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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Seventy-ninth Meeting
Bangkok, 3-7 July 2017

#### PROJECT PROPOSAL: CHINA

This document consists of the comments and recommendation of the Fund Secretariat on the draft Agreement between the Government of China and the Executive Committee for the reduction in consumption of HCFCs in accordance with stage II of the HCFC phase-out management plan for China.

#### PROJECT DESCRIPTION

# **Background**

- 1. At the 76<sup>th</sup> meeting, the Executive Committee considered the overarching strategy for stage II of the HCFC phase-out management plan (HPMP) for China and the accompanying plans for the extruded polystyrene (XPS) foam, polyurethane (PU) foam, industrial and commercial refrigeration and air-conditioning (ICR), room air-conditioning manufacturing and heat pump water heaters (RAC), solvent, and refrigeration and air-conditioning servicing (including the enabling programme component) sectors. Following the discussion, the Executive Committee decided *inter alia* to approve, in principle, the solvent sector plan and the refrigeration and air-conditioning servicing sector plan of stage II of the HPMP for China, and to consider the remaining sector plans and other outstanding issues for stage II of the HPMP for China at its 77<sup>th</sup> meeting.<sup>1</sup>
- 2. At the 77<sup>th</sup> meeting, the Executive Committee continued its deliberations on stage II of the HPMP for China and subsequently decided *inter-alia*:
  - (a) To approve, in principle, stage II of the HPMP for China for the period 2016 to 2026 to reduce HCFC consumption by 37.6 per cent of the baseline by 2020 and to achieve the total phase-out of HCFCs in PU foam, XPS foam and the solvent sectors by 2026, in the amount of US \$500,100,000, plus agency support costs to be determined at a future meeting, for UNDP, United Nations Environment Programme, UNIDO, the World Bank, the Government of Germany, the Government of Italy and the Government of Japan; and noting that the national HCFC consumption target, as well as the targets for the ICR sector and the RAC sector for the period 2021 to 2026 would be determined when stage III of the HPMP was submitted;
  - (b) To note:
    - (i) That the Agreement between the Government of China and the Executive Committee would be considered at the 79<sup>th</sup> meeting and should include in Appendix 4-A (Format of Tranche Implementation Reports and Plans) the amount of co-funding provided by China for the HCFC reductions;
    - (ii) That the tonnage of HCFCs eligible and non-eligible for funding to be deducted from the remaining consumption eligible for funding would be as stipulated in document UNEP/OzL.Pro/ExCom/76/25;
    - (iii) That any interest accrued by the Government of China in the implementation of each of the sector plans of stage II of the HPMP would be reported annually and that the Treasurer would be requested to offset such interest against future transfers to the relevant implementing agency, in line with decision 69/24;
    - (iv) That any remaining funds would be returned in line with paragraph 7(f) of the template Agreement for stage II of HPMPs (Annex XIX to document UNEP/OzL.Pro/ExCom/76/66); and
    - (v) The maximum allowable consumption and tranche funding values would be as reflected in an agreed table included in the decision 77/49.

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<sup>&</sup>lt;sup>1</sup> Decision 76/43.

3. The Executive Committee also approved funding and the associated agency support costs for the first tranche of each of the six sector plans.

#### Draft Agreement for stage II of the HPMP for China

- 4. In response to decision 77/49(b)(i), the Secretariat prepared the draft Agreement for stage II of the HPMP for China contained in Annex I to the present document, using the template for draft Agreements for stage II of HPMPs approved at the 76<sup>th</sup> meeting.<sup>2</sup>
- 5. Given that stage II of the HPMP for China addresses six sector plans, each one with a sector lead implementing agency and several cooperating implementing agencies (in addition to the lead implementing agency of the overall HPMP), the following adjustments were made to the template for draft Agreements:
  - (a) All implementation modalities that were established for stage I of the HPMP were maintained including sector verifications (paragraph 5(c)), monitoring requirements (paragraph 6), flexibility clause (paragraph 7(a)(iv)), and responsibilities of the agencies (Appendices 6-A to 6-D)). For reference, these modification are shown in **bold text**;
  - (b) The conditions contained in decision 77/49 on the approval in principle of stage II of the HPMP (e.g., duration, consumption targets and implementing agencies) had been included in the draft Agreement, as well as the following additions which are shown in *italic text*:
    - (i) The role of the sector lead implementing agency given that each sector plan has its own tranche implementation reports and plans which are submitted by the sector lead implementing agency;
    - (ii) The minimum requirements for sector verifications in Appendix 4-A (based on the experience gained during implementation of stage I of the HPMP);
    - (iii) A penalty for non-compliance with sector consumption targets in Appendix 7-A, in addition to the penalty for non-compliance with the national consumption target; and
    - (iv) Conditions related to specific sectors in Appendix 8-A; and
  - (c) The independent verification report in Appendix 4-A, paragraph 1(b) will address only the consumption and not the Plan results, similar to stage I of the Agreement between the Government of China and the Executive Committee.

#### Agency support costs

6. When stage II of the HPMP for China was approved, in principle, at its 77<sup>th</sup> meeting, the Executive Committee decided that the agency support costs would be determined at a future meeting. Therefore, for all bilateral and implementing agencies involved in the implementation of stage II of the HPMP, no agency support costs have been determined beyond those of the first tranche. The funding request for the second tranche is scheduled for the 80<sup>th</sup> meeting, and its approval would require specific arrangements should no agreement on the agency support costs for stage II of the HPMP for China have been reached.

<sup>&</sup>lt;sup>2</sup> Annex XIX of the Report of the 76<sup>th</sup> meeting (UNEP/OzL.Pro/ExCom/76/66).

# Paragraphs to be considered by the Executive Committee

- 7. The Government of China and the relevant bilateral and implementing agencies provided comments, through UNDP (as the lead implementing agency of the overall stage II), to the draft Agreement prepared by the Secretariat. Upon discussions between the Secretariat and UNDP, consensus was reached for most of the issues. There is a common understanding that stage II would be addressed in the same manner as stage I, which has proven effective for all parties involved.
- 8. The comments that would require the views of the Executive Committee are summarized below and marked in square brackets in the draft Agreement:
  - (a) Paragraphs 5 and 7(a): The Secretariat had suggested a 12-week submission deadline for all sector plan tranche requests; however, UNDP suggested to maintain the submission dates of stage I, namely, 8-week for tranches below US \$5 million and 12-week for tranches above US \$5 million; and
  - (b) Appendix 7-A, paragraph 1: UNDP suggested deleting any reference to each sector level consumption in the penalty clause and limit it only to the national consumption, similar to the Agreement for stage I.
- 9. With regard to Appendix 2-A, subsequent to the approval in principle of stage II and further to a comprehensive evaluation of the activities and timeframe of implementation, the Government of China has proposed an alternative tranche distribution among sector plans, reflecting the actual funding requirements to ensure smooth implementation, noting that the total value of each tranche has not been modified. For reference, the sector tranche distribution used as reference for decision 77/49 and the revised distribution are included in Annex II to the present document.
- 10. UNDP also indicated that while the levels of the agency support costs are still pending, the implementing agencies strongly recommend that they be maintained at the same levels as in stage I of the HPMP, given the increased level of complexity in the implementation of stage II and the larger number of small and medium-sized enterprises involved, which will require additional efforts due to their limited management and technical capacities. The implementing agencies indicated that any change in agency support costs would have a significant negative impact in implementation.

# Secretariat's comments

- 11. Upon review of the feedback provided by the Government of China and further discussion with UNDP, the Secretariat's comments on the two issues are presented below:
  - (a) On the 12-week submission deadline proposed for all sector plan tranche requests of stage II of the HPMP (paragraphs 5 and 7 (a)), the Secretariat notes that although some sector tranches are below US \$5 million, they are part of consolidated annual tranches with values between US \$30 million and US \$69 million. The experience under stage I has been that the analysis of all progress reports and tranche requests associated to the HPMP for China require additional time and effort; in addition to the individual technical assessment and discussion with the sector lead implementing agency, the review of all the information and comments from all the sectors can only be consolidated into the project document for submission to the Executive Committee once these discussions have been completed. For these reasons and to allow the completion of the project document on time, the Secretariat considers that all sector plans associated with stage II of the HPMP, irrespective of their funding level, should have a 12-week submission deadline; and

(b) On the penalty clause (Appendix 7-A), following the performance-based agreement principle, the Secretariat has proposed to extend the penalty clause to compliance with the specific sector consumption targets included in Appendix 2-A (rows 1.3.1, 1.3.2, 1.3.3, 1.3.4 and 1.3.5), noting that the Agreement for stage I limited the penalty clause to row 1.2 (national maximum allowable consumption). This situation is unique for China, where each sector plan is implemented independently and has its own maximum allowable levels of consumption and phase-out. This proposal is intended to cover a possible scenario where the maximum allowable consumption for one sector is exceeded but the national maximum allowable consumption is not exceeded.

UNDP indicated that, as the sector consumption cannot be verified, it is not possible to determine in an independent manner if there is compliance with the maximum allowable sector consumption, as is the case for national consumption. This is the reason why the independent verification per sector was based on the verification of a random sample of at least five per cent of the manufacturing lines which had completed their conversion in the year to be verified, on the understanding that the total aggregated HCFC consumption of the random sample of the manufacturing lines represents at least 10 per cent of the sector consumption phased out in that year. The Secretariat agrees that the sector consumption cannot be independently verified, but does not consider such independent verification to be required for the inclusion of the sector targets in the penalty clause of the Agreement given the independent verification of the national consumption and the sector consumption figures provided annually by the Government of China as part of the progress report and tranche request. Most of the information is also contained in the Country Programme (CP) implementation report, except the breakdown between the ICR and RAC sectors. On this basis, the Secretariat is of the view that compliance with the maximum allowable consumption per sector could be assessed using as reference the CP implementation report and the annual sector consumption figures provided by the Government of China along with the submission of the progress report and tranche request.

- 12. Regarding the changes in tranche distribution among sectors (Appendix 2-A), the Secretariat considers that the proposed revision could contribute to the smooth implementation of the activities in each sector. These modifications have already been included in the draft Agreement.
- 13. With regard to the level of the agency support costs for stage II, the Secretariat notes the comments from the Government of China, through UNDP, to maintain the agency support costs at the same level as stage I. The Secretariat also notes that the Executive Committee will consider a document on the Review of the administrative cost regime and its core unit funding budget (decision 75/69(b))<sup>3</sup> submitted to the 79<sup>th</sup> meeting. Noting the relevance of stage II of the HPMP for China to the work of the Multilateral Fund in the coming years, the Executive Committee may wish to consider the agency support costs to be agreed under stage II of the HPMP for China in the context of its broader discussion on the administrative cost regime.

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<sup>&</sup>lt;sup>3</sup> UNEP/OzL.Pro/ExCom/79/43.

# **Secretariat's recommendation**

- 14. The Executive Committee may wish to consider:
  - (a) Approving the draft Agreement between the Government of China and the Executive Committee for the implementation of stage II of the HCFC phase-out management plan contained in Annex I, in light of the Secretariat's comments provided above, in particular:
    - (i) Whether or not to extend the penalty clause to non-compliance with the sector consumption targets in Appendix 7-A;
    - (ii) The level of agency support costs for the second and subsequent tranches of stage II of the HPMP; and
  - (b) Requesting all bilateral and implementing agencies to submit tranche requests associated with stage II of the HPMP for China 12 weeks in advance to the Executive Committee meeting, irrespective of their level of funding.

#### Annex I

**Text in bold:** Text from the stage I Agreement added to the template to ensure that the same agreed implementation approach used in stage I is being followed in stage II

Text highlighted in italics: New text added to the template to reflect specific features of stage II of the HPMP for China

[Text in square brackets]: comments that would require the views of the Executive Committee

# DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF CHINA AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS IN ACCORDANCE WITH STAGE II OF THE HCFC PHASE-OUT MANAGEMENT PLAN

# **Purpose**

- 1. This Agreement represents the understanding of the Government of China (the "Country") and the Executive Committee with respect to the reduction of controlled use of the ozone-depleting substances (ODS) set out in Appendix 1-A ("The Substances") to a sustained level of 11,772 ODP tonnes by 1 January 2020 in compliance with Montreal Protocol schedule, including the total phase-out of HCFCs in the extruded polystyrene (XPS) foam, polyurethane (PU) foam, and solvent sectors by 2026, and noting that the national HCFC consumption target, as well as the targets for the industrial and commercial refrigeration and air conditioning (ICR) sector and the room air-conditioning manufacturing and heat pump water heaters (HPWH) (RAC) sector for the period 2021 to 2026 would be determined when stage III of the HCFC phase-out management plan (HPMP) is submitted.
- 2. The Country agrees to meet the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A ("The Targets, and Funding") in this Agreement as well as in the Montreal Protocol reduction schedule for all Substances mentioned in Appendix 1-A. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to any consumption of the Substances that exceeds the level defined in row 1.2 of Appendix 2-A as the final reduction step under this Agreement for all of the Substances specified in Appendix 1-A, and in respect to any consumption of each of the Substances that exceeds the level defined in rows 4.1.3, 4.2.3, 4.3.3, 4.4.3, 4.5.3, and 4.6.3 (remaining consumption eligible for funding).
- 3. Subject to compliance by the Country with its obligations set out in this Agreement, the Executive Committee agrees, in principle, to provide the funding set out in row 3.1 of Appendix 2-A to the Country. The Executive Committee will, in principle, provide this funding at the Executive Committee meetings specified in Appendix 3-A ("Funding Approval Schedule").
- 4. The Country agrees to implement this Agreement in accordance with the stage II of the HPMP approved ("the Plan") **and its sector plans**. In accordance with sub-paragraph 5(b) of this Agreement, the Country will accept independent verification of the achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A of this Agreement. The aforementioned verification will be commissioned by the relevant bilateral or implementing agency.

# **Conditions for funding release**

- 5. The Executive Committee will only provide the Funding in accordance with the Funding Approval Schedule when the Country satisfies the following conditions at least [eight weeks<sup>1</sup>/twelve weeks] in advance of the applicable Executive Committee meeting set out in the Funding Approval Schedule:
  - (a) That the Country has met the Targets set out in row 1.2 of Appendix 2-A for all relevant years. Relevant years are all years since the year in which this Agreement was approved;
  - (b) That the meeting of these Targets has been independently verified for all relevant years, unless the Executive Committee decided that such verification would not be required;
  - (c) That, for sector plans with activities that include the conversion of manufacturing capacity, the Country had submitted an independent verification report of a random sample of at least five per cent of the manufacturing lines which had completed their conversion in the year to be verified, on the understanding that the total aggregated HCFC consumption of the random sample of the manufacturing lines represents at least 10 per cent of the sector consumption phased out in that year;
  - (d) That the Country had submitted a Tranche Implementation Report in the form of Appendix 4-A ("Format of Tranche Implementation Reports and Plans") covering each previous calendar year; that it had achieved a significant level of implementation of activities initiated with previously approved tranches; and that the rate of disbursement of funding available from the previously approved tranche was more than 20 per cent; and
  - (e) That the Country has submitted a Tranche Implementation Plan in the form of Appendix 4-A ("Format for Tranche Implementation Reports and Plans") covering each calendar year until and including the year for which the funding schedule foresees the submission of the next tranche or, in case of the final tranche, until completion of all activities foreseen.

# **Monitoring**

**6.** The

6. The Country will ensure that it conducts accurate monitoring of its activities under this Agreement, and will also continue to maintain and operate a system to monitor the consumption in the different sectors to ensure compliance with the sector consumption limits set out in rows 1.3.1, 1.3.2, 1.3.3, 1.3.4 and 1.3.5 of Appendix 2-A. The institutions set out in Appendix 5-A ("Monitoring Institutions and Roles") will monitor and report on implementation of the activities in the previous Tranche Implementation Plans in accordance with their roles and responsibilities set out in the same appendix. This monitoring will also be subject to independent verification as described in sub-paragraph 5(c) above.

<sup>&</sup>lt;sup>1</sup> Tranches with requested level of funding of more than US \$5 million should be submitted in full twelve weeks in advance to the applicable Executive Committee meeting in line with decision 20/7.

# Flexibility in the reallocation of funds

- 7. The Executive Committee agrees that the Country may have the flexibility to reallocate part or all of the approved funds according to the evolving circumstances to achieve the smoothest reduction of consumption and phase-out of the Substances specified in Appendix 1-A:
  - (a) Reallocations categorized as major changes must be documented in advance either in a Tranche Implementation Plan as foreseen in sub-paragraph 5(e) above, or as a revision to an existing Tranche Implementation Plan to be submitted at least [eight weeks²/twelve weeks] in advance to any meeting of the Executive Committee, for its approval. Major changes would relate to:
    - (i) Issues potentially concerning the rules and policies of the Multilateral Fund;
    - (ii) Changes which would modify any clause of this Agreement;
    - (iii) Changes in the annual levels of funding allocated to individual bilateral or implementing agencies for the different tranches;
    - (iv) Provision of funding for activities not included in the current approved Tranche Implementation Plan, or removal of an activity in the Tranche Implementation Plan, with a cost greater than 20 per cent of the total cost of the last approved tranche, or US \$2.5 million, whichever is lower; and
    - (v) Changes in alternative technologies already selected, on the understanding that any submission for such a request would identify the associated incremental costs, the potential impact to the climate, and any differences in ODP tonnes to be phased out if applicable, as well as confirm that the Country agrees that potential savings related to the change of technology would decrease the overall funding level under this Agreement accordingly;
  - (b) Reallocations not categorized as major changes may be incorporated in the approved Tranche Implementation Plan, under implementation at the time, and reported to the Executive Committee in the subsequent Tranche Implementation Report;
  - (c) Any enterprise to be converted to non-HCFC technology included in the Plan and that would be found to be ineligible under the policies of the Multilateral Fund (i.e., due to foreign ownership or establishment post the 21 September 2007 cut-off date), would not receive financial assistance. This information would be reported as part of the Tranche Implementation Plan;
  - (d) The Country commits to examining the possibility of using pre-blended systems with low-global warming potential (GWP) blowing agents instead of blending them in-house, for those foam enterprises covered under the Plan, should this be technically viable, economically feasible and acceptable to the enterprises;
  - (e) The Country agrees, in cases where HFC technologies have been chosen as an alternative to HCFCs, and taking into account national circumstances related to health and safety: to monitor the availability of substitutes and alternatives that further minimize impacts on the climate; to consider, in the review of regulations, standards and incentives adequate

<sup>&</sup>lt;sup>2</sup> Ibid.

- provisions that encourage introduction of such alternatives; and to consider the potential for adoption of cost-effective alternatives that minimize the climate impact in the implementation of the HPMP, as appropriate, and inform the Executive Committee on the progress accordingly in tranche implementation reports; and
- (f) Any remaining funds held by the bilateral or implementing agencies or the Country under the Plan will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.

# Considerations for the refrigeration servicing sector

- 8. Specific attention will be paid to the execution of the activities in the refrigeration servicing sector included in the Plan, in particular:
  - (a) The Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation; and
  - (b) The Country and relevant bilateral and/or implementing agencies would take into consideration relevant decisions on the refrigeration servicing sector during the implementation of the Plan.

# **Bilateral and implementing agencies**

- 9. The Country agrees to assume overall responsibility for the management and implementation of this Agreement and of all activities undertaken by it or on its behalf to fulfil the obligations under this Agreement. UNDP has agreed to be the lead implementing agency (the "Lead IA"); UNDP, UNIDO, United Nations Environment Programme (UN Environment) and the World Bank have agreed to be the sector lead implementing agencies ("Sector Lead IAs") under the overall lead of the Lead IA for ICR and solvent, XPS foam and RAC, service sector and enabling programme, and the PU foam sectors, respectively; and the Government of Germany, the Government of Italy, the Government of Japan have agreed to be cooperating implementing agencies (the "Cooperating IAs") under the lead of the Sector Lead and Lead IA in respect of the Country's activities under this Agreement. The Country agrees to evaluations, which might be carried out under the monitoring and evaluation work programmes of the Multilateral Fund or under the evaluation programme of the Lead IA, Sector Lead IAs, and/or Cooperating IAs.
- 10. The Lead IA will be responsible for ensuring co-ordinated planning, implementation and reporting of all activities under this Agreement, including but not limited to independent verification as per sub-paragraph 5(b). The roles of the Lead IA, *Sector Lead IAs*, and Cooperating IAs are contained in *Appendix 6-A*, *Appendix 6-B* and *Appendix 6-D*, respectively. The Executive Committee agrees, in principle, to provide the Lead IA, Sector Lead IAs, and the Cooperating IAs with the fees set out in rows 2.1.2, 2.2.2, 2.2.4, 2.3.2, 2.4.2, 2.4.4, 2.5.2, 2.5.4, 2.5.6, and 2.6.2 of Appendix 2-A.

# Non-compliance with the Agreement

11. Should the Country, for any reason, not meet the Targets for the elimination of the Substances set out in row 1.2 of Appendix 2-A or otherwise does not comply with this Agreement, then the Country agrees that it will not be entitled to the Funding in accordance with the Funding Approval Schedule. At the discretion of the Executive Committee, funding will be reinstated according to a revised Funding Approval Schedule determined by the Executive Committee after the Country has demonstrated that it has satisfied all of its obligations that were due to be met prior to receipt of the next tranche of funding under the Funding Approval Schedule. The Country acknowledges that the Executive Committee may reduce

the amount of the Funding by the amount set out in Appendix 7-A ("Reductions in Funding for Failure to Comply") in respect of each ODP kg of reductions in consumption not achieved in any one year. The Executive Committee will discuss each specific case in which the Country did not comply with this Agreement, and take related decisions. Once decisions are taken, the specific case of non-compliance with this Agreement will not be an impediment for the provision of funding for future tranches as per paragraph 5 above.

- 12. The Funding of this Agreement will not be modified on the basis of any future Executive Committee decisions that may affect the funding of any other consumption sector projects or any other related activities in the Country.
- 13. The Country will comply with any reasonable request of the Executive Committee, the Lead IA, *Sector Lead IAs*, and the Cooperating IAs to facilitate implementation of this Agreement. In particular, it will provide the Lead IA, Sector Lead IAs, and the Cooperating IAs with access to the information necessary to verify compliance with this Agreement.

# **Date of completion**

14. The completion of the Plan and the associated Agreement will take place at the end of 2027. The completion of each sector plan will take place at the end of the year following the last year for which a maximum allowable total consumption level has been specified for the sector in Appendix 2-A. Should at that time there still be activities that are outstanding, and which were foreseen in the last Tranche Implementation Plan and its subsequent revisions as per sub-paragraph 5(e) and paragraph 7, the completion of the Plan or sector plan will be delayed until the end of the year following the implementation of the remaining activities upon approval by the Executive Committee. The reporting requirements as per sub-paragraphs 1(a) to 1(f) of Appendix 4-A will continue until the time of the completion of the Plan unless otherwise specified by the Executive Committee.

# Validity

- 15. All of the conditions set out in this Agreement are undertaken solely within the context of the Montreal Protocol and as specified in this Agreement. All terms used in this Agreement have the meaning ascribed to them in the Montreal Protocol unless otherwise defined herein.
- 16. This Agreement may be modified or terminated only by mutual written agreement of the Country and the Executive Committee of the Multilateral Fund.

#### **APPENDICES**

#### **APPENDIX 1-A: THE SUBSTANCES**

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	С	I	11,495.31
HCFC-123	С	I	10.13
HCFC-124	С	I	3.07
HCFC-141b	С	I	5,885.18
HCFC-142b	С	I	1,470.53
HCFC-225	С	I	1.22
Total	С	I	18,865.44

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
						Consumptio	n targets						
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	17,342.1	17,342.1	17,342.1	17,342.1	12,524.9	12,524.9	12,524.9	12,524.9	12,524.9	6,262.4	6,262.4	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	16,978.9	16,978.9	15,048.1	15,048.1	11,772.0	*	*	*	*	*	*	n/a
1.3.1	Maximum allowable consumption of Annex C, Group I substances in the ICR sector (ODP tonnes)	2,162.5	2,162.5	2,042.4	2,042.4	1,609.9	1,609.9	**	**	**	**	**	n/a
1.3.2	Maximum allowable consumption of Annex C, Group I substances in the XPS foam sector (ODP tonnes)	2,286.0	2,286.0	2,032.0	2,032.0	1,397.0	1,397.0	1,397.0	762.0	762.0	165.0	0.0	n/a
1.3.3	Maximum allowable consumption of Annex C, Group I substances in the PU foam sector (ODP tonnes)	4,449.6	4,449.6	3,774.5	3,774.5	2,965.7	2,965.7	2,965.7	1,078.4	1,078.4	330.0	0.0	n/a
1.3.4	Maximum allowable consumption of Annex C, Group I substances in the RAC sector (ODP tonnes)	3,697.7	3,697.7	2,876.0	2,876.0	2,259.7	2,259.7	***	***	***	***	***	n/a
1.3.5	Maximum allowable consumption of Annex C, Group I substances in the solvent sector	455.2	455.2	395.4	395.4	321.2	321.2	321.2	148.3	148.3	55.0	0.0	n/a
1			Fui	nding industri	al and commer	cial refrigerat	tion and air co	onditioning (ICF	(a) sector plan	•			
2.1.1	Sector Lead IA (UNDP) agreed funding (US \$)	13,368,756	20,000,000	12,000,000	16,000,000	16,000,000	11,776,041	-	-	-	-	-	89,144,797
2.1.2	Support costs for UNDP (US \$)	935,813	TBD	TBD	TBD	TBD	TBD	-	-	-	=	-	TBD

# UNEP/OzL.Pro/ExCom/79/30 Annex I

Row	Particulars	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
					Funding extru	ded polystyre	ne (XPS) foam	sector plan					
2.2.1	Sector Lead IA (UNIDO) agreed funding (US \$)	7,514,867	8,732,614	8,000,000	9,243,486	9,600,000	14,788,765	11,400,000	11,300,000	9,550,000	9,600,000	11,971,763	111,701,495
2.2.2	Support costs for UNIDO (US \$)	526,041	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
2.2.3	Sector cooperating agency (Germany) agreed funding (US \$)	-	267,386	-	356,514	-	211,235	-	-	250,000	-	-	1,085,135
2.2.4	Support costs for Germany (US \$)	-	TBD	-	TBD	-	TBD	-	-	TBD	-	-	TBD
					Funding p	olyurethane (	PU) foam sect	tor plan					
2.3.1	Sector Lead IA (World Bank) agreed funding (US \$)	7,045,027	10,600,000	9,500,000	12,700,000	12,700,000	20,000,000	15,700,000	15,600,000	10,500,000	13,100,000	14,026,183	141,471,210
2.3.2	Support costs for World Bank (US \$)	493,152	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
							oning (RAC) s	ector plan					
2.4.1	Sector Lead IA (UNIDO) agreed funding (US \$)	14,671,089	16,000,000	18,000,000	14,000,000	14,000,000	11,581,816	-	-	-	-	-	88,252,905
2.4.2	Support costs for UNIDO (US \$)	1,026,976	TBD	TBD	TBD	TBD	TBD	-	-	-	-	-	TBD
2.4.3	Sector cooperating agency (Italy) agreed funding (US \$)	891,892	-	-	-	-	-	-	-	-	-	-	891,892
2.4.4	Support costs for Italy (US \$)	108,108	-	-	-	-	-	-	-	-	-	-	108,108
				Fu	nding service s	ector plan, in	cluding enabli	ng programme					
2.5.1	Sector Lead IA (UN Environment) agreed funding (US \$)	3,299,132	2,570,000	3,270,000	3,370,000	3,570,000	2,810,868	-	-	-	-	-	18,890,000
2.5.2	Support costs for UN Environment (US \$)	364,651	TBD	TBD	TBD	TBD	TBD	-	-	-	-	-	TBD
2.5.3	Sector cooperating agency (Germany) agreed funding (US \$)	300,000	-	300,000	200,000	-	200,000	-	-	-	-	-	1,000,000
2.5.4	Support costs for Germany (US \$)	36,000	-	TBD	TBD	TBD	TBD	-	-	-	-	-	TBD
2.5.5	Sector cooperating agency (Japan) agreed funding (US \$)	80,000	80,000	80,000	80,000	80,000	-	-	-	-	-	-	400,000
2.5.6	Support costs for Japan (US \$)	10,400	TBD	TBD	TBD	TBD	-	-	-	-	-	-	TBD

Row	Particulars	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
					F	unding solven	t sector plan						
2.6.1	Overall Lead IA (UNDP)	2,821,937	3,777,190	2,959,930	3,229,030	3,601,083	7,888,921	7,128,589	3,664,360	5,481,592	2,707,880	4,002,054	47,262,566
	agreed funding (US \$)												
2.6.2	Support costs for UNDP	197,536	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	(US \$)												
						Overall f							
3.1	Total agreed funding	49,992,700	62,027,190	54,109,930	59,179,030	59,551,083	69,257,646	34,228,589	30,564,360	25,781,592	25,407,880	30,000,000	500,100,000
2.2	(US \$)	2 (00 (7)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
3.2	Total support cost (US \$)  Total agreed costs (US \$)	3,698,676 53,691,376	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	ut and remaining eligible co	,,	ממו	וממו	וממו	ממו	ושנו	וממו	ושנו	IDD	ושנו	עמו	עמו
4.1.1	Total phase-out of HCFC-2		chieved under	this Agraemen	t (ODP tonnes)								3,878.80
4.1.2	Phase-out of HCFC-22 to be												1,479.72
4.1.3	Remaining eligible consum				DI tollies)								6,136.79
4.2.1	Total phase-out of HCFC-1				nt (ODP tonnes	3							2.70
4.2.2	Phase-out of HCFC-123 to					'/							0.00
4.2.3	Remaining eligible consum												7.43
4.3.1	Total phase-out of HCFC-1			,	nt (ODP tonnes	3)							0.00
4.3.2	Phase-out of HCFC-124 to												0.00
4.3.3	Remaining eligible consum	ption for HCFC	-124 (ODP ton	nes)	-								3.07
4.4.1	Total phase-out of HCFC-14	41b agreed to be	e achieved und	er this Agreem	ent (ODP tonne	es)							4,187.18****
4.4.2	Phase-out of HCFC-141b to	be achieved in	previously app	proved projects	(ODP tonnes)								1,698.00
4.4.3	Remaining eligible consum	ption for HCFC	-141b (ODP to	nnes)									0.00
4.5.1	Total phase-out of HCFC-1	42b agreed to be	e achieved und	er this Agreem	ent (ODP tonne	es)							646.02
4.5.2	Phase-out of HCFC-142b to	be achieved in	previously app	proved projects	(ODP tonnes)								267.47
4.5.3	Remaining eligible consum	ption for HCFC	-142b (ODP to	nnes)									557.04
4.6.1	Total phase-out of HCFC-22	25 agreed to be	achieved under	r this Agreeme	nt (ODP tonnes	3)							1.13
4.6.2	Phase-out of HCFC-225 to	be achieved in p	reviously appr	oved projects (	ODP tonnes)		-						0.00
4.6.3	Remaining eligible consum	ption for HCFC	-225 (ODP ton	nes)									0.09

Maximum allowable total consumption of Annex C, Group I substances for the period 2021 to 2026 would be determined at a later date, but would in no case be greater than 11,772 ODP tonnes prior to 2025, and no greater than 6,131 ODP tonnes thereafter.

# APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval at the *last* meeting of the year specified in Appendix 2-A.

<sup>\*\*</sup> Maximum allowable total consumption of Annex C, Group I substances in the ICR sector for the period 2021 to 2026 would be determined later, but would in no case be greater than 1,609.9 ODP tonnes prior to 2025, and no greater than 781 ODP tonnes thereafter.

<sup>\*\*\*</sup> Maximum allowable total consumption of Annex C, Group I substances in the RAC sector for the period 2021 to 2026 would be determined later, but would in no case be greater than 2,259.7 ODP tonnes prior to 2025, and no greater than 1,335 ODP tonnes thereafter.

TBD= To be determined.

<sup>\*\*\*\*</sup> In accordance with decision 68/42(b), includes 137.83 ODP tonnes of HCFC-141b contained in exported pre-blended polyols.

Note: Date of completion of stage I as per stage I Agreement: 31 December 2019.

#### APPENDIX 4-A: FORMAT OF TRANCHE IMPLEMENTATION REPORTS AND PLANS

- 1. The submission of the Tranche Implementation Report and Plans for each *sector* tranche request will consist of the following parts:
  - (a) A narrative report, with data provided by tranche, describing the progress achieved since the previous report, reflecting the situation of the Country in regard to phase out of the Substances, how the different activities contribute to it, and how they relate to each other; the amount of ODS phased out as a direct result from the implementation of activities, by substance, and the alternative technology used and the related phase-in of alternatives; the amount of co-funding provided by the Country for the HCFC reductions; successes, experiences, and challenges related to the different activities included in the Plan, reflecting any changes in the circumstances in the Country, and providing other relevant information; information on and justification for any changes vis-à-vis the previously submitted Tranche Implementation Plan(s), such as delays, uses of the flexibility for reallocation of funds during implementation of a tranche, as provided for in paragraph 7 of this Agreement, or other changes;
  - (b) An independent verification report of the consumption of the Substances, as per sub-paragraph 5(b) of the Agreement. If not decided otherwise by the Executive Committee, such a verification has to be provided together with each tranche request and will have to provide verification of the consumption for all relevant years as specified in sub-paragraph 5(a) of the Agreement for which a verification report has not yet been acknowledged by the Committee;
  - (c) For sector plans with activities that include the conversion of manufacturing capacity, an independent verification report as per sub-paragraph 5(c) of the Agreement, including a random sample of at least five per cent of the manufacturing lines which had completed their conversion in the year to be verified, and specifying at a minimum the following information: name of the enterprises; level of the Substance consumption prior to conversion; the alternative technology that has been introduced including the alternative Substance consumption level; the manufacturing capacity and actual production level before and after conversion; and the detailed incremental cost of the conversion;
  - (d) A written description of the activities to be undertaken during the period covered by the requested tranche, highlighting implementation milestones, the time of completion and the interdependence of the activities, any possible changes to the overall Plan that are foreseen, taking into account experiences made and progress achieved in the implementation of earlier tranches;
  - (e) A set of quantitative information for all Tranche Implementation Reports and Plans, submitted through an online database; and
  - (f) An Executive Summary of about five paragraphs, summarizing the information of the above sub-paragraphs 1(a) to 1(e).
- 2. In the event that in a particular year two stages of the HPMP are being implemented in parallel, the following considerations should be taken in preparing the Tranche Implementation Reports and Plans:
  - (a) The Tranche Implementation Reports and Plans referred to as part of this Agreement, will exclusively refer to activities and funds covered by this Agreement; and

(b) If the stages under implementation have different HCFC consumption targets under Appendix 2-A of each Agreement in a particular year, the lower HCFC consumption target will be used as reference for compliance with these Agreements and will be the basis for the independent verification.

#### **APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES**

- 1. The Foreign Economic Cooperation Office/Ministry of Environmental Protection (FECO/MEP), as the National Ozone Unit, is responsible for the following:
  - (a) Co-ordinating the overall implementation of activities to be undertaken with assistance of the Lead IA, Sector Lead IAs and other Cooperating IAs;
  - (b) Developing and implementing national policies and legislations on the control of ODS;
  - (c) Monitoring national consumption based on production data and official import and export data for the Substances recorded by relevant government departments in line with sub-paragraph 5(b) of this Agreement;
  - (d) Supervising implementation of the national system of licensing and quotas for HCFC imports, production and exports, the quota system covering enterprises using large quantities of HCFC in the different consumption sectors, where applicable, and collect the consumption data to control the consumption growth and achieve reduction of HCFC consumption in those enterprises, where applicable;
  - (e) Managing consumption in those sectors with large amounts of small and medium-sized (SMEs) enterprises (e.g., XPS and PU foam, ICR, and solvent sectors), by limiting the quantities of the relevant substances to be sold to the domestic market;
  - (f) Supervising enterprises carrying out the conversion activities to ensure the phase-out target in those enterprises had been achieved; and
  - (g) Co-ordinate with Lead IA, Sector Lead IAs, and Cooperating IAs to facilitate the verification of the sector targets set in the Agreement and in the preparation of reports according to sub-paragraph 5(d) and Appendix 4-A of this Agreement.

#### APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

- 1. The Lead IA will be responsible for a range of activities, including at least the following:
  - (a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements as set out in the Country's HPMP;
  - (b) Assisting the Country in preparation and submission of the Tranche Implementation Reports and Plans as per Appendix 4-A;

- (c) Providing independent verification to the Executive Committee that the Targets have been met and associated tranche activities have been completed as indicated in the Tranche Implementation Plan consistent with Appendix 4-A;
- (d) Fulfilling the reporting requirements for the overall plan as specified in Appendix 4-A for submission to the Executive Committee;
- (e) Ensuring that the experiences and progress is reflected in updates of the overall plan and in future Tranche Implementation Plans consistent with sub-paragraphs 1(d) and 1(e) of Appendix 4-A;
- (f) In the event that the last funding tranche is requested one or more years prior to the last year for which a consumption target had been established, co-ordinate with the responsible *Sector Lead IA* to ensure that annual tranche implementation reports and, where applicable, verification reports on the current stage of the Plan are submitted until all activities foreseen had been completed and HCFC consumption targets had been met;
- (g) Ensuring that appropriate independent technical experts carry out the technical reviews;
- (h) Carrying out the required supervision missions;
- (i) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;
- (j) With the Country, co-ordinating the activities of the *Sector Lead IAs and* Cooperating IAs, and ensuring appropriate sequence of activities;
- (k) In case of reductions in funding for failure to comply in accordance with paragraph 11 of the Agreement, to determine, in consultation with the Country, *the Sector Lead IAs and* the Cooperating IAs, the allocation of the reductions to the different sectors and budget items and to the funding of the Sector Lead IAs and each Cooperating IA;
- (1) Providing assistance with policy, management and technical support when required;
- (m) Reaching consensus with the *Sector Lead IAs and* Cooperating IAs on any planning, co-ordination and reporting arrangements required to facilitate the implementation of the Plan; and
- (n) Co-ordinating the annual financial audit of the income received from the implementing agencies, the disbursements by FECO/MEP to final beneficiaries, and the interest amount earned by FECO/MEP on the balances held by FECO/MEP.
- 2. After consultation with the Country and taking into account any views expressed, the Lead IA will select and mandate an independent entity to carry out the verification of the HPMP results as per sub-paragraphs 5(c) of the Agreement and sub-paragraph 1(c) of Appendix 4-A. The Lead IA can delegate the task described in this paragraph to the respective Sector Lead IA on the understanding that such delegation will not interfere with the Lead IA's responsibility to carry out the verification of the HPMP results.

#### APPENDIX 6-B: ROLE OF THE SECTOR LEAD IAS

- 1. The Sector Lead IAs will be responsible for a range of activities described in their corresponding sector plan, including at least the following:
  - (a) Providing assistance for policy development, planning and management of sector programming as set out in the sector plans, when required;
  - (b) Ensuring verification of sector performance targets in line with paragraph 5(c) and progress of disbursement in accordance with this Agreement and with its specific internal procedures and requirements as set out in the relevant sectors and assisting the Country in the implementation and assessment of the activities;
  - (c) Fulfilling the reporting requirements for the sector Tranche Implementation Reports and Plans as specified in Appendix 4-A for submission to the Executive Committee and, where relevant, including the activities implemented by the Cooperating IAs;
  - (d) Ensuring that appropriate independent technical experts carry out the technical reviews;
  - (e) Carrying out required supervision missions;
  - (f) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;
  - (g) Ensuring that disbursements made to the Country are based on the use of the indicators;
  - (h) Where relevant, reaching consensus with the Cooperating IAs on any planning, co-ordination and reporting arrangements required to facilitate the implementation of the Plan:
  - (i) Timely releasing funds to the Country/participating enterprises for completing the activities related to the sector; and
  - (j) Ensuring financial verification of the activities implemented.

# APPENDIX 6-C: ROLE OF THE WORLD BANK IN THE VERIFICATION OF CONSUMPTION

1. In addition to its role as the Implementing Agency of the China HCFC Production Phase-out Management Plan, after consultation with the Country and taking into account any views expressed, the World Bank will select and mandate an independent entity to carry out the verification of the consumption of the Country as specified in row 1.2 of Appendix 2-A, as per sub-paragraph 5(b) of this Agreement and sub-paragraph 1(b) of Appendix 4-A.

#### APPENDIX 6-D: ROLE OF THE COOPERATING IAS

- 1. The Cooperating IAs will be responsible for a range of activities described in each sector plan, including at least the following:
  - (a) Providing assistance for policy development, planning and management of the sector programming as set out in the respective sector plan, when required;
  - (b) Assisting the Country in the implementation and assessment of the activities, and referring to the Sector Lead IA to ensure a co-ordinated sequence in the activities;
  - (c) Providing reports to the Sector Lead IA on these activities as per Appendix 4-A;
  - (d) Reaching consensus with the *Sector Lead IA* on any planning, co-ordination and reporting arrangements required to facilitate the implementation of the Plan; and
  - (e) Ensuring financial verification of the activities implemented.

# APPENDIX 7-A: REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY

- 1. In accordance with paragraph 11 of the Agreement, the amount of funding provided may be reduced by US \$115 per ODP kg of consumption beyond the level defined in row 1.2, [1.3.1, 1.3.2, 1.3.3, 1.3.4, or 1.3.5] of Appendix 2-A for each year in which the target specified in row 1.2, [1.3.1, 1.3.2, 1.3.3, 1.3.4, or 1.3.5] of Appendix 2-A has not been met, on the understanding that the maximum funding reduction would not exceed the funding level of the tranche being requested. Additional measures might be considered in cases where non-compliance extends for two consecutive years.
- 2. In the event that the penalty needs to be applied for a year in which there are two Agreements in force (two stages of the HPMP being implemented in parallel) with different penalty levels, the application of the penalty will be determined on a case-by-case basis taking into consideration the specific sectors that lead to the non-compliance. If it is not possible to determine a sector, or both stages are addressing the same sector, the penalty level to be applied would be the largest.

#### **APPENDIX 8-A: SECTOR SPECIFIC ARRANGEMENTS**

- 1. During stage II of the HPMP for the RAC sector, the Country agrees to convert at least:
  - (a) Twenty manufacturing lines for the production of RAC equipment to HC-290;
  - (b) Three compressor manufacturing lines to HC-290;
  - (c) Three residential HPWH manufacturing lines to HC-290; and
  - (d) Two residential HPWH manufacturing lines to R-744;
- 2. During stage II of the HPMP for the ICR sector, the Country agrees:
  - (a) That a maximum quantity of 3,150 metric tonnes (mt) in the unitary air-conditioning (UAC) sub-sector could be converted to HFC-32;

- (b) That the Country would have flexibility in the UAC sub-sector to convert to alternatives with a lower GWP than HFC-32 as long as the cost and tonnage to be phased out remained the same;
- (c) That the Country would have flexibility to convert industrial and commercial HPWH lines to HFC-32 on the understanding that UAC and industrial and commercial HPWH conversions to HFC-32 combined would not exceed 3,150 mt;
- (d) That at least 20 per cent of the total phase-out of HCFC-22 in the ICR sector would be from the conversion of SMEs (i.e. those consuming 50 mt or less); and
- (e) That, in sectors other than the UAC sub-sector, the Country would have flexibility to select from among the six low-GWP technologies identified in Table 8 of the ICR sector of document UNEP/OzL.Pro/ExCom/76/25, excluding HFC-32, and would make best efforts to ensure that the tonnage remained within 30 per cent of the amount specified for each technology in that table, at no additional cost to the Multilateral Fund, and that any deviation from that range would be reported to the Executive Committee for its consideration.

# Annex II

# TRANCHE DISTRIBUTION AMONG SECTORS OF STAGE II OF THE HPMP FOR CHINA

Table 1. Tranche distribution used as reference for decision 77/49

Sector*	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total (US \$)
PU	7,045,027	7,658,826	11,177,839	9,947,351	9,744,069	17,055,591	18,100,552	16,103,192	14,048,227	14,590,536	16,000,000	141,471,210
XPS	7,514,867	9,430,260	11,923,302	14,184,440	13,994,594	11,394,451	12,501,387	7,521,874	6,796,432	7,525,023	10,000,000	112,786,630
Solvent	2,821,937	3,536,687	3,358,024	3,379,821	3,675,861	7,695,038	3,626,650	6,939,294	4,936,933	3,292,321	4,000,000	47,262,566
RAC	15,562,981	13,983,080	11,760,181	14,582,193	18,256,362	15,000,000	-	-	-	-	-	89,144,797
ICR	13,368,756	22,807,342	12,321,512	13,932,076	10,715,111	16,000,000	-	-	-	-	-	89,144,797
Servicing	3,679,132	4,610,995	3,569,072	3,153,149	3,165,086	2,112,566	-	-	-	-	-	20,290,000
Total	49,992,700	62,027,190	54,109,930	59,179,030	59,551,083	69,257,646	34,228,589	30,564,360	25,781,592	25,407,880	30,000,000	500,100,000

Table 2. Tranche distribution as proposed by the Government of China

Sector*	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total (US \$)
PU	7,045,027	10,600,000	9,500,000	12,700,000	12,700,000	20,000,000	15,700,000	15,600,000	10,500,000	13,100,000	14,026,183	141,471,210
XPS	7,514,867	9,000,000	8,000,000	9,600,000	9,600,000	15,000,000	11,400,000	11,300,000	9,800,000	9,600,000	11,971,763	112,786,630
Solvent	2,821,937	3,777,190	2,959,930	3,229,030	3,601,083	7,888,921	7,128,589	3,664,360	5,481,592	2,707,880	4,002,054	47,262,566
RAC	15,562,981	16,000,000	18,000,000	14,000,000	14,000,000	11,581,816						89,144,797
ICR	13,368,756	20,000,000	12,000,000	16,000,000	16,000,000	11,776,041						89,144,797
Servicing	3,679,132	2,650,000	3,650,000	3,650,000	3,650,000	3,010,868						20,290,000
Total	49,992,700	62,027,190	54,109,930	59,179,030	59,551,083	69,257,646	34,228,589	30,564,360	25,781,592	25,407,880	30,000,000	500,100,000

Table 3. Differences between Table 1 and Table 2

Sector*	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total (US \$)
PU	0	2,941,174	(1,677,839)	2,752,649	2,955,931	2,944,409	(2,400,552)	(503,192)	(3,548,227)	(1,490,536)	(1,973,817)	0
XPS	0	(430,260)	(3,923,302)	(4,584,440)	(4,394,594)	3,605,549	(1,101,387)	3,778,126	3,003,568	2,074,977	1,971,763	0
Solvent	0	240,503	(398,094)	(150,791)	(74,778)	193,883	3,501,939	(3,274,934)	544,659	(584,441)	2,054	0
RAC	0	2,016,920	6,239,819	(582,193)	(4,256,362)	(3,418,184)	0	0	0	0	0	0
ICR	0	(2,807,342)	(321,512)	2,067,924	5,284,889	(4,223,959)	0	0	0	0	0	0
Servicing	0	(1,960,995)	80,928	496,851	484,914	898,302	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0

<sup>\*</sup>PU= polyurethane foam; XPS= extruded polystyrene foam; RAC=room air-conditioning manufacturing and heat pump water heaters; ICR=industrial and commercial refrigeration and air conditioning