizoram
2	Indian Institute of Science Bangalore	Stable isotopic technique for source identification of tropospheric O3 found in the urban and remote environment of Peninsular India.
3	Central University of South Bihar	Identification of major GHGs emission in Indo-Gangetic Region (IGR) and its global impact on Ozone Layer
4	Nagaland University	Students, Journalists, Depleting Ozone Layer and Climate Change: A comparative Study of perceptions in the Northeast India
5	Central University of Rajasthan	Systematic Observations of Ozone and its precursors over arid and semi-arid regions in western India: Implications to atmospheric oxidation and climate
6	Indian Institute of Tropical Meteorology An autonomous institute of the Ministry of Earth Sciences	Impact of trace gases emissions change on the stratospheric ozone layer and the present day and future climate over South Asia
7	Aligarh Muslim University	Monitoring of tropospheric ozone and carbon dioxide in Industrial, urban, semi- urban and rural areas in Northern India
8	Central University of Himachal Pradesh	In-situ measurement of background atmospheric Chlorofluorocarbons (CFCs) using Gas Chromatography-Electron Capture Detector (GC-ECD) based method in the North-Western Himalayan Foot-hills

In response, the following 9 project proposals have been received:

#### 9 CSIR-National Physical Workshop on Surface Ozone Calibration Laboratory with Primary Ozone Standard

The above 9 project proposals were reviewed by a Committee in line with the goals identified by the Ozone Research Managers and the requirements specified by the Ozone Secretariat, after which the following two project proposals were recommended for submission to the Ozone Secretariat:

Sr. No.	Project Title	Institution
	Capacity Building and Awareness Workshop on Stratospheric and Tropospheric Ozone Measurements and Calibration of Ozone Measuring Equipment	Council of Scientific & Industrial Research (CSIR)-National Physical Laboratory Dr. K.S. Krishnan Marg New Delhi-110012 India
	Impact of trace gases emissions changes on the stratospheric ozone layer and the present day and future climate over South Asia	Indian Institute of Tropical Meteorology An autonomous institute of the Ministry of Earth Sciences Dr. Homi Bhabha Road, Pashan, Pune-411008, India

The above two shortlisted project proposals were submitted to the Ozone Secretariat with the approval of Secretary, MoEF&CC and Chairman, ESC.

As per the agenda and the deliberations of the recently concluded 33<sup>rd</sup> Meeting of the Parties to the Montreal Protocol held during October 2021, the two shortlisted project proposals are under consideration by the Advisory Committee.

#### Proposal for Consideration of the ESC

To accord Ex-Post facto approval for the above said two research projects submitted to the Secretariat of the Vienna Convention and Montreal Protocol – The Ozone Secretariat with the approval of Secretary MoEF&CC and Chairman, ESC.

Item No. 9: Ex-Post Facto approval of data on production, import, export and consumption of Ozone Depleting Substances (ODSs) submitted to the Ozone Secretariat under Article 7 of the Montreal Protocol and Country Programme Progress Report (CPPR) comprising ODS-wise data to the Multilateral Fund (MLF) Secretariat for the year 2019 submitted during September 2020 and for the year 2020 submitted during September 2021.

## Background

India, as Party to the Montreal Protocol on Substances that Deplete the Ozone Layer is mandated to submit the data on production, consumption, import and export of controlled substances as per Article 7 of the Montreal Protocol. National data on controlled substances under the Montreal Protocol is essential for monitoring the effectiveness of the Montreal Protocol system. The data is used for assessing each country's compliance with the ODS phase-out schedules agreed under the Protocol, and for tracking overall progress in phasing-out ODS. The annual data provides important information on national efforts and global efforts to protect the ozone layer, including on new problems or issues at the national level or global level such as providing a basis for further policy development, for identifying appropriate activities and priorities at national level helping to identify illegal trade in ODS.

Two types of data are to be submitted each year, (i) Article 7 of the Montreal Protocol requires both Article 5 and non-Article 5 Parties (developing and developed countries) to provide statistical data about ODSs to the Ozone Secretariat every year and (ii) each Article 5 (developing) country that has a Country Programme supported by the Multilateral Fund (MLF) must provide information annually to the MLF Secretariat, on progress in the implementation of its Programme constituting chemical wise consumption in various sectors/sub-sectors. The MLF Secretariat uses the data submitted by Parties to track the progress in ODS phase-out and to identify areas where further support may be needed. Data submitted to the MLF Secretariat is called the CPPR data.

Data for each calendar year should be submitted by the 30<sup>th</sup> September of the following year. For example, data for the year 2021 should be submitted by the 30<sup>th</sup> September of 2022.

The Standing Committee on Monitoring, a standing Committee of the ESC, chaired by the Ex-Officio, Chairman, Central Pollution Control Board (CPCB) reviews the data compiled by the Ozone Cell and recommends the same for consideration and approval of the ESC, for submission to the Ozone Secretariat and MLF Secretariat respectively. It is pertinent to note that this Committee is constituted in a way that all the line Ministries which are involved in maintaining the data or dealing with the ODSs are the members of this Committee. So, there is an element of responsibility on equal basis to

all the line Ministries to maintain the quality and consistency while managing the data relating to controlled substances.

## Article 7 and CPPR data for the years 2019 and 2020

The Article 7 and CPPR data for the year 2019 was discussed in the meeting of the Standing Committee on Monitoring held on 21 September 2020 and after approval of the recommendations of the Standing Committee on Monitoring by Secretary MoEF&CC and Chairman, ESC the Article 7 data was submitted to the Ozone Secretariat and the CPPR data to the MLF Secretariat respectively within time. The finalised Article 7 data for the year 2019 is placed at *Enclosure-8, pages 157-172* and finalized CPPR data for the year 2019 is placed at placed at placed at *Enclosure-9, pages 173-179* respectively.

The Article 7 and CPPR data for the year 2020 was discussed in the meeting of the Standing Committee on Monitoring held on 22 September 2021 and after approval of the recommendations of the Standing Committee on Monitoring by Secretary MoEF&CC and Chairman, ESC the Article 7 data was submitted to the Ozone Secretariat and the CPPR data to the MLF Secretariat respectively within time. The finalised Article 7 data for the year 2020 is placed at *Enclosure-10, pages 180-195* and finalized CPPR data for the year 2020 is placed at placed at *Enclosure-11, pages 196-202* respectively.

During the year 2020, vide order dated 21<sup>st</sup> April, 2021 a Working Group of the Standing Committee on Monitoring was constituted with the approval of Secretary, MoEF&CC and Chairman, ESC for examining applications for use of ODSs as feedstock for registration under Ozone Depleting Substances (Regulation and Control) Rules, 2000 as amended from time to time.

#### Following proposals recommended by the Working Group of the Standing Committee on Monitoring for use of ODSs as feedstock for registration under Ozone Depleting Substances (Regulation and Control) Rules, 2000, as amended from time to time.

The following enterprises were registered under the Ozone Depleting Substances (Regulation and Control) Rules, 2000, as amended from time, based on the recommendations of the Working Group and review by the Standing Committee on Monitoring in its meeting held on 22<sup>nd</sup> September, 2021:

	Feedstock process approved along with the name of ODS			
0	Use of HCFC-22 as feedstock for the manufacture of Sulfentrazone.			
FVI. LIU.	manulacture of Sullentrazone.			

	Use of Carbon Tetrachloride (CTC) as feedstock material for the manufacture of 3-chloro-5-Trichloromethyl Chloropent-1-ene (CTCM CP) for trial runs/pilot scale study.
M/s Chemplast Sanmar Ltd., Chennai	Use of CTC as feedstock material for the manufacture of Sodium 4-(2, 4-Dichloro-M-Toluoyl)-1, 3-Dimethyl-5-Pyrazololate (MY-
M/s SRF Limited	71ONa) for trial runs /pilot scale study. Use of CTC as feedstock for manufacture of DV Acid Chloride and Chlorotrichloromethyl Cyclopentene (CTCM-CP)
M/s Gujarat Fluorochemicals Ltd.	Use of CTC as feedstock material for the manufacture of 3,4-dichloro-6- (trifluoromethyl) toluene for trial runs / pilot scale
· · ·	Use of HCFC – 22 as feedstock material for the manufacture of the product Pyroxasulfone (Octopussy)
M/s Astec Lifesciences Ltd.	Use of carbon tetrachloride as feedstock material for 5 batches analysis trial runs / pilot scale study purpose only

## **Proposal for Consideration of the ESC**

- (i) To note the registration of the above mentioned under the Ozone Depleting Substances (Regulation and Control) Rules, 2000, as amended from time, based on the recommendations of the recommendations of the Working Group and review by the Standing Committee.
- (ii) To accord Ex-Post Facto approval of data on production, import, export and consumption of ODS submitted to the Ozone Secretariat under Article 7 of the Montreal Protocol and CPPR comprising Ozone depleting substance wise data to the MLF Secretariat for the year 2019 submitted during September 2020 and for the year 2020 submitted during September 2021, as per the recommendations of the Standing Committee on Monitoring and with the approval of approval of Secretary MoEF&CC and Chairman, ESC

# Item No. 10: Ex-Post Facto approval of the customs and excise duty exemption granted to five enterprises under the Fiscal Incentive Scheme

## Background

The Union Cabinet in its meeting held on 27 January 1994 approved the fiscal concessions in excise and customs duty for adoption of substitutes for Ozone Depleting Substances (ODSs), thus making the import of technology and machinery for the projects funded by the Multilateral Fund (MLF) eligible for concessional customs and excise duty. It was also approved that the ESC for implementation of the Montreal Protocol is authorized to grant such concessions

The TFSC, one of the Standing Committees of ESC, is responsible for considering of project proposals for availing the fiscal incentive scheme and upon appraisal, recommend to the ESC for approval for grant of exemptions excise and customs duty, under notification of the Department of Revenue, Ministry of Finance, Government of India. The latest amendment to the notification was in 2012.

# Proposal for grant of excise and customs duty exemption

Name of the Enterprise	Date of meeting of the TFSC	Decision of TFSC	Remarks
M/s Lloyd Insulations (India) Ltd., Pithampur, Madhya Pradesh	15.10.2019	Recommended for grant of excise and customs duty exemption	Details placed at Enclosure-12, pages 204-207
M/s Sudarshan Saur Shakti Pvt. Ltd., Aurangabad	10.08.2020	Recommended for grant of excise and customs duty exemption	Details placed at Enclosure-13, pages 222-224
M/s Shree Venus Energy System Private Limited, Chennai	10.08.2020	Recommended for grant of excise and customs duty exemption	Details placed at <i>Enclosure-13,</i> pages 225-227
M/s Havells India Limited, Rajasthan	10.08.2020	Recommended for grant of excise and customs duty exemption	Details placed at <i>Enclosure-14,</i> pages 228-231

Following five Proposals were considered by the TFSC for grant of excise and customs duty exemption

M/s	Varivar	10.08.2020	Recommended	for	Details placed at
Plast	Products		grant of excise	and	Enclosure-13,
Pvt.	Ltd.,		customs	duty	pages 231-234
Kanpu	r, Uttar		exemption	-	
Prades	sh				

Duty exemption certificates were issued to the above mentioned five enterprises after approval of the recommendation of TFSC by Secretary MoEFCC and Chairman, ESC.

#### Proposal for consideration of ESC:

To accord Ex-post facto approval of the customs and excise duty exemption granted to five enterprises under the Fiscal Incentive Scheme as per the recommendations of the TFSC with the approval of Secretary MoEF&CC and Chairman, ESC.

Item No. 11: Status report on implementation of the Project on Upskilling of airconditioner service technicians, implemented through a Memorandum of Agreement (MoA) between the Ministry of Environment, Forest & Climate Change (MoEF&CC) and the Ministry of Skill Development and Entrepreneurship (MSDE), under the Pradhan Mantri Kaushal Vikas Yojana (PMKVY).

# Background

A Memorandum of Understanding (MoU) was signed between the MoEF&CC and the MSDE on 2<sup>nd</sup> August 2018, to jointly undertake a project relating to upskilling and certification of 100,000 Refrigeration and Air-Conditioning (RAC) service technicians on good servicing practices and knowledge of alternative refrigerants to ozone-depleting chemicals, through funding under the National Skill Qualification Framework (NSQF), Recognition of Prior Learning (RPL) type 3 of the – Pradhan Mantri Kaushal Vikas Yojana-2.0 (PMKVY). The salient features of the project are:

Target:	To train, assess and certify 1,00,000 RAC Service Technicians Phase I: 20,000 Phase II: 40,000 Phase III: 40,000		
Training Course	3 days (including hands-on practical training and		
Duration	assessment at training Centers)		
Batch strength	18-20 technicians		
Need	<ul> <li>The use of RAC equipment is growing at a rapid pace in the country.</li> <li>Out of the estimated 2 lakh RAC service technicians in the country, the majority are semi or unskilled.</li> <li>Given that around 50% of refrigerant consumption is in the servicing sector, training of technicians on proper servicing practices to reduce leakages can have significant environmental benefits.</li> <li>The training and certification would also benefit technicians as it covers safety practices and would increase their employability within the formal sector.</li> </ul>		

Project Outcomes	<ul> <li>Better awareness of safety and environmental practices in RAC servicing by the service technicians</li> <li>Reduced consumption of refrigerants among trained technicians</li> <li>Increased number of certified technicians who can seek employment in the formal sector.</li> </ul>		
Project Budget	Total Project cost: INR 34,00,00,000.		
	<b>Per technician cost</b> : INR 3400 (Including job kit, consumables, pay-out to training centre, etc).		

The project is implemented by the Electronics Sector Skill Council of India (ESSCI), a not-for-Profit Organization, registered under the Indian Companies Act, 1956 with financial support by National Skill Development Corporation (NSDC), in close cooperation with the Ozone Cell, MoEF&CC.

All the technicians trained are provided an Incentive of Rs. 500/- under the Direct Benefit Transfer scheme (DBT scheme). In addition they are covered under accidental insurance for Rs. 2 lakh for a period of 3 years. The trained technicians can also avail loan under the Micro Units Development & Refinance Agency Ltd. (MUDRA) scheme for procurement of tools, etc.

## **Implementation Status**

The status of implementation of the project till date is presented below:

#### Phase I

Target	Enrolled	Assessed	Certified
20000	20000	19813	17146

#### Phase II

Target	Enrolled	Assessed	Certified
40000	31748	24426	21740

#### Total

Target	Enrolled	Assessed	Certified
60000	51748	44239	38886

## **Project Monitoring Framework**

A Project Advisory Committee (PAC) co-chaired by Joint Secretaries of MoEF&CC and MSDE and comprises representatives of industry, industry associations, NSDC provides oversight and guidance in implementation.

A third-party assessment of the trainings undertaken, infrastructure available at the training centre, quality of trainers and assessors including feedback from the trainees on the quality of training done, was carried out for the phase -1 and the findings were presented to the PAC and the lessons learnt to be appropriately applied in the implementation of phase 2.

# Closure of PMKVY 2.0

ESSCI, vide communication dated 19 May 2021 has conveyed that the PMKVY 2.0 scheme ended on 31<sup>st</sup> March 2020 and hence all allocations under the scheme were suspended.

# Need for continuation of the project

- (i) RAC is an important and critical sector both for social and economic development in the country. Air conditioning is becoming a necessity for healthy working and living environment, and refrigeration is an essential component of the cold chain for the preservation and distribution of perishable food.
- (ii) Servicing sector is important not only because it consumes a large total consumption proportion of the of refrigerants like Hydrochlorofluorocarbons (HCFCs) and Hydrofluorocarbons (HFCs) but also it has been the major source of emissions of these chemicals to the environment. These refrigerants are either Ozone Depleting Substances (ODS) or have extremely high global warming potential. Refrigerants leak out of air-conditioners during normal operation and due to poor servicing practices, causing adverse impacts to the environment. About 40% to 50% of the refrigerant consumption is for the servicing. In addition, the energy efficiency of wrongly serviced airconditioners is also low.
- (iii) With the global focus on adoption of climate friendly and low global warming potential technologies, the role of RAC service technicians becomes more important, particularly in the safety aspects of these technologies.
- (iv) India has been witnessing high growth in the air-conditioning market. As per the projections of the India Cooling Action Plan (ICAP), the stock of room air conditioners is expected to grow from about 20 million in 2017-18 to 350 million in 2037-38. Thus, there is a huge demand for servicing.

- (v) The quality of servicing would also maintain the energy efficiency of the serviced equipment resulting in saving in electricity consumption. The use of proper servicing practices would not only result in savings in refrigerant and consumption and emissions but also reduce electricity consumption in the serviced equipment.
- (vi) Most of the technicians engaged in this sector are from the unorganized sector without formal technical education and/or training and these technicians have learnt by working in the field over several years.
- (vii) The project would also supplement the efforts of training of RAC service technicians being carried out through the HCFC Phase-out Management Plan (HPMP) implemented by Ozone Cell, MoEF&CC in close cooperation with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) Proklima, Government of Germany. As part of Stage-I of HPMP, nearly 11,000 technicians were trained and under HPMP Stage-II, it is envisaged that around 17,000 technicians will be trained by the end of 2022.
- (viii) The project would not only improve the livelihood opportunities of the RAC service technicians working in the informal sector though upskilling and certification, but most importantly this would have significant positive environmental impacts through reduction leakage of refrigerants and increase in the energy efficiency in the operation of RAC equipment.
- (ix) The project would also help in achieving the goal of upskilling and certifying 1 lakh RAC technicians by 2023 listed in the ICAP.

# Action taken by MoEF&CC for continuation and completion of the Project

Ozone Cell, MoEF&CC, through a communication from the Joint Secretary (Ozone Cell) to the Secretary, MSDE (*Enclosure-14,* pages 238-239) has requested.

Another communication dated 9<sup>th</sup> December 2021 (*Enclosure-15, page* **240**) was sent from Joint Secretary (Ozone Cell) to Additional Secretary, MSDE requesting for continuation of the project and completion of the training and certification of the balance 61,200 RAC technician.

## Proposal for consideration of the ESC

To note the progress made in implementation, further action taken for continuation and completion of the Project and prepare a way forward.

- Item No. 12: Report on outcomes of the Montreal Protocol Meetings:
- Item No. 12(i): Executive Committee (Ex-Com) of the Multilateral Fund (MLF) for the Implementation of the Montreal Protocol.
- Item No. 12(ii): Meeting of Parties (MOP) to the Montreal Protocol including the 4<sup>th</sup> Extraordinary Meeting of the Parties to the Montreal Protocol
- Item No.12(iii): Open Ended Working Group (OEWG) of the Parties to the Montreal Protocol

# Background

The Ex-Com of the MLF was established along with the MLF in 1991 and is responsible for developing and monitoring the implementation of specific operational policies, guidelines and administrative arrangements, including the disbursement of resources to the Article-5 (developing countries). The Ex-Com meets at least twice a year to approve the funding of projects to phase out controlled substances in Article 5 parties, including institutional strengthening and capacity-building, working through the four implementing agencies (the World Bank, the UN Environment Program (UNEP), the United Nations Development Program (UNDP) and the United Nations Industrial Development Organization (UNIDO)) and other bilateral agencies for project implementation. The Ex-Com reports annually to the MOP on the activities exercised under its mandate, and to make recommendations as appropriate. The Ex-Com comprises seven members from Article 5 parties and seven members from non-Article 5 parties and each member can coopt additional 2 members. Ex-Com membership is considered by the MOP India, being the second largest producer and consumer of annually. controlled substances among the developing countries (Article-5 countries), is represented in the Ex-Com each year as Member/co-opted Member with China, the largest producer and consumer of controlled substances in the Asian region.

The MOP to the Montreal Protocol is held once a year to review the implementation of the Protocol and take the required policy decisions for implementing the reduction of controlled substances in line with the agreed schedule by the Parties, including required amendments, adjustments to the reduction schedule. Parties may also decide to convene Extraordinary MOP (Ex-MOP), for deciding required on any specific issue and which cannot wait till the regular MOP is held.

The OEWG was established in 1987 as a subsidiary body to the MOP, to deal with specific issues and recommend action to the MOP. At least one OEWG meeting is held per year, during which any issue referred to it by the MOP is considered. The OEWG also considers all issues prior to forwarding its recommendations to the MOP. The MOP makes the final decision on any matter referred to it by the OEWG.

# Outcomes of the meetings of the Ex-Com held during 2020 and 2021

During 2020 and 2021, four meetings of the Ex-Com of the MLF comprising 85<sup>th</sup> to 88<sup>th</sup> meetings were held. Due to the on-going COVID-19 pandemic and taking into account the travel restrictions imposed by the Government of Canada, MLF Secretariat, all the four meetings of the Ex-Com were held through virtual and the Intersessional Approval Process (IAP) mode. During the virtual meetings only essential agenda items including project proposals which need discussion are considered and the remaining project proposals on which all technical and cost issues are resolved are posted on the web portal designed, from which members can see and give comments, if any. In case of no comments by any member, else the proposals are deemed to be approved

Indian representatives participated in all the four meetings - as member during the 85<sup>th</sup> and 86<sup>th</sup> meetings held during 2020 and as coopted member with China in the 87<sup>th</sup> and 88<sup>th</sup> meetings held during 2021.

The significant outcomes of the Ex-Com meetings are as follows:

- (i) Approval of Project Proposals for India
  - a) The 86<sup>th</sup> meeting of the Ex-Com of the MLF held in November 2020 approved the third tranche funding request of US\$14,792,059 for HCFC Phase out Management Plan (HPMP) Stage-II and the corresponding 2021-22 tranche implementation plan.
  - b) Funding request of US\$490,000 for Preparation of Stage-III of the HPMP was approved at the 87<sup>th</sup> meeting of the Ex-Com of the MLF held in June 2021
  - c) Funding request of US\$ 477,000 for renewal of Institutional Strengthening Project (ISP) (Phase 13) was approved at the 88<sup>th</sup> meeting of the Ex-Com of the MLF held in November 2021
  - d) Funding request of US\$250,000 for the Implementation of Enabling Activities for Phase down of Hydrofluorocarbons (HFCs) under the Kigali Amendment to the Montreal Protocol was approved at the 88<sup>th</sup> meeting of the Ex-Com of the MLF held in November 2021
- (ii) The 87<sup>th</sup> meeting of the Ex-Com of the MLF approved the guidelines for preparation of HFC phase down plans by Article-5 (developing countries) under the Kigali Amendment to the Montreal Protocol
- (iii) The 87<sup>th</sup> meeting of the Ex-Com decided that the MLF Secretariat shall prepare for the first meeting of the Ex-Com in 2022, a report identifying options within the MLF and by working with other financial institutions

that financed energy efficiency and whose procedures could be compatible with those of the MLF, for mobilizing financial resources for maintaining and/or enhancing energy efficiency when replacing HFCs with low global warming potential alternatives. The MLF Secretariat, as part of the report, shall also identify the relevant procedures and conditions relating to the provision of grants and other funding options by such institutions for maintaining and/or enhancing energy efficiency. It may be mentioned that India with other likeminded countries has been actively pursuing for inclusion of energy efficiency as a cost element while phasing down HFCs under the Kigali Amendment to the Montreal Protocol.

- (iv) Items considered at the 88<sup>th</sup> meeting of the Ex-Com
  - a) Guidelines for funding for phase out of HCFC-22 in the production sector. Intervening on issue, representative of India said the swing production plants are eligible for compensation as there is loss of profit by early phase-out of production of HCFCs from 2040 to 2030 and till an outcome on the issue of swing plants is reached under the issue relating to key aspects related to HFC-23 by-product control technologies and the related policy is finalized by the Ex-Com, the HCFC-22 production sector guidelines should be retained in the agenda.
  - b) On the issue relating to potential strategies, policy measures and commitments as well as projects and activities that could be integrated with Stage-I of the HFC phase down management plans for Article 5 countries to ensure limits on growth and sustainable reductions in the HFC consumption, several Article 5 representatives including India said that given the very complex nature of several elements covered in the document, there is a need for clear understanding for assessing each of the recommendations proposed by the MLF Secretariat and the impact of the proposed elements on Article 5 Countries during HFC phase-down. Since many of these recommendations involve commitment from Article 5 countries including consultation with line Ministries and industry stakeholders, there is a need to have full clarity on each recommendation and the associated elements, which is very difficult in the present virtual/online format, restricting consultations amongst Noting the complexity of the issues and Article 5 Parties. involvement of several stakeholders in the countries, it is proposed that such matters should be only considered once the in -person meetings are held.
  - c) On the issue relating to modalities for funding for HFC phase down in the refrigeration and air conditioning servicing sector, several Article 5 representatives including India said that servicing is important both for Low-Volume Consuming (LVC) and non-LVC

countries and there should be a clear framework on the issue both for LVC and non LVC countries before the funding modalities for the servicing sector are discussed and the discussion should form part of the cost guidelines, the discussion on which are pending.

## Outcomes of the MOP to the Montreal held during 2020 and 2021

The 12<sup>th</sup> Joint Conference of Parties (COP) to the Vienna Convention (Part-1) and 32<sup>nd</sup> MOP to the Montreal Protocol was held from 23-27 through virtual mode and the Joint COP to the Vienna Convention (Part 2) and the 33<sup>rd</sup> MOP to the Montreal Protocol was held from 23-29 October 2021 through virtual mode. During these meetings limited issues were addressed in view of the meetings being through virtual mode due to the Covid Pandemic.

The significant outcomes of the above meetings are

- (i) To adopt an interim budget for the triennium 2021-2023 and to authorize use of rollover funds from the current triennium. The interim budget would be in effect till the parties adopted a decision for the replenishment of the MLF, which is for a 3-year cycle. The decision on replenishment could not be adopted by the Parties in 2020 in a absence of a physical meeting.
- (ii) To hold an extraordinary MOP for finalizing the replenishment or to adopt a decision for payment of national contributions to the MLF
- (iii) To appoint Mr. Rajendra Shende, Chairman, TERRE Policy Center and former head, UNEP OzonAction, as Senior Expert Member of the Technology and Economic Assessment Panel (TEAP) of the Montreal Protocol for 2021 and 2022.
- (iv) India has been elected as member of the Ex-Com of the MLF for the year 2021 and for 2020, as coopted member with China.
- (v) On the issue of Chlorofluorocarbon (CFC)-11, the delegation of European Union introduced a draft decision on Enhancing the global and regional atmospheric monitoring of CFC-11 and other substances controlled by the Montreal Protocol during the 33rd MOP. Intervening on the issue, several Article 5 representatives including India said that the draft decision covers a range of issues which are quite complex. Issues such as gaps in monitoring addressed by the Ozone Research Managers (ORM), enhance sharing of data and capacities on atmospheric monitoring of controlled substances, establishing new monitoring capacities, etc., are quite complex and should be addressed taking into account national circumstances and accordingly, more time is needed for understanding and assessing each of the operating paragraphs in the draft decision. Since many of the proposed elements in the operating paragraphs in the draft decision involve commitment from Article 5 countries, there is a need to have common understanding and hence it would not be possible to

come to an agreement in these virtual meetings and the discussion should be deferred to a physical meeting.

(vi) On the issue of energy efficiency, intervening on the Conference Room Paper (CRP) submitted by the delegation of United Kingdom of Great Britain and Northern Ireland relating to continued provision of information on energy efficient and low global warming potential technologies, several Article 5 representatives including India said that The TEAP task force on Energy Efficiency has being producing comprehensive reports on various issues relating to energy efficiency and the good work should continue with focus on improvement in energy efficiency of Refrigeration and Air-Conditioning (RAC) equipment including in servicing of RAC equipment and address issues relating to adoption of low-GWP and energy efficient technologies and the discussion should be focused on these issues to arrive at a decision to enable the energy efficiency Task force to continue its work. The elements of the CRP relating to review of national regulatory framework for preventing import of unwanted HCFCs and HFCs and submission of national regulations and policies to the Ozone Secretariat. These aspects are not related to the energy efficiency. Thus, these issues should be taken up separately, if required Intervening on the CRP introduced by the delegation of Ghana on behalf of the African Countries, several Article 5 representatives including India said that the CRP talks about several elements like unwanted dumping of obsolete items, iPIC platform, estimated damage of obsolete products traded, green customs initiative, etc., which are guite complex and not directly related to energy efficiency. This CRP could be taken up as a separate agenda item if required at the next meeting.

# Outcomes of the Meetings of the OEWG of the Parties to the Montreal held during 2020 and 2021

The 42<sup>nd</sup> meeting of the OEWG of the Parties to the Montreal Protocol was held from 14-16 July 2020 and the 43<sup>rd</sup> meeting in 2 parts – from 22-24 May 2021 and 14-17 July 2021 through virtual mode.

During these meetings the CFC-11 Task force, Replenishment Task Force and energy efficiency task force presented their respective reports for consideration by the Parties. The structure of the meeting was only to present the report by the Task Force after which participants can pose questions and make comments during question-and-answer sessions and seek clarifications. Indian representatives participated in the deliberations on all the three issues and sought the required clarifications.

## Proposal for consideration of the ESC

To note the outcomes of the meetings Montreal Protocol held during 2020 and 2021.

Item No. 13: Reporting items:

Item No. 13(i) : Issuance of quota order for Hydrochloroflourocarbon (HCFC)-22 Production for non-feedstock applications for the years 2020 and 2021 in line with the Montreal Protocol phase out schedule and as per the provisions of Ozone Depleting Substances (Regulation and Control) Rules 2000, as amended in 2014

#### **Background**

In accordance with sub rule 4 of Rule 3 of the Ozone Depleting Substances (Regulation and Control) Rules, 2000, and its amendments, Quota for production of controlled substances needs to be issued by the Ministry of Environment, Forest & Climate Change (MoEF&CC), to adhere to the phase out schedule by the Country, as Party to the Montreal Protocol. Currently phase out of production and consumption of HCFC-22, a controlled substance under the Montreal Protocol, is being implemented as per the accelerated phase out schedule of the Montreal Protocol.

Production Quota is issued to the producers of HCFC-22 in the country based upon the average of the non-feedstock HCFC-22 production reported under the Montreal Protocol, for the years 2009-2010 (which constitutes the baseline, from which phase out is to be done and reduction target is to be achieved by the producers of HCFC-22 in line with the phase out schedule of the Montreal Protocol). The HCFC-22 production for non-feedstock uses is apportioned on pro-rata basis among the HCFC-22 producers, considering the phase out target as per the Montreal Protocol reduction schedule, which constitutes the quota, the limit for which each producer can produce during a year.

The issuance of the enterprise-wise production quota for HCFC-22 production for non-feedstock applications commenced in the year 2016 to enable the country to be in compliance with the Montreal Protocol reduction schedule for HCFCs. The baseline of the country for HCFC-22 production (average of 2009 and 2010 production of HCFC-22 for non-feedstock purpose) is 43626.728 MT. To enable the country to be in compliance with the Montreal Protocol schedule, the HCFC-22 production needs to be phased out in a step wise manner starting 10% reduction from baseline production as on 1.1.2015, 35% as on 1.1.2020, 67.5% as on 1.1.2025 and 97.5% as on 1.1.30, with 2.5% of the baselines constituting the service tail, the annual average during the period 2030-2040.

It may be mentioned that as on 1.1.2020, as against a reduction target of 35% from the baseline as per the Montreal Protocol, India achieved a reduction target of 44% from the baseline in HCFC-22 production.

Quota for HCFC-22 production was issued to the HCFC-22 producers for the years 2020 and 2021 with the approval of Secretary, MoEF&CC and Chairman, Empowered Steering Committee (ESC). Quota orders for 2020 is placed at *Enclosure-16*, pages 241-252 and for 2021 at *Enclosure-17*, pages 253-264 respectively.

## Proposal for consideration of ESC

To note the issuance of Issuance of quota order for HCFC-22 Production for non-feedstock applications for the years 2020 and 2021 in line with the Montreal Protocol phase out schedule and as per the provisions of Ozone Depleting Substances (Regulation and Control) Rules 2000, as amended in 2014, with the approval of Secretary, MoEF&CC and Chairman, ESC.

#### Item No. 13(ii): Nomination of Mr. Rajendra Shende, Former Head, UN Environment Program (UNEP) OzonAction branch as senior expert member to the Technology and Economic Assessment Panel (TEAP) of the Montreal Protocol, for the years 2021 and 2022.

#### Background

The TEAP is the technology and economics advisory body to the Montreal Protocol Parties and provides, at the request of Parties, technical information related to the alternative technologies that have been investigated and employed to make it possible to phase out/phase down and virtually eliminate use of substances controlled under the Montreal Protocol. The TEAP comprises members from both Article 5 (developing) and Non-Article-5 (developed countries). The TEAP prepares a progress report every year and presents to Parties at the Open-Ended Working Group (OEWG) of the Parties to the Montreal Protocol and an updated report, if required, to the Meeting of the Parties (MOP) held each year.

Membership to TEAP along with tenure is decided by the MOP. In accordance with the normal schedule for preparing its annual report, the TEAP sets out the status of the Panel membership along with details of members whose terms expire at the end of the concerned year.

Parties need to submit nominations in accordance with paragraph 3 of decision 31/8 of the 31<sup>st</sup> MOP to the Montreal Protocol, taking into account the matrix of needed expertise, and geographical and gender balance, to address new issues related to the Kigali Amendment, such as energy efficiency, safety standards and climate benefits. Decision on the nominations is adopted at the High-Level Segment of the MOP each year.

## Nomination to TEAP from India

Mr. Rajendra Shende, Chairman, TERRE Policy Centre and former Head, Ozon Action Branch, UNEP, was nominated to the TEAP in the year 2016 vide decision 28/12 of the 28<sup>th</sup> MOP for a period of 4 years starting 1 January 2017. Based on the request received from Mr. Shende, the proposal for renomination was submitted to the Joint 12<sup>th</sup> Conference of Parties to the Vienna Convention and 32<sup>nd</sup> Meeting of the Parties to the Montreal Protocol held virtually during October 2020, which approved all similar nominations received during the year for a period of one year starting January 2021, keeping in view that in view of the new requirements of expertise for the implementation of the Kigali Amendment, which should be discussed and finalized by the Parties at an in person meeting. Mr. Shende requested the MoEF&CC for renomination prior to the MOP as his term was expiring in December 2021. Based on the request received the proposal for renomination of Mr. Shende was submitted to the Joint 12<sup>th</sup> Conference of Parties (Part-II) to the Vienna Convention and 33<sup>rd d</sup> MOP to the Montreal Protocol held virtually during October 2021 after approval of the Hon'ble Minister, Environment, Forest and Climate Change. During 2021, a similar decision was taken by the Meeting of Parties to approve all similar nominations for a period of one year, starting January 2022 to December 2022 as the meeting was held virtually.

To have wider representation in the TEAP from India, the Ministry of Environment, Forest and Climate Change (MOEF&CC) plans to send communication to all the scientific research and academic institutions, inviting names of suitable persons, in line with the matrix of needed expertise defined by the TEAP in its 2021 Progress report, for considering nominations to be made to TEAP during the Meeting of Parties to be held during 2022.

#### Proposal for consideration of the ESC

To note the renomination of Mr. Rajendra Shende, Chairman, TERRE Policy Centre and former Head, Ozon Action Branch, UNEP, to the TEAP for the years 2021 & 2022.

# Item No.13(iii): Participation of India in the Asia-Pacific Regional Ozone-2- Climate Art contest 2021-2022 organized by UN Environment Program (UNEP)

## Background

UNEP, Asia and the Pacific Office is organizing a "Asia-Pacific Regional Ozone2Climate Art Contest" to commemorate the success of the Montreal Protocol on Substances that Deplete the Ozone Layer. The aim of the Art contest is to support the National Ozone Units (NOUs) in conducting public awareness and outreach activities to increase awareness of the general public about the Montreal Protocol, including the Kigali Amendment. The art contest is a yearlong campaign, from its launch at the national level by participating Article 5 countries on 16<sup>th</sup> September 2021 to the awarding of the regional winner on 16<sup>th</sup> September 2022, which is World Ozone Day.

The objectives of the Art Contest are as follows:

- (i) To promote the linkage of ozone layer and climate change protection, as well as achievements made under the Montreal Protocol
- To promote outreach for continuous mobilization of public support on the phase-out of Ozone Depleting Substances (ODS) and phasedown of Hydrofluorocarbons (HFCs).

# Details of the Art Contest

The art contest has been categorized under three categories namely:

- a) **Photography contest** including original photographs taken from a camera without heavy digital manipulation (such as adding additional objects or removing any objects from original photo).
  - a. Slight photo adjustments such as lighting, brightness, contrast, etc. can be used.
- b) *Drawing contest* including hand-drawing, hand-painting, or other hand-made art.
- c) *Graphic design contest* including digital drawings/computer assisted designs and graphic program/applications from computer or mobile phone applications.

The content to be presented in the artwork can be either be related to the achievements, actions, and /or benefits related to the Vienna Convention, Montreal Protocol including the Kigali Amendment for protecting the ozone layer and climate or related to the theme of World Ozone Day 2021. The Theme of World Ozone Day 2021 was *Montreal Protocol - Keeping us, our food and vaccines cool*.

Participation will be made in 2 (two) groups for all the above mentioned three categories of competition. The two groups for participation are as follows:

- a) **Youth category**: For an individual or group of participants with the age 15 years or younger as of 16 September 2021.
- b) **General category**: For an individuals or group of participants with the age older than 15 years as of 16 September 2021.

Under each category, only the first-place winner of each category at the national level will be submitted to enter the regional contest.

In the first phase of the competition, the countries that are interested in joining the Art Contest will organize a contest at the national level followed by evaluation and selection of the national winners for entry in the regional contest. In the second phase, the nominated winners from the countries will be uploaded to a digital platform and UNEP will compile the nominations from all countries and conduct an evaluation to select the winners at the regional level. The final evaluation for award will be based on the following factors:

- a) 30% from the public voting
- b) 35% from the National Ozone Unit in the region
- c) 35% from Judging Committee comprising of UNEP, United Nations Educational, Scientific and Cultural Organization (UNESCO), and specialists.

The result of the regional contest will be publicly announced in September 2022 by UNEP. UNEP has developed a website i.e. <u>www.ozone2climate.org</u> for the competition in which the participants can submit their entries.

India confirmed its participation in the above contest with the approval of Secretary, Ministry of Environment, Forest & Climate Change (MoEF&CC) and Chairman, Empowered Steering Committee (ESC).

## Proposal for Consideration of the ESC

To note the participation of India in the Asia-Pacific Regional Ozone2Climate Art Contest, organized by UNEP, with the approval of Secretary, MoEF&CC and Chairman, ESC.

## Background

The World Ozone Day is celebrated on 16<sup>th</sup> September each year to commemorate the signing of the Montreal Protocol, an international environmental treaty for phasing out of production and consumption of Ozone Depleting Substances (ODSs) that came into force on this day in 1987. World Ozone Day is celebrated every year to spread awareness among people about the depletion of Ozone Layer and the measures taken/ to be taken to preserve it. The Ozone Cell, Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India has been celebrating the World Ozone Day since 1995 at the National and State levels.

## World Ozone Day 2021

The 27<sup>th</sup> World Ozone Day was celebrated on 16 September 2021 through virtual mode with the theme "*Montreal Protocol - Keeping us, our food and vaccines cool*". Hon'ble Minister of State for Environment, Forest and Climate Change, Government of India, Shri Ashwini Kumar Choubey was the Chief Guest for the function. The key highlights of the World Ozone Day 2021 function are the following:

#### Release of Awareness Material

- (i) Release of winning entries of Poster and slogan competitions: To create awareness among the students to protect the Ozone Layer, competitions in the categories of Poster and Slogan Writing were organized for school children across the country. 2137 entries have been received for the poster competition and 800 entries for the slogan category respectively through a web portal developed for the purpose. The winning entries were finalized by a panel of judges.
- (ii) 23<sup>rd</sup> edition of "The Montreal Protocol: India's Success Story" highlighting India's achievements in the Montreal Protocol Implementation in phasing out of ODSs till date.
- (iii) Short video Film on phasing out of Ozone Depleting Substance in India highlighting India's achievement in phasing out of HCFC-141b completely from the foam sector in India.

## Release of Publications

 (i) Action Plan for implementing the recommendations of the India Cooling Action Plan (ICAP) for the thematic Area Space Cooling in Buildings: The action plan has been finalized after mapping of the recommendations given in the ICAP with the ongoing government programs/schemes and the proposed actions by different agencies and extensive discussion with all the concerned stakeholders including line ministries/departments.

- (ii) Study Report on Public Procurement Policies for Refrigeration and Air-Conditioning (RAC) Equipment using non-ODS based refrigerants: This study focuses on promotion of public procurement of highest star labelled energy efficient equipment using adoption of non-ODS and low-Global Warming Potential (GWP) alternative technologies through the government e marketplace (GeM)
- (iii) Study Report on Cold Chain sector in India for Promoting non-ODS and Low-GWP Refrigerants: This study presents the sustainable cooling technology options, focusing on energy efficient, non-ODS and low-GWP technologies, to be adopted in different components of cold chain.
- (iv) **Booklet on Good Servicing Practices for Energy Efficient operation of Room Air conditioners**: The booklet provides information on reduction of refrigerant leakages to the environment and maintaining energy efficiency of room airconditioners through good servicing practices, which will in turn reduce greenhouse gas emissions to the environment.

The above said publications released were widely disseminated to all the concerned stakeholders including the nodal line Ministries/ Departments

## Proposal for consideration of the ESC

To note the celebration of the World Ozone Day 2021 and the activities undertaken.

#### Item No.13(v): Relocation of office of the Ozone Cell, Ministry of Environment, Forest & Climate Change (MoEF&CC) from India Habitat Centre to 1<sup>st</sup> Floor, 9, Institutional Area, Lodhi Road New Delhi

#### Background

The Ozone Cell was functioning from the premises of Consultancy Development Centre (CDC) at the India Habitat Centre Lodhi Road, New Delhi since August 1993. CDC is an autonomous institution of the Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology, Government of India. CDC provided space of 2762 sqft of space to the Ozone Cell against monthly rental, paid in the form of service charges and the arrangement is operationalized through Memorandum of Understanding (MoU) between CDC and Ozone Cell, which specify the monthly charges payable to CDC towards the space occupied by the Ozone Cell.

The monthly service charges for the space are paid by the Ozone Cell to CDC from the project funds provided by the Multilateral Fund (MLF through the Institutional Strengthening Project (ISP), which is approved on a twoyear cycle. It may be mentioned that as per the past practice, the annual increase in the service charges was Rs.15/sqft. + GST. As per the arrangement, the monthly service charges for the period April 2021 to March 2022 inclusive of GST works out to Rs.12,38,481

Keeping in view that with the yearly outflow for service charges being paid to CDC it would be difficult to sustain the Ozone Cell in the coming years, the Ozone Cell explored for alternative accommodation to house the Ozone Cell within the proximity of the MoEF&CC, for day-to-day interaction on matters relating to the working of Ozone Cell.

## Relocation of the Ozone Cell

The Delhi Tuberculosis Association (DTBA), a voluntary organisation and registered society has space of carpet area of 3500 Sq.ft in the first floor of its building located at 9, Institutional Area, Lodhi Road, which would be sufficient to house the Ozone Cell. DTBA offered to give the premises on lease to the Ozone Cell, MoEF&CC for a period of 10 years at a monthly rental of Rs.300,000 (Rupees three lakhs only) with an annual increase of 5%. Relocating the Ozone Cell at the premises of DTBA will result in substantial savings in the yearly rental (service charges), which can be used for the operations of the Ozone Cell, thus enabling to sustain the Ozone Cell in the long run.

In view of above, the Ozone Cell, MoEF&CC was relocated from India Habitat Centre to 1<sup>st</sup> Floor, 9, Institutional Area, Lodhi Road New Delhi with the approval of Secretary (EF&CC) and Chairman, Empowered Steering

Committee (ESC) and has been functioning from the relocated premises from 21 June 2021.

## Proposal for consideration of the ESC

To note the relocation of the Ozone Cell from the premises of CDC in the India Habitat Centre to 1<sup>st</sup> floor, 9 Institutional Area, Lodhi Road, New Delhi form 21 June 2021.

Item No. 14 : Any other item with permission of the Chair

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