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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Sixty-sixth Meeting Montreal, 16-20 April 2012

PROJECT PROPOSAL: BRUNEI DARUSSALAM

This document consists of the comments and recommendation of the Fund Secretariat on the following project proposal:

Phase-out

• HCFC phase-out management plan (stage I, first tranche)

UNEP/UNDP

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Brunei Darussalam

| (I) PROJECT TITLE | AGENCY |
|-------------------------------|-------------------|
| HCFC phase out plan (Stage I) | UNDP, UNEP (lead) |

| (II) LATEST ARTICLE 7 DATA Year: 2010 | 6.90 (ODP tonnes) |
|---------------------------------------|-------------------|
|---------------------------------------|-------------------|

| (III) LATES | Γ COUNTR | | Year: 2010 | | | | | | |
|-------------|----------|------|---------------|---------------|---------------|--|---------------|---------|--------------------------|
| Chemical | Aerosol | Foam | Fire fighting | Refrigera | Refrigeration | | Process agent | Lab Use | Total sector consumption |
| | | | | Manufacturing | Servicing | | | | |
| HCFC-123 | | | | | | | | | |
| HCFC-124 | | | | | | | | | |
| HCFC-141b | | | | | | | | | |
| HCFC-142b | | | | | | | | | |
| HCFC-22 | | | | | 6.85 | | | | 6.85 |

| (IV) CONSUMPTION DATA (ODP tonnes) | | | | | | | | | | |
|------------------------------------------------------------------------------------|-------|------------------------------------------|--|--|--|--|--|--|--|--|
| 2009 - 2010 baseline: 6.07 Starting point for sustained aggregate reductions: 6.07 | | | | | | | | | | |
| | CONSU | MPTION ELIGIBLE FOR FUNDING (ODP tonnes) | | | | | | | | |
| Already approved: 0.0 Remaining: 3. | | | | | | | | | | |

| (V) BUSINESS PLAN | | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Total |
|-------------------|----------------------------|---------|------|------|---------|------|------|------|------|--------|---------|
| UNEP | ODS phase-out (ODP tonnes) | 0.4 | | | 0.4 | | | | | 0.4 | 1.2 |
| | Funding (US \$) | 157,000 | 0 | 0 | 13,000 | 0 | 0 | 0 | 0 | 37,000 | 207,000 |
| UNDP | ODS phase-out (ODP tonnes) | 0.2 | | | 0.7 | 0 | 0 | 0 | 0 | | 0.9 |
| | Funding (US \$) | 27,000 | | | 120,000 | | | | | | 147,000 |

| (VI) PROJECT DATA | | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Total | |
|----------------------------------------------------|----------------------------------------------------|------------------|---------|------|-------|--------|------|-------|--------|-------|--------|---------|
| Montreal Protoco | Montreal Protocol consumption limits | | | 6.07 | 6.07 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 3.95 | n/a |
| Maximum allowa tonnes) | ble consum | ption (ODP | n/a | 6.07 | 6.07 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 3.95 | n/a |
| | | Project | 123,000 | 0 | 0 | 27,500 | 0 | 0 | 7,000 | 0 | 25,500 | 183,000 |
| | UNEP | costs | | | | | | | | | | |
| Project Costs requested in | | Support costs | 15,990 | 0 | 0 | 3,575 | 0 | 0 | 910 | 0 | 3,315 | 23,790 |
| principle(US\$) | | Project | 52,800 | 0 | 0 | 39,600 | 0 | 0 | 33,000 | 0 | 6,600 | 132,000 |
| | UNDP | costs | | | | | | | | | | |
| | | Support costs | 4,752 | 0 | 0 | 3,564 | 0 | 0 | 2,970 | 0 | 594 | 11,880 |
| Total project cost (US \$) | Total project costs requested in principle (US \$) | | 175,800 | 0 | 0 | 67,100 | 0 | 0 | 40,000 | 0 | 32,100 | 315,000 |
| Total support costs requested in principle (US \$) | | 20,742 | 0 | 0 | 7,139 | 0 | 0 | 3,880 | 0 | 3,909 | 35,670 | |
| Total funds reque | sted in prin | ciple (US \$) | 196,542 | 0 | 0 | 74,239 | 0 | 0 | 43,880 | 0 | 36,009 | 350,670 |

| (VII) Request for funding for the first tranche (2012) | | | | | | | | | |
|--------------------------------------------------------|-------------------------|-----------------------|--|--|--|--|--|--|--|
| Agency | Funds requested (US \$) | Support costs (US \$) | | | | | | | |
| UNEP | 123,000 | 15,990 | | | | | | | |
| UNDP | 52,800 | 4,752 | | | | | | | |

| Funding request: | Approval of funding for the first tranche (2012) as indicated above |
|-------------------------------|---------------------------------------------------------------------|
| Secretariat's recommendation: | Individual consideration |

PROJECT DESCRIPTION

- 1. On behalf of the Government of Brunei Darussalam UNEP, as the designated lead implementing agency, has submitted to the 66th Meeting of the Executive Committee an HCFC phase-out management plan (HPMP) at a total cost, as originally submitted, of US \$350,670, consisting of US \$183,000 plus agency support costs of US \$23,790 for UNEP, and US \$132,000 plus agency support costs of US \$11,880 for UNDP. The HPMP proposes strategies and activities to achieve a 35 per cent reduction of HCFC consumption by 2020 as stage I of its HPMP.
- 2. The first tranche for stage I being requested at this meeting amounts to US \$139,000 plus agency support cost of US \$18,070 for UNEP, and US \$24,000 plus agency support cost of US \$2,160 for UNDP, as originally submitted.

Background

- 3. Brunei Darussalam's National Ozone Unit (NOU) is located in the Department of Environment, Parks and Recreation (DOEPR) of the Ministry of Development. The NOU is responsible for the implementation of the Montreal Protocol in the country, and has been operational since 1999.
- 4. The current licensing system to control import/export of ODS is implemented through an Application Permit (AP) System regulated under the Customs Act-Prohibition and Restriction on Imports and Exports 2006. ODS including HCFCs are controlled under the Customs Act, which designates that only importers who have an approved AP are allowed to import/export ODS in accordance with the quantity specified in the AP. The DOEPR through the NOU was designated as licensing authority responsible for registration of importers, allocation of annual quota, and approval of import licence on the shipment basis through the AP system. Although importers and exporters of HCFCs are required to comply with the AP approval procedures, the quota system has not yet been applied to import and export of HCFCs. The HPMP indicated that an annual quota for HCFC imports will be in place by the beginning of 2013.
- 5. The Government of Brunei Darussalam has ratified all the amendments to the Montreal Protocol.

HCFC consumption

6. The HPMP provided an overview of the consumption of HCFCs in the country. The country has no HCFC production, therefore consumption is calculated only through imports predominantly of HCFC-22. A small quantity of HCFC-141b was imported in 2008 for use as a flushing agent for servicing refrigeration and air conditioning (RAC) equipment. Since 2008 onwards, there were no imports of HCFC-141b into Brunei Darussalam. The table below provides information on imports reported to the Ozone Secretariat under Article 7 of the Montreal Protocol.

Table 1: HCFC consumption 2005 to 2010 as reported under Article 7

| HCFC in tonnes | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|----------------|-------|-------|------|-------|-------|--------|
| ODP tonnes | 2.60 | 0.80 | 0.50 | 5.20 | 5.30 | 6.85 |
| metric tonnes | 46.70 | 14.69 | 9.00 | 92.77 | 96.36 | 124.55 |

7. Based on the end-user data survey, Brunei Darussalam used about 124.55 metric tonnes (mt) (6.85 ODP tonnes) of HCFC-22 in 2010. HFC-blended refrigerants (R-404A, R-407C, and R-410A) and HFC-134a are also being used.

8. The survey conducted during the HPMP preparation showed that Brunei Darussalam used HCFCs only in the servicing and installation of RAC equipment. HCFC-22 was used in the following sub-sectors: split-type and window-type air-conditioner, packaged air-conditioner (66.5 per cent) and variable refrigerant flow (VRF) systems (20 per cent), chillers (5.1 per cent), commercial refrigeration (condensing unit and island freezer) (5.6 per cent) and cold storage (2.9 per cent). RAC equipment is mainly supplied from China, Japan, Malaysia, Republic of Korea and Thailand with a low proportion imported from other countries. Most of the RAC equipment imported into Brunei Darussalam is split-type and window-type air-conditioners. The survey estimated that about 79 per cent of 2010 consumption was used for servicing (maintenance and repair) the existing HCFC-based equipment, while the remaining amount was used for installation of new HCFC-based equipment. The estimated HCFC-based equipment inventory as well as HCFC use per sector in Brunei Darussalam is summarized in Table 2 below. The survey did not find any use of HCFC in foam, fire-fighting or solvent sectors.

Table 2: Estimated use of HCFCs in the refrigeration sector in Brunei Darussalam (2010)

| | Existing | HCFC-22 Consumption in 2010 | | | | | | | |
|----------------------------------|----------|----------------------------------|---------------|--------------|---------------|-------|---------------|--------|---------------|
| Sub-sector | No. of | Total HCFC Installed Capacity | | Installation | | Serv | icing | Total | |
| | Units | | ODP Tonnes | MT | ODP Tonnes | МТ | ODP Tonnes | MT | ODP Tonnes |
| Split-type and Window-type AC | 356,000 | 376.6 | 20.72 | 9.9 | 0.55 | 73.0 | 4.01 | 82.9 | 4.56 |
| Packaged AC and VRF System | 11,500 | 104.6 | 5.75 | 7.5 | 0.41 | 17.2 | 0.95 | 24.7 | 1.36 |
| Chiller | 172 | 42.3 | 2.33 | 1.3 | 0.07 | 5.0 | 0.28 | 6.3 | 0.35 |
| Condensing Unit and Freezer | 445 | 11.9 | 0.66 | 6.7 | 0.37 | 0.3 | 0.02 | 7.0 | 0.39 |
| Cold Storage | 120 | 49.0 | 2.70 | 1.2 | 0.07 | 2.4 | 0.13 | 3.6 | 0.20 |
| Total | 368,237 | 584.40 | 32.16 | 26.60 | 1.47 | 97.80 | 5.39 | 124.50 | 6.85 |

Source: National Ozone Unit

- 9. The survey identified 70 servicing workshops that service RAC equipment using HCFCs. Servicing companies in Brunei Darussalam can be categorized into two groups: contractors and large-size servicing workshops, and small and medium-size servicing workshops. Out of these, 60 are small and medium-size servicing workshops while 10 are contractor-based and large-size workshops. There are about 400 technicians, including 50 freelance and 50 working in-house with hotels and other establishments who carry out servicing on site. Technicians linked to established service shops and hotels have had formal education and training, while the rest belong to the informal sector and learned skills on-the-job, mostly servicing only split-type and window-type air-conditioners. The HPMP will address all workshops that service RAC equipment by providing training as well as tool-kits for the technicians.
- 10. The HPMP also recognised that while there are no HCFC blends available or imported into the country, the main alternatives to HCFCs available in Brunei Darussalam are HFC-134a and HFC blends. The table below shows the prices of HCFCs and HFC blends imported into the country.

Table 3: HCFC price of refrigerants imported to Brunei Darussalam in 2010

| Refrigerant | R-22 | R-404A | R-134A | R-407C | R-410A |
|------------------|------|--------|--------|--------|--------|
| Price/kg (US \$) | 8.3 | 14.2 | 12.5 | 16.7 | 23.3 |

Estimated compliance baseline for HCFC consumption

11. The HPMP estimated the baseline for compliance as 110.45 mt (6.07 ODP tonnes) using the average of consumption of 96.36 mt (5.30 ODP tonnes) and 124.55 mt (6.85 ODP tonnes) reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol.

Forecast of future HCFC consumption

12. Brunei Darussalam estimated its future demand for HCFCs using the potential needs for servicing existing equipment and changing to new equipment. It took into account currently installed equipment as well as the number that would be retired in the future, and calculated its forecast consumption using the least-square method. Table 4 below provides a summary of the forecast of HCFC consumption in Brunei Darussalam, showing the difference between constrained growth (i.e. in line with the Protocol) and unconstrained growth.

2020 2009* 2010* 2012 2013 2014 2015 2016 2017 2018 2019 Year 2011 110.45 mt 96.36 124.55 127.86 130.93 110.45 99.41 99.41 99.41 99.41 99.41 71.80 Constrained HCFC consumption ODP t 5.30 6.85 7.03 7.20 6.07 6.07 5.46 5.46 5.46 5.46 5.46 3.95 Unconstrained 96.36 124.55 127.86 130.93 133.95 136.91 140.4 143.25 146.55 149.92 153.34 156.86 mt **HCFC** ODP t 5.30 6.85 7.03 7.20 7.36 7.53 7.72 7.88 8.06 8.25 8.43 consumption 8.63

Table 4: Forecast consumption of HCFCs

Strategy and implementation of the HCFC phase-out plan

- 13. The Government of Brunei Darussalam is proposing to follow the Montreal Protocol schedule and adopt a staged approach to achieve the complete phase-out of HCFCs by 2030. The current submission requests funding for stage I of the HPMP to achieve a 35 per cent reduction by 2020 and focuses on activities for the servicing sector using HCFC-22. The activities in the HPMP were designed to address three strategic elements crucial to the successful phase-out of HCFCs in the country, namely, limiting the supply of HCFCs, reducing the demand for them and limiting new demand. These will be undertaken through activities which are a combination of non-investment activities (policy instruments, training and awareness raising and equipment labelling) and investment activities (provision of tools for servicing, pilot retrofit/recovery, recycling and re-use programme) to be implemented by UNEP and UNDP respectively.
- 14. The specific elements which funding is requested include the following activities for stage I as summarized in Table 5 below.

<u>Table 5: Specific activities of stage I of the HPMP and proposed period of implementation</u>

| Description of Activities | Time frame |
|-------------------------------------------------------------------|------------|
| Policy review and amendment of regulations | 2011-2013 |
| Training of enforcement officers | 2011-2013 |
| Refrigeration servicing training and certification of technicians | 2011-2016 |

^{*}Actual reported Article 7 data

| Description of Activities | Time frame | | | |
|--------------------------------------------------------------|------------|--|--|--|
| Recovery and re-use programme | 2015-2020 | | | |
| End-user retrofit/pilot investment programme | 2015-2020 | | | |
| Information and education campaign to support HCFC phase-out | 2011-2020 | | | |
| Project management and monitoring | 2011-2020 | | | |

- 15. Under the HCFC policy component, Brunei Darussalam will strengthen its licensing system for HCFCs and establish an import quota for bulk HCFC-22 from 2013 onwards based on its baseline consumption and following the Montreal Protocol schedule. It also plans to strengthen the control of HCFCs at both point of entry and the distribution chain to ensure that only allowed type of HCFCs can be imported to the country and sold to only entitled end-users. The Government anticipates that these actions would affect the price of HCFCs and reduce the price gap between HCFCs and alternatives to provide incentives for consumers to opt for alternative technology. Starting from 2013, the Government will introduce a container labelling, which will be mandatory for HCFC importers to label all HCFC containers before they are released to the market for better tracking purposes.
- 16. The HPMP also foresees activities that will consist of training and certification of service technicians in adopting good practices in servicing both HCFC and non-HCFC refrigeration equipment and provision of new tools for the service workshops. The technical assistance component provided to the servicing sector will focus on reducing demand for HCFCs through a reclaim and a pilot retrofit programme, to replace HCFC-based equipment with ODS-free and climate friendly alternatives. The main objective of the pilot phase will be to demonstrate retrofit options and disseminate performance information on HCFC-free, climate friendly alternatives under local conditions. It is expected that upon completion of this activity, the successful cases of retrofitting HCFC-based RAC systems will build confidence among other end-users, so precipitating early retrofitting decisions and reducing demand for HCFCs.
- 17. In order to limit new demand for HCFCs, the Government will put in place a policy restricting the establishment of new capacity for manufacturing equipment and products using HCFCs. It also proposes to promote adoption of new alternative technologies. These will be supported by a ban on the import of all types of HCFC-based RAC equipment starting from 2015 onwards.

Cost of the HPMP

18. The total cost of stage I of the HPMP for Brunei Darussalam has been estimated at US \$315,000 to achieve a 35 per cent reduction in HCFC consumption by 2020. The detailed cost breakdown for activities is listed in Table 6.

Table 6: Proposed activities and cost of stage I of the HPMP

| Activity | Multilatei | ral Fund | In-kind Contribution (Brunei Government) | Estimated Total Cost (US \$) | | | | | |
|------------------------------------------------|------------|----------|---------------------------------------------------|------------------------------|-----------------------|--|--|--|--|
| | UNEP | UNDP | | Estimated Cost | Requested from MLF | | | | |
| Policy, regulations and enforcement | | | | | | | | | |
| a. Policy review and amendments of regulations | 3,000 | | | 3,000 | 3,000 | | | | |

| b. Training of enforcement officers | 56,000 | | 16,000 | 72,000 | 56,000 |
|---------------------------------------------------|---------|---------|---------|---------|---------|
| Refrigeration servicing | | I | l . | | |
| a. Training of technician | 45,000 | | 15,000 | 60,000 | 45,000 |
| b. Certification of refrigeration technician | 2,000 | | 3,500 | 5,500 | 2,000 |
| a. Recovery and re-use programme | | 98,500 | | 98,500 | 98,500 |
| b. Pilot Retrofit incentive project for end-users | | 33,500 | | 33,500 | 33,500 |
| Information, education, and communication (IEC) | | | | | |
| IEC | 37,000 | | 6,000 | 43,000 | 37,000 |
| Project Management & Monitoring | | | | | |
| Project Management Unit | 40,000 | | 95,000 | 135,000 | 40,000 |
| TOTAL | 183,000 | 132,000 | 135,500 | 450,500 | 315,000 |

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

19. The Secretariat reviewed the HPMP for Brunei Darussalam in the context of the guidelines for the preparation of HPMPs (decision 54/39), the criteria for funding HCFC phase-out in the consumption sector agreed at the 60th Meeting (decision 60/44), subsequent decisions on HPMPs and the 2012-2014 business plan of the Multilateral Fund. The Secretariat discussed with UNEP and UNDP technical and cost related issues, which were satisfactorily addressed as summarized below.

Issues related to consumption

20. In reviewing the data provided in the HPMP, the Secretariat noted the fluctuating import trend of HCFCs from 2005 to 2010, and sought an explanation for the drastic decrease of imports from 2005 to 2007, the increase in 2008 and 2009, and the very high increase (30 per cent) between 2009 and 2010. UNEP explained that as the licensing system was finalised only in 2006, it was not really fully enforced until 2007, which led to some discrepancies in reporting actual imports between 2006 and 2007. UNEP indicated that the increase between 2008 and 2009 was a result of a fully implemented permit system therefore allowing more accurate monitoring of imports. UNEP also indicated that the 30 per cent increase in HCFC imports between 2009 and 2010 was due to a robust gross domestic product (GDP) growth during this period. It also acknowledged, however, that an increase in servicing consumption possibly attributed to lack of good practice techniques by service technicians, and the Government was hoping to reverse this trend through technician certification and allowing only trained and certified service technicians to handle HCFCs.

Starting point for aggregate reduction in HCFC consumption

21. The Government of Brunei Darussalam agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the baseline of 6.07 ODP tonnes, calculated using actual consumption of 5.30 ODP tonnes and 6.85 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol.

Technical and cost issues

- The Secretariat raised questions with both UNEP and UNDP on those outstanding activities currently still being implemented in the refrigerant management plan (RMP) as these related to the HPMP under consideration, in line with decision 60/11(b) of the Executive Committee. In particular, the Secretariat queried the technical assistance component that addressed good practices through recovery and recycling and retrofit of CFC-based mobile air conditioning (MAC) equipment, for which there was a balance of US \$390,000, and how the remaining activities could be linked to HCFC phase-out. UNEP and UNDP indicated that out of this remaining funding under the RMP, \$360,000 is already committed for technical assistance and equipment support for a MAC retrofit incentive programme. The remaining \$30,000 will be used to support HPMP implementation, mainly for technical assistance for HCFC recovery and reclamation and a retrofit incentive scheme for conversion to HCFC-free alternatives. UNDP also reiterated that, as part of the RMP, the equipment supplied under this component will be suited for MAC recovery and recycling and retrofit activities only, and therefore may not be directly used for HCFC recovery and recycling activities. The training programme to be undertaken for good practices in servicing will however also cover HCFC recovery and recycling. The Secretariat requested UNEP as lead agency to ensure that the details of the HPMP implementation support using remaining funds from the RMP be clearly indicated in the HPMP document. The HPMP was revised accordingly.
- 23. The Secretariat raised other issues concerning the policy and enforcement component and additional activities included in the HPMP for which funds had been provided in the HPMP preparation. It questioned the high cost of the identifiers, and other details about the equipment to be provided for the recovery and re-use pilot phase, some budgetary requests for the training programme that required clarification, and alternatives that will be used for retrofits. It also sought information on the co-funding requirement under decision 54/39.
- 24. UNEP provided additional information and justification for the policy and enforcement component, mentioning that while a review of the existing licensing system to control import/export of ODS including related regulations on ODS-based equipment was conducted during the project preparation, activities to strengthen this system would need to be implemented, as it would support the other initiatives developed under the overall programme. UNEP also provided clarification on some budget items on the technician and customs training programme, as well as the cost of identifiers and equipment. It explained that with regard to the retrofits, low-global warming potential (GWP) alternatives that were commercially available in the country would be selected. UNEP also provided a list of the tools to be given to the service technicians and training centres. The information provided satisfactorily responded to the Secretariat's comments and observations.
- 25. The total cost of stage I of the HPMP for Brunei Darussalam was submitted at US \$315,000 to meet a 35 per cent reduction in HCFC consumption by 2020 and is in line with decision 60/44, as shown in Table 6 above. This would result in a phase-out of 38.66 mt (2.12 ODP tonnes) by 2020.

Impact on the climate

26. The proposed technical assistance activities in the HPMP, which include the introduction of better servicing practices and enforcement of HCFC import controls, will reduce the amount of HCFC-22 used for refrigeration servicing. Each kilogram (kg) of HCFC-22 not emitted due to better refrigeration practices results in the savings of approximately 1.8 CO₂-equivalent tonnes saved. Although a calculation of the impact on the climate was not included in the HPMP, the activities planned by Brunei Darussalam, in particular training for technicians on improved service practice, and refrigerant recovery and reuse, indicate that it is likely that the country will achieve the reduction of 6,440 CO₂-equivalent tonnes in emissions into the atmosphere as estimated in the 2012-2014 business plan. However, at this time, the Secretariat is not in a position to quantitatively estimate the impact on the climate. The impact might be established through an assessment of implementation reports by, *inter alia*, comparing the levels of

refrigerants used annually from the commencement of the implementation of the HPMP, the reported amounts of refrigerants being recovered and recycled, the number of technicians trained and the HCFC-22 based equipment being retrofitted.

Co-financing

27. In response to decision 54/39(h) on potential financial incentives and opportunities for additional resources to maximize the environmental benefits from HPMPs pursuant to paragraph 11(b) of decision XIX/6 of the Nineteenth Meeting of the Parties, UNEP explained that Brunei Darussalam will provide personnel and other resources as an in-kind contribution, which could be considered as the Government's share of co-financing for the HPMP, amounting to US \$135,500 (Table 6). The Secretariat proposed that UNEP should encourage Brunei Darussalam to explore other co-financing opportunities especially for stage II of the HPMP.

2012-2014 Business plan of the Multilateral Fund

28. UNEP and UNIDO are requesting US \$315,000 plus support costs for implementation of stage I of the HPMP. The total value requested for the period 2012-2014 of US \$270,781 including support cost is below that in the draft business plan. Based on the estimated HCFC baseline consumption in the servicing sector of 110.45 mt, Brunei Darussalam's allocation up to the 2020 35 per cent reduction should be US \$315,000 in line with decision 60/44.

Draft Agreement

29. A draft Agreement between the Government of Brunei Darussalam and the Executive Committee for HCFC phase-out is contained in Annex I to the present document.

RECOMMENDATION

- 30. The Executive Committee may wish to consider:
 - (a) Approving, in principle, stage I of the HCFC phase-out management plan (HPMP) for Brunei Darussalam for the period 2012 to 2020 to reduce HCFC consumption by 35 per cent of the baseline, at the amount of US \$350,670, consisting of US \$183,000, plus agency support costs of US \$23,790 for UNEP, and US \$132,000, plus agency support costs of US \$11,880 for UNDP;
 - (b) Noting that the Government of Brunei Darussalam had agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the baseline of 6.07 ODP tonnes, calculated using actual consumption of 5.30 ODP tonnes and 6.85 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol;
 - (c) Deducting 2.12 ODP tonnes of HCFCs from the starting point for sustained aggregate reduction in HCFC consumption;
 - (d) Approving the draft Agreement between the Government of Brunei Darussalam and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document;
 - (e) Approving the first tranche of stage I of the HPMP for Brunei Darussalam, and the corresponding implementation plan, at the amount of US \$196,542, consisting of US \$123,000 plus agency support costs of US \$15,990 for UNEP, and US \$52,800 plus agency support costs of US \$4,752 for UNDP.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF BRUNEI DARUSSALAM AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS

- 1. This Agreement represents the understanding of the Government of Brunei Darussalam (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 3.95 ODP tonnes by 1 January 2020 in compliance with Montreal Protocol schedules.
- 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 row 4.1.3 (remaining eligible consumption).
- 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 HCFC phase-out sector plans submitted. 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.
- 5. The Executive Committee will not provide the Funding in accordance with the Funding Approval Schedule unless the Country satisfies the following conditions at least eight weeks in advance of the applicable Executive Committee meeting set out in the Funding Approval Schedule:
 - (a) That the Country had 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. Years for which no obligation for reporting of country programme data exists at the date of the Executive Committee meeting at which the funding request is being presented are exempted;
 - (b) That the meeting of these Targets has been independently verified, unless the Executive Committee decided that such verification would not be required;
 - (c) That the Country had submitted annual implementation reports in the form of Appendix 4-A ("Format of 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;

- (d) That the Country has submitted an annual implementation plan in the form of Appendix 4-A 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; and
- (e) That, for all submissions from the 68th meeting onwards, confirmation has been received from the Government that an enforceable national system of licensing and quotas for HCFC imports and, where applicable, production and exports is in place and that the system is capable of ensuring the Country's compliance with the Montreal Protocol HCFC phase-out schedule for the duration of this Agreement.
- 6. The Country will ensure that it conducts accurate monitoring of its activities under this Agreement. The institutions set out in Appendix 5-A ("Monitoring Institutions and Roles") will monitor and report on implementation of the activities in the previous annual implementation plans in accordance with their roles and responsibilities set out in Appendix 5-A. This monitoring will also be subject to independent verification as described in paragraph 4 above.
- 7. The Executive Committee agrees that the Country may have the flexibility to reallocate the approved funds, or part of the 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 an annual implementation plan submitted as foreseen in sub-paragraph 5(d) above, or as a revision to an existing annual implementation plan to be submitted eight weeks prior 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; and
 - (iv) Provision of funding for programmes or activities not included in the current endorsed annual implementation plan, or removal of an activity in the annual implementation plan, with a cost greater than 30 per cent of the total cost of the last approved tranche;
 - (b) Reallocations not categorized as major changes may be incorporated in the approved annual implementation plan, under implementation at the time, and reported to the Executive Committee in the subsequent annual implementation report; and
 - (c) Any remaining funds will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.
- 8. Specific attention will be paid to the execution of the activities in the refrigeration servicing sub-sector, 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 the bilateral and implementing agencies involved will take full account of the requirements of decisions 41/100 and 49/6 during the implementation of the plan.

- 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. UNEP has agreed to be the lead implementing agency (the "Lead IA") and UNDP has agreed to be the cooperating implementing agency (the "Cooperating IA") under the lead of the 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 any of the agencies taking part in this Agreement.
- 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). This responsibility includes the necessity to co-ordinate with the Cooperating IA to ensure appropriate timing and sequence of activities in the implementation. The Cooperating IA will support the Lead IA by implementing the activities listed in Appendix 6-B under the overall co-ordination of the Lead IA. The Lead IA and Cooperating IA have reached consensus on the arrangements regarding inter-agency planning, reporting and responsibilities under this Agreement to facilitate a co-ordinated implementation of the Plan, including regular co-ordination meetings. The Executive Committee agrees, in principle, to provide the Lead IA and the Cooperating IA with the fees set out in rows 2.2 and 2.4 of Appendix 2-A.
- 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 these decisions are taken, this specific case will not be an impediment 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 decision 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 and the Cooperating IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA and the Cooperating IA with access to the information necessary to verify compliance with this Agreement.
- 14. The completion of stage I of the HPMP and the associated Agreement will take place at the end of the year following the last year for which a maximum allowable total consumption level has been specified in Appendix 2-A. Should there at that time still be activities that are outstanding, and which were foreseen in the Plan and its subsequent revisions as per sub-paragraph 5(d) and paragraph 7, the completion will be delayed until the end of the year following the implementation of the remaining activities. The reporting requirements as per sub-paragraphs 1(a), 1(b), 1(d), and 1(e) of Appendix 4-A will continue until the time of the completion unless otherwise specified by the Executive Committee.
- 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.

APPENDICES

APPENDIX 1-A: THE SUBSTANCES

| Substance | Annex | Group | Starting point for aggregate reductions in consumption (ODP tonnes) |
|-----------|-------|-------|---------------------------------------------------------------------|
| HCFC-22 | C | I | 6.07 |

APPENDIX 2-A: THE TARGETS, AND FUNDING

| Row | Particulars | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Total |
|-------|----------------------------------------------------------------------------------------|---------|------|------|--------|------|------|--------|------|--------|---------|
| 1.1 | Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes) | n/a | 6.07 | 6.07 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 3.95 | n/a |
| 1.2 | Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes) | n/a | 6.07 | 6.07 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 3.95 | n/a |
| 2.1 | Lead IA - UNEP agreed funding (US \$) | 123,000 | 0 | 0 | 27,500 | 0 | 0 | 7,000 | 0 | 25,500 | 183,000 |
| 2.2 | Support costs for Lead IA - UNEP (US \$) | 15,990 | 0 | 0 | 3,575 | 0 | 0 | 910 | 0 | 3,315 | 23,790 |
| 2.3 | Cooperating IA - UNDP agreed funding (US \$) | 52,800 | 0 | 0 | 39,600 | 0 | | 33,000 | 0 | 6,600 | 132,000 |
| 2.4 | Support costs for Cooperating IA - UNDP (US \$) | 4,752 | 0 | 0 | 3,564 | 0 | 0 | 2,970 | 0 | 594 | 11,880 |
| 3.1 | Total agreed funding (US \$) | 175,800 | 0 | 0 | 67,100 | 0 | 0 | 40,000 | 0 | 32,100 | 315,000 |
| 3.2 | Total support cost (US \$) | 20,742 | 0 | 0 | 7,139 | 0 | 0 | 3,880 | 0 | 3,909 | 35,670 |
| 3.3 | Total agreed costs (US \$) | 196,542 | 0 | 0 | 74,239 | 0 | 0 | 43,880 | 0 | 36,009 | 350,670 |
| 4.1.1 | Total phase-out of HCFC-22 agreed to be achieved under this agreement (ODP tonnes) | | | | | | | | 2.12 | | |
| 4.1.2 | Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes) | | | | | | | | 0 | | |
| 4.1.3 | Remaining eligible consumption for HCFC-22 (ODP tonnes) | | | | | | | | 3.95 | | |

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

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

APPENDIX 4-A: FORMAT OF IMPLEMENTATION REPORTS AND PLANS

1. The submission of the Implementation Report and Plan for each tranche request will consist of five parts:

- A narrative report, with data provided by calendar year, regarding the progress since the (a) year prior to 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 report should include ODS phase-out as a direct result from the implementation of activities, by substance, and the alternative technology used and the related phase-in of alternatives, to allow the Secretariat to provide to the Executive Committee information about the resulting change in climate relevant emissions. The report should further highlight 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. The report should also include information on and justification for any changes vis-à-vis the previously submitted Annual 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. The narrative report will cover all relevant years specified in sub-paragraph 5(a) of the Agreement and can in addition also include information on activities in the current year;
- (b) A verification report of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, 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) A written description of the activities to be undertaken until and including the year of the planned submission of the next tranche request, highlighting the interdependence of the activities, and taking into account experiences made and progress achieved in the implementation of earlier tranches; the data in the plan will be provided by calendar year. The description should also include a reference to the overall plan and progress achieved, as well as any possible changes to the overall plan that are foreseen. The description should cover the years specified in sub-paragraph 5(d) of the Agreement. The description should also specify and explain in detail such changes to the overall plan. This description of future activities can be submitted as a part of the same document as the narrative report under sub-paragraph (b) above;
- (d) A set of quantitative information for all annual implementation reports and annual implementation plans, submitted through an online database. This quantitative information, to be submitted by calendar year with each tranche request, will be amending the narratives and description for the report (see sub-paragraph 1(a) above) and the plan (see sub-paragraph 1(c) above), the annual implementation plan and any changes to the overall plan, and will cover the same time periods and activities; and
- (e) An Executive Summary of about five paragraphs, summarizing the information of the above sub-paragraphs 1(a) to 1(d).

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. Annual consumption of HCFCs and other ODS will be monitored through the Department of Environment, Parks and Recreation (DOEPR) with collaboration from the Royal Customs and Excise Department. DOEPR is a licensing authority to issue Application Permit, while the Royal Customs and Excise Department will control and monitor the import of ODSs at the point of entry.

2. The National Ozone Unit (NOU) will liaise with importers and retailers of ODS to obtain HCFC consumption data and cross-check with data from the Royal Customs and Excise Department. NOU will undertake regular inspection to monitor the implementation of labelling requirement for HCFC container including regular review on list of HCFC customers to enforce the control on sale of HCFCs. In addition to enforcement, NOU will also undertake market survey to gauge the penetration of non-HCFC substitutes and alternative technologies in the refrigeration and air-conditioning (RAC) sector. NOU will monitor the implementation of capacity building activities with relevant agencies e.g. RAC technician training (training centers) and enforcement officers training (Royal Customs and Excise Department and DOEPR).

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 of the Implementation Plans and subsequent reports as per Appendix 4-A;
 - (c) Providing independent verification to the Executive Committee that the Targets have been met and associated annual activities have been completed as indicated in the Implementation Plan consistent with Appendix 4-A;
 - (d) Ensuring that the experiences and progress is reflected in updates of the overall plan and in future annual implementation plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;
 - (e) Fulfilling the reporting requirements for the annual implementation reports, annual implementation plans and the overall plan as specified in Appendix 4-A for submission to the Executive Committee. The reporting requirements include the reporting about activities undertaken by the Cooperating IA;
 - (f) Ensuring that appropriate independent technical experts carry out the technical reviews;
 - (g) Carrying out required supervision missions;
 - (h) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Implementation Plan and accurate data reporting;
 - (i) Co-ordinating the activities of the Cooperating IA, and ensuring appropriate sequence of activities;
 - (j) 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 and the Cooperating IA, the allocation of the reductions to the different budget items and to the funding of each implementing or bilateral agency involved;
 - (k) Ensuring that disbursements made to the Country are based on the use of the indicators; and
 - (1) Providing assistance with policy, management and technical support when required.

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 and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement and sub-paragraph 1(b) of Appendix 4-A.

APPENDIX 6-B: ROLE OF THE COOPERATING IMPLEMENTING AGENCY

- 1. The Cooperating IA will be responsible for a range of activities. These activities are specified in the overall plan, including at least the following:
 - (a) Providing assistance for policy development when required;
 - (b) Assisting the Country in the implementation and assessment of the activities funded by the Cooperating IA, and refer to the Lead IA to ensure a co-ordinated sequence in the activities; and
 - (c) Providing reports to the Lead IA on these activities, for inclusion in the consolidated reports as per Appendix 4-A.

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 \$180 per ODP kg of consumption beyond the level defined in row 1.2 of Appendix 2-A for each year in which the target specified in row 1.2 of Appendix 2-A has not been met.
