

## **AGENDA OF XXXXI MEETING OF THE EMPOWERED STEERING COMMITTEE FOR IMPLEMENTATION OF THE MONTREAL PROTOCOL**

**Date** : 19th December, 2016

**Time** : 1500 hrs

**Venue** : **Kaveri Conference Hall,**  
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 XXXX meeting of the Empowered Steering Committee (ESC)

**Item No. 2** : Action taken on decisions of the XXXX ESC

**Item No. 3** : Kigali Amendment to the Montreal Protocol on Substances that deplete the ozone layer

**Item No. 4** : HCFC Phase out Management Plan (HPMP) stage-II

**Item No. 5** : Progress of Hydrochlorofluorocarbon (HCFC) Phase-out Management Plan (HPMP) Stage-I

(a) Investment Projects

(b) Enabling components (awareness and communication, enforcement training, capacity building and trade controls)

**Item No. 6** : Submission of Article 7 of the Montreal Protocol to the Ozone Secretariat and Country Programme Progress Report (CPPR) to the Multilateral Fund Secretariat for the years 2012, 2013, 2014 and 2015

**Item No. 7** : Collaborative Research Programme on low Global Warming Potential (GWP) alternatives to Hydrofluorocarbons (HFCs)

**Item No. 8** : Fiscal Incentives Scheme

- Item No. 9** : Procedure of functioning for implementation of projects / activities
- Item No. 10** : Any other matters with permission of the Chair

# **ANNOTATED AGENDA OF XXXXI MEETING OF THE EMPOWERED STEERING COMMITTEE FOR IMPLEMENTATION OF THE MONTREAL PROTOCOL**

## **Item No. 1 : Confirmation of Minutes of XXXX meeting of the Empowered Steering Committee (ESC)**

Minutes of the XXXX meeting of the ESC held on 1<sup>st</sup> April, 2016 were circulated to all the Members (**Enclosure-1, pages 1-8**). No comments have been received. The minutes may be confirmed.

## **Item No. 2 : Action taken on decisions of the XXXX ESC**

<b>S. No</b>	<b>Decision taken in XXXIX ESC</b>	<b>Action taken on the decision</b>
1	<p><u>Agenda Item No. 3</u></p> <p>Audit of production of Hydrochlorofluorocarbon (HCFC)-22 ought to have been carried out, and should be completed within a month and the report including the movement of price of HCFC-22 for the past years, should be submitted on file positively by 1/5/16.</p>	Bids for carrying out the audit of production of HCFC-22 have been received in the Ozone Cell the same will be processed and final report of Audit will be submitted to the ESC.
2	<p><u>Agenda Item No. 4 (a)</u></p> <p>Report of the verification conducted by the United Nations Development Programme (UNDP) and the report of the verification – cum – review carried out by the Multilateral Fund (MLF) Secretariat along with a detailed status note of the project – National Strategy for Transition to Non-Chlorofluorocarbon (CFC) Metered Dose Inhalers (MDIs) and Plan for Phase-out of CFCs in the Manufacturing of Pharmaceutical MDIs in India, should be put up on file within a week.</p>	Completed
3	<p><u>Agenda Item No. 4(b)</u></p> <p>A detailed status note on implementation of the project – HCFC Phase-out Management Plan (HPMP) Stage-I along with</p>	The 19 <sup>th</sup> Meeting of the Parties to the Montreal Protocol held in 2007 adopted accelerated phase-

	rationale for baseline as the average for the years 2009 and 2010 should be put up on file.	out of HCFCs with the baseline of as the average for the years 2009 and 2010.
4	<p><u>Agenda Item No. 4(b)</u></p> <p>The sectoral strategies being developed by Refrigeration and Air-Conditioners Manufacturers Association (RAMA) and the Indian Polyurethane Association (IPUA) along with Road Map for implementation of HPMP Stage-II should be presented in the next meeting of the ESC</p> <p>The second demonstration project for the unorganized sector using Ozone Depleting Substances (ODSs) should be submitted for funding by the MLF.</p>	<p>Included in Agenda item No. 4</p> <p>MLF did not fund the demonstration project because of its high cost (USD 4 million).</p>
5	<p><u>Agenda Item No. 5</u></p> <p>It was decided that a Committee under the Chairmanship of Mr. Manoj Kumar Singh, Joint Secretary, MoEF&amp;CC and comprising senior officials from other ministries/departments and Co-opted Experts would review the continuance of the scheme in its present form and put up its recommendations to the next meeting of the ESC.</p>	Report of the Committee has been submitted. The report will be taken up for consideration at Agenda item No. 13.
6	<p><u>Agenda Item No. 6</u></p> <p>A detailed note on the issue of guidelines for the HCFC-22 Producers for the environmentally safe incineration of HFC-23 should be put up on file by Director, Ozone Cell within a week.</p>	The government has issued order on 13 <sup>th</sup> October, 2016, inter alia directing the manufacturers of HCFC-22 not to emit/vent HFC-23 in the atmosphere.

**Item No. 3 : Kigali Amendment to the Montreal Protocol on Substances that deplete the ozone layer**

Hydrofluorocarbons (HFCs) being non-Ozone Depleting Substance (ODS) chemicals, are not controlled under the Vienna Convention for the Protection of the Ozone Layer and its Montreal Protocol on Substances that Deplete the Ozone Layer. However, HFCs have high-Global Warming

Potential (GWP). The emissions of HFCs are controlled along with other six Green House Gases (GHGs), Carbon Dioxide (CO<sub>2</sub>), Methane, Nitrous Oxide, Perfluorocarbons (PFCs), Sulphur hexafluoride (SF<sub>6</sub>) and Nitrogen Trifluoride (NF<sub>3</sub>) under the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol.

Hydrofluorocarbon (HFCs) have been used as a replacement for CFCs and HCFCs worldwide. The use of HFCs has been rising in various sectors such as refrigeration and air-conditioning, foam, solvents due to industrial development and urbanization. The GWP of HFCs varies from 4 to 14800. As a result of the potential impacts of increasing use of HFCs on climate, the 28<sup>th</sup> Meeting of Parties to the Montreal Protocol held in Kigali, Rwanda, adopted the Kigali Amendment to the Montreal Protocol, for phasedown of HFCs, in October, 2016. It is expected that due to the Kigali Amendment to the Montreal Protocol would lead a reduction of global temperature by 0.5 °C.

It is significant to note that the negotiations for phasing down of HFCs under the Montreal Protocol were initiated way back in 2009, but these negotiations gathered momentum only after India submitted an amendment proposal for phase down of HFCs under the Montreal Protocol in April, 2015. The Indian Amendment proposal was crafted in a way to balance the needs of our rapidly growing economy and achieve maximum climate benefit (**Enclosure-2, pages 9-18**). There were 4 amendment proposals viz (i) North American Proposal (Canada, USA and Mexico), (ii) Micronesia And Island States Proposals, (iii) Indian Proposal and (iv) European Union Proposal.

The issue of phase down of HFCs under the Montreal Protocol was also brought into focus through Joint Statement of Prime Minister of India and President of United State of America (USA) in June, 2016, wherein, it was resolved to work to adopt an HFC amendment in 2016 with increased financial support from donor countries to the Multilateral Fund (MLF) to help developing countries with the implementation, and an ambitious phase down schedule, under the Montreal Protocol pursuant to the Dubai Pathway agreed by the 27<sup>th</sup> Meeting of Parties. A copy of the Joint Statement is placed at **Enclosure-3, pages 19-24** and the Dubai Pathway is at **Enclosure-4 , pages 25-32**

As the discussions could not be concluded, the 27th MOP decided to work within the Montreal Protocol to the HFC

amendment in 2016 by first resolving challenges by generating solutions in the contact group on the feasibility and ways of managing HFCs at the Montreal Protocol meetings and then address the amendment proposals. It was also decided by the 27th MOP to hold a series of Open Ended Working Group (OEWG) and other meetings including an Extraordinary MOP in 2016.

In the two OEWG meeting (37<sup>th</sup> OEWG and Resumed 37<sup>th</sup> OEWG) the parties were able to address identified challenges for managing HFCs. During the 3<sup>rd</sup> Extraordinary Meeting of Parties held in Vienna a new joint proposal was submitted by USA, European Union, Japan, New Zealand, Australia (JUSSCANZ) according to which the developed countries had suggested one single common baseline years for production and consumption of HFCs for developing countries i.e. 2017-2018-2019 and freeze year as 2021. However, various developing countries proposed as many as six different baselines range from 2017 to 2030, and freeze year ranging from 2021 to 2031.

India represents only around 2 % of the global production and consumption of HFCs but our manufacturing and consumption sector is expected to grow at a rapid pace in future. Our challenge, therefore, was to secure international agreement on a regulatory regime that served the global expectations and yet protect our national interest.

India has been a strong advocate of the principle of Common but Differentiated Responsibility in the matter of global actions to protect environment and also that national circumstances need to be factored in for arriving at any durable agreement related to climate.

At the commencement of negotiations in Kigali, India piloted realistic baseline of 2024-2026 for developing countries and which protects India's interests. As per the agreement reached in Kigali, India will freeze its manufacturing and consumption of HFCs in 2028 and start reducing it from 2032 to 2047 with reference to the baseline years 2024, 2025 and 2026. The Freeze year is subject to technology review and could be further deferred to 2030. The agreement facilitates adequate carbon space for growth on domestic industry while minimizing the cost to the economy during the transition period.

India had consistently taken a position that the baseline and freeze years should be at such a future date which allows for growth of economy while minimizing cost to the

economy. The Indian delegation also had steadfastly raised the issues of Intellectual Property Rights of non-HFC technologies, the high cost of these technologies and resultant cost to economy in transitioning away from HFCs.

In the Kigali Amendment, it has been agreed that the developing countries will have two set of baselines – one for the early movers in which case it will be 2020-2021-2022 and the other for those whose national circumstances were different and the manufacturing of HFCs and consumption in whose case was still rising in the absence of clear alternative technologies. In case of such countries the agreed baseline years are 2024, 2025 and 2026. An allowance of HCFC component of 65% was also added in the baseline of India in order to compensate for the upward movement of baseline years in Indian amendment proposal, the HCFC component was only 32.5%.

At the same time, it has also been agreed that the developed countries will reduce their production and consumption of HFCs by 70% in 2029. India will complete its phase down in 4 steps from 2032 onwards with cumulative reduction of 10% in 2032, 20% in 2037, 30% in 2042 and 85% in 2047.

The Montreal Protocol had no arrangement till date to incentivise improvement in energy efficiency in case of use of new refrigerant and technology. On India's initiative, it was agreed in Kigali that the Multilateral Fund under the Montreal Protocol will pay for maintaining or increasing the energy efficiency with new technology. Funding for R&D and servicing sector in developing countries has also been included in the agreed solutions on finance.

The amendment to Montreal Protocol agreed in Kigali have facilitated the creation of an international regime of regulatory actions and financial support for treating this set of chemicals in the same manner and with the same urgency as was accorded to other Ozone Depleting Substances in the past. The text of the Kigali amendment as issued by the UN Secretary General is placed at ***Enclosure-5 , pages 33-42.***

Details of the elements of the agreed HFC phase-down schedule are provided in table below:

	<b>A5 parties (developing countries) – Group 1</b>	<b>A5 parties (developing countries) - Group 2</b>	<b>Non-A5 parties (developed countries)</b>
<b>Baseline formula</b>	Average HFC consumption for 2020-2022 + 65% of hydrochlorofluoro carbon (HCFC) baseline	Average HFC consumption for 2024-2026 + 65% of HCFC baseline	Average HFC consumption for 2011-2013 + 15% of HCFC baseline*
<b>Freeze</b>	2024	2028	-
<b>1<sup>st</sup> step</b>	2029 – 10%	2032 – 10%	2019 – 10%
<b>2<sup>nd</sup> step</b>	2035 – 30%	2037 – 20%	2024 – 40%
<b>3<sup>rd</sup> step</b>	2040 – 50%	2042 – 30%	2029 – 70%
<b>4<sup>th</sup> step</b>	-	-	2034 – 80%
<b>Plateau</b>	2045 – 80%	2047 – 85%	2036 – 85%

\* For Belarus, Russian Federation, Kazakhstan, Tajikistan, Uzbekistan, 25% HCFC component of baseline and different initial two steps (1) 5% reduction in 2020 and (2) 35% reduction in 2025

#### Notes

1. Group 1: Article 5 parties not part of Group 2
2. Group 2: Bahrain, India, the Islamic Republic of Iran, Iraq, Kuwait, Oman, Pakistan, Qatar, Saudi Arabia and the United Arab Emirates
3. Technology review in 2022 and every five years
4. Technology review four to five years before 2028 to consider the compliance deferral of two years from the freeze of 2028 of Article 5 Group 2 to address growth in relevant sectors above certain threshold.

The Kigali Amendment, will enter into force on 1 January 2019, provided that it is ratified by at least 20 parties. If that condition is not met by 2019, the Amendment will become effective 90 days after 20 parties ratify it.

After the Kigali meeting a Note seeking ex-post facto approval of the Cabinet for the negotiating position of India with respect to the proposals for amendment to the Montreal Protocol of the Vienna Convention for Protection of Ozone Layer was submitted on 7th November, 2016.

The Cabinet considered the note and approved the proposals contained in of the Cabinet Note as 30<sup>th</sup> November 2016.

The success of negotiations at Kigali is a result of the spirit of collective action, accommodation and flexibility by all the parties to ensure the best possible outcome which addresses the needs of all countries and leads to maximum climate benefits.

India has been able to secure an agreement that provides adequate space for growth of our economy, while providing adequate time for industry to shift to sustainable alternatives in the interest of environment. The agreed arrangements will minimize the cost to consumers in transitioning away from HFCs and provide for domestic innovation to develop in the sector of new generation refrigerants and related technologies.

The proposal for approval of ESC:

1. Ex-post facto approval of the Indian amendment proposal submitted to the Ozone Secretariat (**Enclosure 2**).
2. To take note of the development regarding finalization of amendment at Kigali and Cabinet approval (**Enclosure 4 & 5**)

**Item No. 4 : HCFC Phase out Management Plan (HPMP) Stage-II**

The Executive Committee (Ex-Com) of the Multilateral Fund (MLF) for implementation of the Montreal Protocol in its 72nd meeting held in May, 2014 had earlier approved US \$ 490,000 for the preparation of HPMP Stage-II for India with UNDP as the lead implementing agency, in association with UNEP and GIZ, Government of Germany as cooperating agencies.

The Indian Polyurethane Association (IPUA) and the Refrigeration and Air-conditioning Manufacturers Association (RAMA), were involved in the HPMP Stage- II preparation process. The two associations had the responsibility for carrying out survey of the Foam and

Refrigeration and Air conditioning (RAC) manufacturing sectors respectively. Towards this, a Memorandum of Agreement (MOA) was signed by the Ozone Cell, MoEF&CC with the IPUA and RAMA. Copies of the MOA are placed at **Enclosure-6, pages 43-50 and Enclosure-7, pages 51-57** respectively. The approval of the MoAs is not available on file.

The total value for the contract with RAMA is Rs. 63,00,000, out of which Rs. 37,80,000 has been paid, and Rs. 25,20,000 has to be paid. The total value of contract for IPUA is Rs. 55,00,000, out of which Rs. 33,00,000 has been paid, and Rs. 22,00,000 has to be paid.

Based on the milestones given in the MOA, two out of the five instalments of payment were released to both RAMA and IPUA and payment towards balance three instalments is yet to be made to both RAMA and the IPUA.

In order to adequately inform the stakeholders of the challenges and opportunities in complying with the phase-out schedule for HCFCs workshops were organized by the IPUA and RAMA. Appropriate questionnaires and formats for reporting information and data were developed in cooperation with the implementing agencies. IPUA and RAMA collected data at sectoral/sub-sectoral level and for developing sector-level strategies and recommendations, for achieving reductions in HCFC consumption. Both IPUA and RAMA engaged professional survey agencies for data collection at enterprise-level.

At the national level, export import data on ODS has been obtained from Directorate General of Commercial Intelligence and Statistics (DGCIS), Ministry of Commerce and Industry.

The HPMP Stage-II of India has been prepared for assisting the country in achieving compliance with the Montreal Protocol post 2020 phase out targets for consumption of HCFCs with complete phase-out of HCFC-141b by 1.1.2020, phase out of HCFC-22 in the air conditioning manufacturing sector for 6 large enterprises that have volunteered to participate in the HPMP Stage-II. In addition, phase-out of HCFC-22 in the RAC servicing sector and project activities and policy and regulations, enforcement training have also been addressed. The plan also includes activities that build on already implemented HPMP Stage-I activities.

The HPMP Stage II proposal submitted by the Ministry to the Multilateral Fund Secretariat (MLFS) relates to phase out of 5233 metric tonnes of HCFC-141b, 1376 MT

HCFC-22 in RAC manufacturing and 2500 MT HCFC-22 in servicing sector with a total funding of around 103 million USD.

The MLF fund secretariat reviewed the Indian Stage II HPMP. While reviewing proposal the MLF Secretariat, sent two rounds of extensive observations about HCFC consumption in the country, eligibility of enterprises for funding, technology choices, requirement of equipments, item-wise cost implications, funding of incremental capital cost and incremental operating cost and cost effectiveness thresholds. With first set of comments, MLF offered a funding of 32 million and after obtaining response for comments gave further observation and made a revised funding offer of 36.5 million USD

The MoEFCC, through UNDP submitted the counter proposal for 63.34 million USD to the MLF Secretariat on 11th November, 2016. The MLF Secretariat summarized the India stage II HPMP proposal and their observations thereon along with responses of Ozone Cell stating that cost and technology issues are still pending in the meeting paper for consideration of the Executive Committee of the Multilateral Fund (**Enclosure-8, pages 58-78**).

India's HPMP Stage-II was considered at the 77th meeting of the Executive Committee (Ex-Com) meeting of the MLF for Implementation of the Montreal Protocol held from 28th November to 2nd December, 2016 at Montreal, Canada.

After detailed discussions during ExCom meeting the Secretariat could address majority of the technical and cost issues associated with the India's HPMP Stage-II. After which, an informal Group was constituted by the ExCom to address and finalize all pending issues including costs for consideration by the Ex-Com. After extensive discussions agreement could be reached between the smaller contact group and the Indian representatives.

A copy of the decision on India's HPMP Stage-II is placed at (**Enclosure-9, pages 79-80**). The draft agreement between the Ex-Com of the MLF and the Government of India is placed at (**Enclosure-10 , pages 81-89**).

A total of 414 enterprises has been selected including 24 large enterprises, 34 medium enterprises and 356 small enterprises in HPMP Stage-II. A list of the enterprises is placed at **Enclosure-11, pages 90-107**.

The Stage II HPMP has been approved for 44.9 million USD excluding agency support costs for phasing out 8190.30 MT of HCFCs.

**The proposal for approval of ESC:**

1. Ex-Post facto approval is requested for the following:
  - I. Submission of HPMP Stage-II to MLF (*submitted after approval of Chairman, ESC*) seeking 103 million USD for phase out of 9109 MT of HCFCs.
  - II. The MOAs signed between Ozone Cell, MoEF&CC and the IPUA and RAMA for carrying out surveys and preparation of sectoral strategies in the foam and RAC sectors respectively. (**Enclosure 6 & 7**)
  - III. Payment of two instalments of Rs.33 lakhs already released to the IPUA and Rs.37.8 lakhs already released to the RAMA respectively.
2. Approval of the ESC is also sought for the following:
  - i. To release the balance payment of Rs.22 lakhs to the IPUA and Rs.25.20 lakhs to the RAMA, subject to meeting all the milestones and deliverables as per the MOA.
3. The ESC may note the approval of HPMP Stage II by the ExCom of the MLF for 44.9 million USD excluding Agency Support costs for phasing out 8190 MT of HCFCs and the agreement between the Government of India and the Ex-Com of the MLF (**Enclosure 9 & 10**).

**Item No. 5 :**

**Progress of Hydrochlorofluorocarbon (HCFC) Phase-out Management Plan (HPMP) Stage-I**

**a) Investment Projects**

The 56th meeting of the Executive Committee (Ex-Com) of the Multilateral Fund (MLF) held in November, 2008

approved the preparation of HPMP Stage-I for India with United Nations Development Programme (UNDP) as the lead implementing agency in association with United Nations Environment Programme (UNEP) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Government of Germany.

HPMP –I was finalized in close consultation with stakeholders. The HPMP Stage-I was to phase-out the HCFCs enabling India to meet 2013 freeze and 10% reduction in 2015.

HPMP-I had conversions in foam manufacturing sector from HCFCs to non- Ozone Depleting Substance (ODS) technologies in the enterprises with large consumption of HCFC-141b, technical assistance to the systems houses for developing HCFC-free low-Global Warming Potential (GWP) pre-blended polyols and activities in the RAC servicing sector.

The Ex-Com of the MLF in its 66th meeting held in April 2012 approved the HPMP Stage-I for India for the period from 2012 to 2015 for phase-out HCFCs in the consumption sector to meet the 2013 and 2015 targets at the amount of US \$**23,011,537** including agency support costs for phase-out of 341.77 ODP tonne of HCFCs from the starting point of 1691.25 ODP tonne. In the Starting point HCFC-141b accounts for 865 ODP tonnes while HCFC-22 accounts for 601 ODP tonnes.

The Implementing Agency –wise breakup of funds is given below:

S.No.	Implementing Agency	Amount (Million USD)
1.	UNDP (Lead Agency)	18.43
2.	GIZ (Cooperating Agency)	1.99
3.	UNEP (Cooperating Agency )	0.87
	Total	21.29

A total of 30 enterprises in the foam sector have been covered in HPMP I, of these 30 enterprises, 15 large foam manufacturing enterprises, are involved in phase out of HCFC-141b and technical and financial assistance has been provided to 15 System Houses, which are involved in developing HCFC-141b free polyol formulations. These formulations are used in manufacture of foam products.

The break-up of the 341.77 ODP tonne of phase out is given below:

S.No	Sector	ODP Tonne
1	15 foam manufacturing enterprises	269.9
2	15 System Houses	33
3	HCFC 22 Servicing	31.24
	M/s Metenco (non funded component)	7.56

A copy of the agreement between the Ex-Com of the MLF and the Government of India is placed at ***Enclosure-12, pages 108-115.***

Out of the total approved cost for UNDP (other than the support cost), US \$ 1,140,000 is for Project Management Component and US \$ 17,298,490 for Investment component for phase out in 15 Foam Manufacturing enterprises and Technical Assistance to 15 Systems Houses.

The Ozone Depleting Substances (Regulation and Control) Rules, 2000 had been amended in 2014 to align with the accelerated phase-out of HCFCs.

The UNDP, as the Lead agency for HPMP in India. HPMP Stage-I, addressed the conversion of manufacturing facilities in the foam sector from HCFC 141b to Cyclopentane, which is a non-Ozone Depleting Substances (ODSs) and low-Global Warming Potential (GWP) technology, in 15 large enterprises.

The details of the 15 enterprises along with funding allocated to each enterprise and the phase out target are as follows:

	Enterprise	A5 ownership (%)	Sub-sector	HCFC-141b consumption		Alternative	Allocated Amount (USD)	Amount Released (USD)	Balance Amount (USD)
				MT	(ODP tonnes)				
1	Applicomp	100	DR	110.00	12.10	CP	10,31,007	10,31,007	0
2	Empire	100	DR	82.00	9.02	CP	7,68,569	6,14,855	1,53,714
3	Haier	100	DR	93.00	10.23	CP	8,71,670	8,71,670	0
4	Techno	100	DR	155.00	17.05	CP	14,52,783	14,52,783	0
5	Value	100	DR	63.00	6.93	CP	5,90,486	5,90,486	0
6	Videocon	100	DR	107.00	11.77	CP	10,02,889	10,02,889	0
7	Whirlpool (Pune)	25	DR	630.00	69.30	CP	6,33,549	6,33,549	0
8	Whirlpool (Faridabad)	25	DR	385.00	42.35	CP	6,60,835	6,60,835	0
9	Sintex	100	C	139.00	15.29	CP	12,65,183	10,12,146	2,53,037
10	Synergy	100	C	312.00	34.32	CP	14,30,811	8,58,487	5,72,324
11	Industrial Foams	100	D	60.00	6.60	CP	5,62,368	5,62,367	0
12	Blue Star	100	D	96.00	11.29	CP	8,99,788	8,99,788	0
13	Isollloyd	100	D	71.00	7.81	CP	6,65,468	3,99,281	2,66,187
14	Lambda	100	D	81.00	8.91	CP	7,59,196	4,55,518	3,03,678
15	Rinac	100	D	63.00	6.93	CP	5,90,486	5,90,486	0
<b>Total</b>				<b>2447</b>	<b>269.9</b>		<b>13,185,088</b>	<b>1.16,36,147</b>	<b>15,48,940</b>

CP: Cyclopentane, DR: Domestic Refrigeration, C: Continuous Panels, D: Discontinuous Panels

In addition, Technical Assistance was also provided to Systems Houses for developing non-ODS pre-blended polyol system for Micro, Small and Medium Enterprises (MSMEs) of foam manufacturing, which could facilitate towards phase out of HCFC-141b during HPMP Stage-II.

The list of 15 Systems Houses and the funding allocated to each of them are as follows:

S No	Name of Enterprises	Allocated Amount (US\$)	Amount Released (USD)	Balance Amount (USD)
1	Jai Durga Polyurethane Industries	127,490	95,618	31,873
2	Organometalic Industries	127,490	95,618	31,873
3	Pine Resin & Chemicals	127,490	95,618	31,873
4	Shiv Polymers	127,490	31,873	95,618
5	Shivathene Linopack	127,490	95,618	31,873
6	Amrit Chem	256,614	1,92,461	64,154
7	Bestopuf	256,614	64,154	1,92,461
8	Gomati Impex (P) Ltd.,	256,614	1,92,461	64,154
9	Manya International	256,614	1,92,461	64,154
10	Royal Industries	256,614	1,92,461	64,154
11	Shakun Industries	256,614	1,92,461	64,154
12	Tandy Innovative Chemicals Pvt. Ltd.	256,614	1,92,461	64,154
13	Expanded Polymer Systems Pvt. Ltd.	559,885	5,03,897	55,989
14	Industrial Foams Pvt. Ltd.	559,885	5,03,897	55,989
15	Manali Petrochemical Ltd.	559,885	5,03,897	55,989
<b>Total</b>		<b>4,113,403</b>	<b>31,44,949</b>	<b>9,68,455</b>

The total cost for conversion in manufacturing facilities in foam sector and system houses is US\$ 13,185,088 + US\$ 4,113,403 = US\$ 17,298,491.

### **Implementation of HPMP Stage-I (investment component)**

The Ozone Cell signed Memorandum of Agreement (MOA) with of the above 30 enterprises for implementation of HPMP I. The MOAs signed with the enterprises is placed at **Enclosure-13, pages 116-132**. The MOAs expired on 31st December, 2014 and were extended subsequently till December, 2016. The extended MOAs are placed at **Enclosure-14, pages 133-136**. Some of the enterprises (M/s Lambda Eastern Telecommunication Ltd., M/s Isolloyd Engineering Technologies Ltd. and M/s Empire Home Appliances Ltd. in Foam manufacturing and M/s Pine Resin & Chemicals and M/s Amrit Chem in System Houses) have still not been able to complete the conversion process to non-ODS technologies for logistical reasons. Accordingly

their MoAs may need to be extended by another period one year i.e. till December 2017.

As per the schedule of payments indicated in the MOAs, the allocated amount is to be paid to the 15 foam manufacturing enterprises in 5 instalments. The first two instalments were against submission of documents stipulated in the MOA and the last 3 installments are subject to physical verification and subject to accomplishment of milestones indicated in the MOA. For the 15 systems houses, as per the schedule of payments indicated in the MOAs, the allocated amount is to be paid in 4 instalments. The first instalment was against submission of documents stipulated in the MOA and the last 3 installments are subject to physical verification and subject to accomplishment of milestones indicated in the MOA.

#### **Physical Verification of enterprises (Foam manufacturing and Systems Houses)**

The Ozone Cell, MoEF&CC appointed M/s Centre for Sustainable Development (CSD) as a consultant for carrying out the physical verification of the 15 foam manufacturing enterprises and the 15 Systems Houses to confirm accomplishment of the milestones by the enterprises as stipulated in the MOA. A copy of the MoA signed between M/s Centre for Sustainable Development (CSD) and the Ozone Cell, MoEF&CC dated 18th March, 2015 is placed at ***Enclosure-15, pages 137-140***. It may be mentioned that the appointment of M/s Centre for Sustainable Development has been done with the approval of Director, Ozone Cell. The details of the amount released to the Consultant is 2015 is placed at ***Enclosure-15, pages 137-140***.

#### **Procedure followed in releasing payments to the enterprises.**

The following procedure was followed by the Ozone Cell, MoEF&CC in releasing payment to the 30 participating enterprises.

- i. For first two instalments for the 15 foam manufacturing enterprises and the first instalment for the Systems Houses, the documents submitted by the enterprises as stipulated in the MOA were forwarded by the Ozone Cell, MoEF&CC to UNDP for technical Review.

- ii. UNDP after technical review when found them to be in order communicated the same to Ozone Cell and seek the concurrence of the Ozone Cell, MoEF&CC for release of the concerned instalment of payment.
- iii. After the concurrence of the Ozone Cell, MoEF&CC, UNDP would release payment directly to the enterprises.
- iv. For 3rd to 5th instalments for the 15 foam manufacturing enterprises and 2nd to 4th instalments for the Systems Houses, the verification reports submitted by the consultant were forwarded by the Ozone Cell, MoEF&CC to UNDP for technical review. The rest of the process is as per (ii) and (iii) above.

It may be noted that all the above said correspondence between the Ozone Cell, MoEF&CC and the UNDP was through email.

**Status of Payments released to the enterprises and balance amount due.**

The details of amount allocated to enterprises, the amount released till date and the balance amount due are given at ***Enclosure-16, page 141.***

**Activities in the RAC Servicing Sector**

GIZ, Proklima, Government of Germany and UNEP are Cooperating Agencies for implementation of activities under the servicing sector, which includes training of technicians in the room air-conditioning sector, training of institutional users like Defense sector and Indian Railways, which have a substantial inventory of all their HCFC based equipment / appliances, upgradation of syllabus for the Industry Training Institutes (ITIs) students in the trade of RAC to ODS free servicing and Good Service Practices for HCFC based systems, etc, promotion of recovery and reclamation centres on a pilot basis to assess support required by the reclamation centres.

Under HPMP I, a total of 11,276 technicians through 408 training programs were trained. Under the module for

servicing - a total 9,240 technicians were trained through 332 training programs and under the module for installers - a total 2,036 technicians were trained through 76 training programs.

The activities under the RAC servicing sector have been carried out independently by the GIZ Proklima in cooperation with the UNEP and the Ozone Cell, MoEF&CC

### **The proposal for approval of ESC:**

(a) Ex-Post facto approval is requested for the following:

- (i) Agreement between the Ex-Com of the MLF and the Government of India for implementation of HPMP-I vide decision 66/45.
- (ii) Projects of 30 enterprises under HPMP Stage-I (15 foam manufacturing enterprises and the 15 Systems Houses) as approved for implementation.
- (iii) 30 MOAs signed between the Ozone Cell, MoEF&CC and the 30 enterprises under HPMP Stage-I (15 foam manufacturing enterprises and the 15 Systems Houses)
- (iv) 30 Supplementary MoAs (including M/s Synergy Telecommunication Extended MOAs between the Ozone Cell, MoEF&CC and the 29 enterprises under HPMP Stage-I (14 foam manufacturing enterprises and the 15 Systems Houses)
- (v) Approval of appointment of consultant for carrying out verification of enterprises under the HPMP Stage-I
- (vi) Approval for amount of US \$ 1,47,81,095 released till date to the enterprises under HPMP Stage-I as at ***Enclosure-16, page 141.***

(b) Approval of the ESC is requested on the following proposals:

- (i) To extend the MOA for the three enterprises viz. M/s Lambda Eastern Telecommunication Ltd., M/s Isolloyd Engineering Technologies Ltd. and M/s Empire Home Appliances Ltd. in Foam manufacturing and M/s Pine Resin & Chemicals and M/s Amrit Chem in System Houses, if required, in case activities cannot be completed in 2016 extension is sought till December, 2017.
- (ii) To release balance payments of US \$ 25,17,395 to 20 enterprises participating under HPMP Stage-I against the work completed as indicated in **Enclosure-16**, **page 141**.
- (iii) To release balance payment of Rs. 2,50,000 to the consultant appointed for carrying out verification of the enterprises.

**b) Enabling components (awareness and communication, enforcement training, capacity building and trade controls**

The UNEP has been implementing activities under the enabling component for the servicing sector, building sector interventions, enforcement training, trade controls, policy and regulation and awareness generation. The activities under the enabling component are implemented through a Small Scale Funding Agreement (SSFA) signed between the Ozone Cell, MoEF&CC and the UNEP. The details of SSFAs signed and the status has been given below:

Tranche received by UNEP	Sector	Project Cost (US \$)	Support Cost (US\$)	Total Cost (US\$)
First Tranche	Enabling Activities	250,000	30,402	280,402
First Tranche	Refrigeration Servicing Sector	180,800	21,986	202,786

Second Tranche	Refrigeration Servicing Sector and Enabling Activities	344,640	41,910	386,550
Third Tranche	Refrigeration Servicing Sector and Enabling Activities	86,160	10,478	96,638
<b>Total</b>		<b>861,600</b>	<b>104,776</b>	<b>966,376</b>

Out of the total approved amount of US \$ 861,600, UNEP has signed five SSFA's with Ozone Cell, MoEF&CC amounting to US \$ 688,200 for carrying out the activities as mentioned in the respective SSFA's.

For implementing the enabling activities in India the UNEP signs Small Scale Funding Agreement (SSFA) with the Ozone Cell, for fixed amount of grants for undertaking activities listed in the funding agreement. A total 5 SSFAs have been signed with the UNEP. The status of activities along with funds is given in the following table:

SSFA	Reference No.	Amount	Planned Activities	Status
SSFA - 1	SSFA/2013/005	1,35,000	3 RAC & refrigerant dealer half day awareness workshops Mumbai, Chennai and Guwahati	Completed
			website and interlink the same with ozone cell website	
			2 regional awareness workshops including Posters and stickers for servicing enterprises, flyers for training promotions	
			National Awareness workshop	
			Facilitating establishment of an RAC service enterprises association (pilot in Ludhiana and Mumbai)	
			Submission of final progress and expenditure report	

SSFA	Reference No.	Amount	Planned Activities	Status
SSFA - 2	UNEP/SSFA/SA/2015/008	1,97,000	3 RAC & refrigerant dealer half day awareness workshops Mumbai, Chennai and Guwahati	Completed
			3 regional awareness workshops including Posters and stickers for servicing enterprises, flyers for training promotions	Completed
			website maintenance	ongoing
			Production of awareness material	Completed
			Production and launch of HCFC awareness campaign film	Not Started
			Facilitating establishment of an RAC service enterprises association	ongoing
			Production of newsletter	Not started
			Submission of final progress and expenditure report	Not started
SSFA - 3	UNEP/SSFA/SA/2015/007	1,00,000	Preparation and updation of Training Materials	Not started
			Training of Trainers (4 courses)	
			Training Courses for Supervisory Officers of Customs, Other enforcement agencies (DRI, BSF) and sensitization of senior decision makers on ODS issues (Total 10 workshops)	
			Enforcement studies and campaigns	
			Submission of final progress and expenditure report	
			Distribution of refrigerant Identifiers (28)	
			Submission of final progress and expenditure report	
SSFA - 4	UNEP/SSFA/SA/2016/010	1,70,040	Facilitating establishment of an RAC service enterprises association (pilot in Delhi and Chennai)	Not Started
			Development of amendments for non-HCFC building components in NBC, ECBC and GRIHA and seminar with MUD, MNRE and BEE	
			Template for Amending curriculum of architectural colleges to include ODS issues	
			Development of four (4) videos targeting RAC servicing sector	
			website maintenance	

SSFA	Reference No.	Amount	Planned Activities	Status
SSFA - 5	UNEP/SSFA/2016/ROAP/SA/11	86,160	Delivering 2 Training of Trainers workshops at NACEN	Not Started
			Delivering 5 Training workshops for Supervisory Officers	
			Risk profiling – International resources	
			Short work on videos at NACEN	
			Publication	
			Newsletter	
			Submitting progress and financial reports	
Total		6,88,200		

### The proposal for approval of ESC:

Ex-Post facto approval is requested for the following:

- i. SSFA signed on 26.04.2013 for the amount of US \$ 135,000 with Ref No. SSFA/2013/005
- ii. SSFA signed on 05.08.2015 for the amount of US \$ 197,900 with Ref No. UNEP/SSFA/SA/2015/008 and subsequent amendment signed on 07.12.2016
- iii. SSFA signed on 01.04.2016 for the amount of US \$ 100,000 with Ref No. UNEP/SSFA/SA/2015/007 and subsequent amendment signed on 07.12.2016
- iv. SSFA signed on 07.12.2016 for the amount of US \$ 170,040 with Ref No. UNEP/SSFA/SA/2016/010
- v. SSFA signed on 07.12.2016 for the amount of US \$ 86,160 with Ref No. UNEP/SSFA/2016/ROAP/SA/11.

Item No. 6 :

**Submission of Article 7 of the Montreal Protocol to the Ozone Secretariat and Country Programme Progress Report (CPPR) to the Multilateral Fund Secretariat for the years 2012, 2013, 2014 and 2015.**

As per the requirement of the Executive Committee (Ex-Com) of the Multilateral Fund (MLF) for the Implementation of the Montreal Protocol and as per the Article 7 of the Montreal Protocol, the Country Program Progress Reports (CPPR) and the Article 7 data needs to be submitted to the Multilateral Fund Secretariat and the Ozone Secretariat respectively.

As per Article 7 of the Montreal Protocol, the data on production, import, export and feedstock use of ODSs is to be submitted to the Ozone Secretariat by 30<sup>th</sup> September every year. The CPPR is to be submitted on an annual basis to the Multilateral Fund Secretariat. In the CPPR the chemical-wise consumption in various sub-sectors is reported.

The Standing Committee on Monitoring Chaired by the Chairman, Central Pollution Control Board (CPCB) is responsible for reviewing and recommending the data for submission to the Ozone Secretariat.

The data on production of ODSs is being collected from the producers. The data for import/export of ODSs is being collected from the Directorate General of Foreign Trade (DGFT), Directorate General of Commercial Intelligence & Statistics (DGCI&S) and Ministry of Agriculture respectively.

The Article 7 data for the calendar years 2012, 2013 & 2014 were submitted to the Ozone Secretariat.

The Standing Committee on Monitoring was reconstituted on 22<sup>nd</sup> September, 2016 at (**Enclosure-17, pages 142-143**) since the validity of the earlier constitution of the Committee expires on 22<sup>nd</sup> June, 2012. No meeting of the Standing Committee took place to consider the Article-7 data for the years 2012, 2013 and 2014.

In the reconstitution of the Standing Committee on Monitoring dated 22<sup>nd</sup> September, 2016, the Terms of

Reference (TOR) were also revised. The revised TOR are as follows:

(i) To analyze, collate and recommend the Country data on production, import and export each of the controlled substances accordingly to Article – 7 of the Montreal Protocol for onward submission to the Ozone Secretariat.

(ii) To analyze, collate and recommend the data for Country Programme progress Report to be submitted to Multilateral Fund Secretariat.

The Meeting of Standing Committee on Monitoring was held on 28<sup>th</sup> September, 2016 under the Chairmanship of Shri. S.P. Singh Parihar, Chairman, Central Pollution Control Board (CPCB). The copy of the Minutes is placed at ***Enclosure-18, pages 144-173.***

The Committee noted the prescribed formats of data reporting under Article 7. The Committee also noted the process of acquisition of information and the sources from which data relating to ODSs are sought which includes, Producers, Consumers of Carbon tetrachloride, Metered Dose Inhalers (MDI) manufacturers, Directorate General of Commercial Intelligence and Statistics (DGCIS) and Ministry of Agriculture for methyl bromide.

The Committee was specifically informed about the following:

- (i) 0.18 MT export of CTC
- (ii) Incineration of CFC-12 as reported by M/s SRF Limited that they have incinerated 34.115 MT of CFC-12 received from M/s Cipla Ltd.
- (iii) Export of methyl bromide wherein, the producers had earlier informed the Ministry that they had exported 622 MT of methyl bromide for Quarantine and pre-shipment (QPS), while DGCIS had provided figure of 1072.04 MT.

The Committee was also informed that these would be reported in the Article-7 formats. Simultaneously, the Ministry will seek further information on the same from DGCIS, producers of methyl bromide and M/s SRF Limited along with M/s Cipla Limited regarding incineration of CFC-12.

The Committee, taking note of the detailed information and explanation on production, consumption, export, import of ODSs for the year 2015, the Committee recommended that the data for the year 2015 be submitted to the Ozone Secretariat and to the Multilateral Fund Secretariat with the approval of Empowered Steering Committee (ESC). Keeping in view that the last date for submission of the data was 30th September, 2016, it was also recommended that the data be sent to the Ozone Secretariat with the approval of Secretary (EF&CC) in his capacity as Chairman of the ESC and ex-post facto approval of the ESC could be obtained at its future meeting.

Accordingly, the Article -7 data and CPPR were submitted to the Ozone Secretariat and to the Multilateral Fund Secretariat respectively.

#### **The proposal for approval of ESC:**

Ex-Post facto approval is requested for the following:

- (i) Article-7 data for the years 2012 (***Enclosure-19***, ***pages 174-183***), 2013 (***Enclosure-20***, ***pages 184-193***), 2014(***Enclosure-21***, ***pages 194-203***) and 2015 (***Enclosure-22***, ***pages 204-214***)
- (ii) CPPR data for the years 2012 (***Enclosure-23***, ***Pages 215-220***), 2013 (***Enclosure-24***, ***pages 221-226***), 2014 (***Enclosures-25***, ***pages 227-232***) and 2015 (***Enclosures-26***, ***pages 233-238***)

Item No. 7 :

**Collaborative Research Programme on low Global Warming Potential (GWP) alternatives to Hydrofluorocarbons (HFCs)**

India is a signatory to Vienna Convention for Protection of Ozone Layer and its Montreal Protocol on substances that deplete the Ozone layer since 1992. Implementation of the Montreal Protocol has led to 98 % reduction in use of Ozone Depleting Substances worldwide. This decrease has led to substantial climate co-benefits as most of the Ozone Depleting Substances such as Chlorofluorocarbons (CFCs), India is a signatory to Vienna Convention for Protection of Ozone Layer and its Montreal Protocol on substances that deplete the Ozone layer since 1992. Implementation of the Montreal Protocol has led to 98 % reduction in use of Ozone Depleting Carbon Tetrachloride and Hydrochlorofluorocarbons (HCFCs), have high Global Warming Potential (GWP).

Hydrofluorocarbon (HFCs) have been used as a replacement for CFCs and HCFCs worldwide. The use of HFCs has been rising in various sectors such as refrigeration and air-conditioning, foam, solvents due to industrial development and urbanization. The GWP of HFCs varies from 4 to 14800. As a result of the potential impacts of increasing use of HFCs on climate, the 28<sup>th</sup> Meeting of Parties to the Montreal Protocol held in Kigali, Rwanda, in October, 2016 adopted the Kigali Amendment to the Montreal Protocol, for phase down of HFCs. It is expected that Kigali Amendment to the Montreal Protocol alone would lead to a reduction of global temperature by 0.5 °C.

As per agreement reached in Kigali, India will freeze its production and consumption of HFCs in 2028, and reduce it over a period covering from 2032 to 2047 with reference to the baseline years of 2024, 2025 and 2026. The Freeze year is subject to technology review and could be further deferred to 2030. There is also an agreement to add 65% of HCFC baseline into the baseline of HFCs. India will complete its phase down in 4 steps from 2032 onwards with cumulative reduction of 10% in 2032, 20% in 2037, 30% in 2042 and 85% in 2047.

The most critical aspect for phase down of HFC use, is the availability of low GWP non-ODS cost effective alternative technologies to replace HFCs. Most of the low GWP alternative technologies are heavily patented by Multinational companies such as Honeywell and DuPont and are very costly. As technologies are protected by

patents use of these technologies will lead to outflow from our economy.

Another important aspect associated with transitioning away from HFCs to new generation low GWP refrigerants is that India is currently an exporter of refrigerant chemicals and is second only to China in terms of exports globally. Due to the application and process patents of the new refrigerants being held by the two US based multinational companies, this position may be affected in future, and India may become importer of new generation chemical refrigerants.

As there is a national focus on research, innovation and technology development reflected in Make in India Programme of the Government, and to have least cost to economy while transitioning away from HFCs, and maintain the position of exporter of refrigerants, the Ministry had decided to launch a collaborative research programme in development of low GWP non ODS cost effective alternative technologies to HFCs indigenously.

Accordingly, a meeting was held under the chairmanship of Secretary (EFCC) on 10<sup>th</sup> August, 2016, where representatives of DST, CSIR, research and academic institutions, civil society organizations and Industry were present. The Summary Record of the meeting is at **Enclosure-27** on **pages 239-246**. The Ministry made a public announcement about the collaborative R&D programme to develop next generation, sustainable refrigerant technologies as alternatives to HFCs on 16<sup>th</sup> September 2016 - the 22<sup>nd</sup> International Ozone Day. The Indian Institute of Chemical Technology (IICT), Hyderabad has been designated as the nodal institute for implementation of the programme by the Ministry. IICT has an established programme on fluoro-chemicals and has in the past collaborated with the industry on process development for HFCs.

Subsequently, a second meeting was convened under the Chairmanship of Secretary (EFCC) on 21<sup>st</sup> October, 2016, with representative of DST and IICT on the way forward for implementation of the collaborative research programme. The following issues were discussed in the meeting (i) Partners in the research program, (ii) Mechanism of implementation, (iii) Linkages, (iv) proposed areas of research with prioritization into short- medium- and long-term, and (v) Requirement of funds and its mobilization.

On the mechanism for implementation of the programme various options were discussed, one of the suggestions

was to have a registered legal body where there can be a PPP in R&D For the implementation of the short, medium and long term R&D objectives and specific tailor-made implementation mechanism for delivery may be worked out.

It was also discussed that in order to have a vibrant research programme knowledge linkages with Centres of Excellence outside the country is essential. It was suggested that International Collaboration Division of DST may be able to play a role in this. Also, joint technology projects may be envisaged under mechanisms Indo – US Forum, Indo- French Centre etc. One of the suggestions to jump start the programme, was to hire Indian Scientists and engineers from overseas who have already adequate competence, expertise and technology readiness to implement the programme immediately.

The potential list of Academic and Research partners in the programme to start with as suggested by IICT are (i) CSIR-Central Electrochemical Research Institute, Karaikudi, Tamilnadu, (ii) CSIR- National Environmental Engineering Research Institute (NEERI), Nagpur, (iii) DRDO-Centre for Fire, Explosives and Environment Safety (CFEES), New Delhi, (iv) IIT, Chennai, R&D wing, Mechanical Engineering Department for compressors design and manufacture.

Some of the proposed areas of research with prioritization into short- medium- and long-term are given below:

<b>Short-term</b>
Reduction of air conditioning load, charge quantity
Research for improving servicing sector and use of multiple refrigerants.
R&D for HC-290 AC technology.
<b>Medium-term</b>
Research on use of natural refrigerants (HC, Ammonia, CO <sub>2</sub> ).
Non-HFC alternative in Room Air Conditioning.
Non-HFC alternatives for Pack houses and Refer Vans.
<b>Long-term</b>
Development of new molecules (Refrigerant), so far being done only by Honeywell and Du-Pont.
Alternative to HFO 1234yf in MAC sector like CO <sub>2</sub> , R-152 etc. Use of HFO 1234yf in high ambient temperature.

Some the molecules which could be taken up for synthesis (lab scale, bench scale and pilot scale with basic

engineering suggested by IICT (i) Short term (5 years) : HFO-1234yf, HFO-1234ze, 2-BTP, (ii) Medium (10 years) : HFO – 1336mzz, HCFO-1233zd, HCFO-1233xf, 1225zc, HFC-245fa, and (iii) Long term (15 years) : HFC-161, HFC-152, HFC-41, HCFC-123, HFC-225ea.

As the programme is intrinsically linked to technology development and its implementation, it is imperative to have a strong industry linkage, wherein, the chemical manufacturers and the manufacturers of AC equipment form partners in the programme both in terms of financing the programme and up-scaling the outputs from pilot scale to industry level. In the past for process development of HFC 134a, while transitioning away from CFC when HFC 134a, process was under patent, the chemical manufacturers had a collaborative project with IICT for process development.

As the envisaged collaborative research programme is long term and will require sustained funding it was suggested that for immediate mobilization Start up activities can be pooled in from the Science Ministries for a year and then EFC/ SFC may be developed for securing funds for the full scale development program. There are various options for mobilization of funds for the programme viz. (i) government grants – budgetary support from programmes of MoEFCC and DST, (ii) NMITLI (New Millennium Indian Technology Leadership Initiative) by CSIR, (iii) Private sector, and (iv) Industry associations.

Another important avenue for mobilization of funds could be the funds available under technical assistance programmes under various Multilateral Fund projects / bilateral projects (Japan Component CTC project). It is for consideration of the ESC to guide for further course action.

#### **The proposal for approval of ESC:**

- (a) Establishing a body which can co-ordinate the collaborative research programme.
- (b) Establishing a budget line in the Ministry for funding.
- (c) Creating a body (Society / Trust) where fund from different sources can be pooled. The Project Management Unit (PMU) in Ozone Cell is a registered society, so PMU can also be authorized to take up this work.

**Item No. 8 :**

**Fiscal Incentives Scheme**

The report of Committee constituted under Joint Secretary to review the continuance of the fiscal incentive scheme in its present form is placed at **Enclosure-28, pages 247-280.**

**The proposal for approval of ESC:**

- (i) May like to consider report of the Committee for adoption and further directions (**Enclosure 28**)

**Item No. 9 :**

**Procedure of functioning for implementation of projects / activities**

As per the Cabinet Decision dated 27<sup>th</sup> January 1994, the Empowered Steering Committee inter alia approves the projects and review the implementation of the Montreal Protocol. The first order of constitution of the Empowered Steering Committee states that the ESC will devise its own rule of procedure for grants and implementation of the protocol and that the procedure to be followed by the Committee would be notified (**Enclosure 29, pages 281-287**). Since the beginning till to date the ESC has not notified the rules of procedure.

In order to provide uniformity and predictability on the level of approvals of projects/activities funded through the Multilateral Fund for the implementation of the Montreal Protocol, the following scheme of approval is proposed for consideration of the ESC.

<b>S. No.</b>	<b>Work /Activity</b>	<b>Proposed Competent Authority for approval</b>
1	Issuance of recommendations to DGFT for import / export of ODSs	Joint Secretary
2	Registration of enterprises under ODS rules	Joint Secretary
3	Investment projects payments ≤ 50 lakhs	Joint Secretary
4	Investment projects payments > 50 lakhs	Secretary
5	Approval for selection of consultants/hiring of services/other expenditures ≤ 10 lakhs	Joint Secretary
6	Approval for selection of consultants/hiring of services/other expenditures > 10 lakhs	Secretary
7	Reporting of Article 7 data and Country Programme Progress Report	Secretary
8	Projects posed to MLF for funding	Secretary
9	Policy issues arising out of implementation of Montreal Protocol Activities, ODS rules, MLF funded projects etc.	Secretary

The proposal for approval of ESC:

1. To approve the above proposal on approval and payments under the protocol.

**Item No. 10 : Any other matters with permission of the Chair**