



**United Nations  
Environment  
Programme**

Distr.  
GENERAL

UNEP/OzL.Pro/ExCom/73/22  
7 October 2014



ORIGINAL: ENGLISH

EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Seventy-third Meeting  
Paris, 9-13 November 2014

**UNIDO BUSINESS PLAN FOR THE YEARS 2015-2017**

1. This document presents a summary of UNIDO's planned activities for the phase-out of ozone-depleting substances (ODS) during the 2015-2017 period. It also contains UNIDO's business plan performance indicators and recommendations for consideration by the Executive Committee. UNIDO's 2015-2017 business plan narrative is attached to the present document.

**SECRETARIAT'S COMMENTS**

2. Table 1 sets out, by year, the value of activities included in UNIDO's business plan according to categories "required for compliance", "not required for compliance" and "standard cost activities".

**Table 1: Resource allocation in UNIDO's business plan as submitted (2015-2017) (US \$000s)**

Item	2015	2016	2017	Total (2015-2017)	Total (2018-2020)	Total after 2020
<b>Required for compliance</b>						
Approved multi-year agreements (MYAs)	23,677	11,198	3,820	38,696	59,997	183
HCFC production - stage I	0	0	0	0	15,772	0
HCFC production PRP - stage I	0	268	0	268	0	0
HPMP stage I	0	3,013	921	3,933	468	0
HPMP stage I - additional funding	0	2,933	0	2,933	0	0
HPMP PRP - stage II	1,207	289	574	2,070	703	0
HPMP stage II	9,361	67,402	69,712	146,475	223,297	708
Demonstration - low GWP alternatives	11,944	0	0	11,944	0	0
Demonstration PRP - low GWP alternatives	610	0	0	610	0	0
Technical assistance - District cooling	214	0	0	214	0	0
Methyl bromide (MB) technical assistance	268	0	0	268	0	0
<b>Not required for compliance</b>						
Not required by model - MB - DEM PRP	64	0	0	64	0	0
Not required by model - MB - DEM	482	0	0	482	0	0

Pre-session documents of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol are without prejudice to any decision that the Executive Committee might take following issuance of the document.

Item	2015	2016	2017	Total (2015-2017)	Total (2018-2020)	Total after 2020
<b>Standard cost activities</b>						
Institutional strengthening (IS)	864	1,091	1,222	3,177	3,123	0
Core unit	2,041	2,055	2,069	6,165	6,295	0
<b>Grand total</b>	<b>50,731</b>	<b>88,248</b>	<b>78,317</b>	<b>217,297</b>	<b>309,655</b>	<b>891</b>

### Required for compliance

#### MYAs

3. Approved MYAs amount to US \$38.7 million for HCFC phase-out management plan (HPMP) stage I activities for the period of 2015-2017. The value for these activities from 2018 to 2020 amounts to US \$60 million and US \$182,569 for after 2020.

#### Stage I HCFC production sector and project preparation

4. A total of US \$16.04 million (including US \$267,500 for project preparation activities for the period of 2015 to 2017) is included for stage I of HCFC production phase-out management plans in the Democratic People's Republic of Korea and Mexico.

#### Stage I of HPMPs

5. There are two countries (Democratic People's Republic of Korea (the) and Libya) for which stage I of HPMPs have not yet been approved. The business plan includes US \$4.4 million including US \$3.93 million for the period of 2015 to 2017. The HPMP for the Democratic People's Republic of Korea has been submitted to the 73<sup>rd</sup> meeting.

6. UNIDO's business plan includes three countries (Bahrain, Mexico and Uruguay) for additional projects outside their stage I of HPMPs amounting to US \$2.93 million for the period of 2015 to 2017. These requests fall under different decisions of the Executive Committee that allow these countries to submit additional projects during the implementation of stage I.

#### Stage II project preparation for HPMPs

7. The total level of funding for project preparation for stage II of HPMPs<sup>1</sup> is US \$2.77 million including US \$2.07 million for the period of 2015 to 2017<sup>2</sup>.

#### Stage II of HPMPs in low-volume-consuming (LVC) countries

8. The total level of funding for projects for the HCFC servicing sector in LVC countries to reach a 35 per cent reduction amounts to US \$65,785 (including US \$36,547 for the period of 2015 to 2017).

9. UNIDO's business plan includes activities for stage II of HPMPs for LVC countries that already received approved projects covering 35 per cent reduction amounting to US \$4.3 million (no request for the period of 2015 to 2017).

<sup>1</sup> "Project preparation could be funded for stage II activities and might be included prior to the completion of stage I in business plans for the years 2012-2014" (decision 63/5(f)(i)).

<sup>2</sup> The guidelines for the preparation of stage II of HPMPs were approved at the 71<sup>st</sup> meeting (decision 71/42).

Stage II of HPMPs in non-LVC countries

10. The total level of funding for stage II of HPMPs for non-LVC countries is US \$366.09 million for a total phase-out of 3,075 ODP tonnes of HCFCs (including US \$146.44 million for a total phase-out of 1,265 ODP tonnes for the period of 2015 to 2017). The sectors' breakdown is provided in Table 2.

**Table 2: Stage II of HPMPs by sector (US \$000)**

Sector	Total (2015-2017)	Total (2018-2020)	Total after 2020	Total	Per cent of total
Foam rigid	11,800	2,585	708	15,093	4.1
Extruded polystyrene (XPS) foam	32,086	45,907	0	77,993	21.3
Refrigeration assembly	1,563	856	0	2,419	0.7
Refrigeration air-conditioning	62,788	91,086	0	153,874	42.0
Refrigeration manufacturing	16,098	40,167	0	56,265	15.4
Refrigeration manufacturing and foam	4,708	0	0	4,708	1.3
Refrigeration servicing	17,395	38,342	0	55,737	15.2
<b>Grand total</b>	<b>146,438</b>	<b>218,943</b>	<b>708</b>	<b>366,090</b>	<b>100.0</b>

Demonstration projects for low global-warming-potential (GWP) alternatives and technical assistance projects for feasibility studies in district cooling

11. A total of US \$12.55 million is included for 12 demonstration projects for low GWP alternatives in 2015 (including US \$609,900 for project preparation activities) (Table 3). UNIDO provides a description of its planned demonstration projects in an annex to its business plan.

12. UNIDO provided ODP values for four demonstration projects including one of two air conditioning projects which is for heat pumps; the other air conditioning project is for compressors. For the remaining projects, UNIDO indicated that as per its understanding of decision 72/40(b)(i)c., phase-out is not mandatory, but that when submitting the full demonstration project, UNIDO will be in a position to confirm whether any ODS phase-out will be achieved.

13. UNIDO did not provide information on which countries would be involved in regional projects. However, it indicated in the case of the demonstration project in West Asia that it would cooperate with UNEP, which has indicated the countries that would participate in the project.

14. UNIDO has not provided any letters from the countries listed below for the inclusion of these projects in its business plan.

15. A total of US \$214,000 is included for technical assistance projects for feasibility studies in district cooling in 2015 (Table 3). UNIDO provided a description of these activities in an annex to its business plan except the project preparation activities that were submitted to the 73<sup>rd</sup> meeting but subsequently withdrawn with the request to add the project preparation activities to UNIDO's business plan amounting to US \$64,200.

16. UNIDO did not provide ODP value for these activities or indicate if a letter from the country had been received to include the entry in UNIDO's business plan. UNIDO also did not indicate which countries would be included in the West Asia regional project, but it indicated that it would cooperate with UNEP, which has indicated the countries for the project.

**Table 3: Demonstration projects for low GWP alternatives and technical assistance projects for feasibility studies in district cooling (US \$000)**

Country	HCFC status	Sector and subsector	Working title in BP annex	Value 2015		ODP 2015
				PRP	DEM	
<b>Demonstration projects for low GWP alternatives</b>				<b>PRP</b>	<b>DEM</b>	
China	Non-LVC	Commercial refrigeration	Transition to low-GWP alternatives in transport refrigeration	53.5	856	0.0
China	Non-LVC	Air-conditioning	CO <sub>2</sub> compressor for domestic heat pumps	32.1	2,675	0.0
China	Non-LVC	Air-conditioning	CO <sub>2</sub> technology for domestic heat pumps	32.1	1,605	8.3
China	Non-LVC	Industrial refrigeration	Leak reduction in large refrigeration equipment at 3 different sites and different applications	53.5	482	2.8
Saudi Arabia	Non-LVC	Air-conditioning	New technologies (e.g. HFOs) in refrigeration	32.1	1,926	10.0
South Africa	Non-LVC	Foam-XPS	Joint POPs/MP projects for system houses	32.1	535	0.0
Turkey	Non-LVC	Rigid PU foam	HFOs as foaming agents in the rigid PU foam applications	32.1	463	5.5
Global (3 countries)	Non-LVC	Commercial refrigeration	Demonstrate needs for REF assembly/installation	85.6	1,605	0.0
Regional (2 countries)	N/A	Servicing	Impact of refrigerant containment and leakage prevention on reduction of virgin HCFC refrigerants in A-5 Countries	53.5	161	0.0
Regional (2 West Asian countries) with UNEP	Non-LVC	Servicing	Strategy for the servicing sector: enforcement of ODS legislation and handling of end-of-life equipment	53.5	321	0.0
Regional (4 African countries)	LVC	Servicing	Demonstration project on the adoption of the best strategy to ensure market availability of high quality refrigerants, including the introduction and update of safety standards on refrigerants	85.6	685	0.0
Regional (5 Caribbean countries)	LVC	Servicing	Demonstration project on HPMP stage II servicing sector activities with focus on service for systems using and being designed for flammable refrigerants	64.2	631	0.0
<i>Sub-total for demonstration projects for low GWP alternatives</i>				<i>609.9</i>	<i>11,945</i>	<i>26.6</i>
<b>Technical assistance projects for feasibility studies in district cooling</b>				<b>PRP</b>	<b>TAS</b>	
Qatar	Non-LVC		Feasibility study on district cooling	31.2	107	0.0
Region: West Asia with UNEP	N/A		Feasibility study on using non-conventional technologies in district cooling systems in the Middle East Region (3 West Asian countries)	31.2	107	0.0
<i>Sub-total for technical assistance projects for feasibility studies in district cooling</i>				<i>62.4</i>	<i>214</i>	<i>0.0</i>
<b>Grand total for projects pursuant to decision 72/40(b)</b>				<b>632.4</b>	<b>11,376.5</b>	<b>26.6</b>

**MB**

17. UNIDO's business plan includes US \$267,500 for a MB technical assistance project in one country (Egypt) in 2015 for high-moisture content dates for which Egypt has remaining funding eligibility. This project would address the final phase-out of MB with activities addressing high-moisture content dates, as alternatives are now available.

**Not required for compliance**MB demonstration

18. The business plan includes US \$545,700 (including US \$64,200 for preparation project) in 2015 for a demonstration project on avoiding unintended transfer of MB from non-controlled to controlled uses to ensure compliance in the global region, which is not required for compliance. UNIDO's business plan narrative indicates that there appears to be a misinterpretation in the understanding of quarantine and pre-shipment (QPS) and controlled use of MB that has QPS listed when there are actual controlled uses. These demonstrations would identify such cases, provide support to stop the controlled uses and strategies to educate stakeholders.

19. This project raises several issues: all countries eligible for MB assistance have already received assistance or have activities in business plans for such assistance; compliance assistance activities are provided by the compliance assistance programme (CAP); the demonstrations are effectively project preparation to identify possible projects for which there is currently no eligibility; and such project preparation would set a precedent for such activities in all Article 5 countries.

**Standard cost activities**

20. The core unit costs for 2015-2017 will increase at an annual rate of 0.7 per cent that has been agreed to-date.

21. For IS activities, US \$6.3 million has been included in the business plan of which US \$3.18 million is for the period of 2015 to 2017<sup>3</sup>, and US \$3.12 million is for the period of 2018 to 2020.

**Adjustments based on existing Executive Committee decisions**

22. In line with relevant decisions by the Executive Committee, the Secretariat proposed the following adjustments to UNIDO's 2015-2017 business plan:

- (a) To reduce MYA values to reflect the records of the Secretariat by US \$54.74 million (including US \$21,401 for the period of 2015 to 2017);
- (b) To remove the funding levels provided for additional stage I of HPMP activities for the aerosol sector in Mexico amounting to US \$1.72 million for the period of 2015 to 2017 since these activities were included in 2014 business plan;
- (c) To reduce the level of funding for project preparation of stage II of HPMPs pursuant to decisions 71/42 for the period of 2015 to 2020 by US \$402,556 (including US \$260,195 for the period of 2015 to 2017);
- (d) To reduce the funding levels provided for stage II of HPMPs in LVC countries to the maximum allowable value<sup>4</sup> to achieve the 35 per cent reduction in the HCFC baseline by US \$40,927 for the period of 2015 to 2020 (including US \$22,737 for the period of 2015 to 2017);

<sup>3</sup> In line with decision 63/5(b), current levels of funding for IS for business planning purposes are maintained up to 2020 in the absence of a decision on funding levels.

<sup>4</sup> According to decision 60/44(f)(xii).

- (e) To reduce the amount for stage II of HPMPs in non-LVC countries for the projects in the refrigeration manufacturing sector by US \$249,505 for the period of 2015 to 2017 (no adjustment after 2017) after applying a maximum cost-effectiveness for business planning of US \$9.00/kg; and reduce the amount by US \$437,727 for the period of 2015 to 2020 (no adjustment for the period of 2015 to 2017) for projects in the refrigeration servicing sector after applying a cost-effectiveness of US \$4.50/kg;
- (f) To remove demonstration projects on low GWP alternatives amounting to US \$12.55 million for the period of 2015-2017 with no adjustment after 2017;
- (g) To remove MB demonstration projects (including project preparation) amounting to US \$545,700 for the period of 2015-2017 with no adjustment after 2017; and
- (h) To reduce IS values according to when IS renewals are due based on the latest approvals of the IS requests and the current funding structure amounting to US \$436,182 for the period of 2015 to 2020 (including US \$358,582 for the period of 2015 to 2017).

23. These adjustments are addressed in the context of the Consolidated 2015-2017 business plan document (UNEP/OzL.Pro/ExCom/73/18).

24. Table 4 presents the results of the Secretariat's proposed adjustments to UNIDO's 2015-2017 business plan.

**Table 4: Resource allocation in UNIDO's business plans as adjusted by existing Executive Committee decisions (US \$000s)**

Item	2015	2016	2017	Total (2015-2017)	Total (2018-2020)	Total after 2020
<b>Required for compliance</b>						
Approved MYAs	23,677	11,240	3,800	38,717	5,231	183
HCFC production - stage I	0	0	0	0	15,772	0
HCFC production PRP - stage I	0	268	0	268	0	0
HPMP stage I	0	3,013	921	3,933	468	0
HPMP stage I - additional funding	0	1,211	0	1,211	0	0
HPMP PRP - stage II	998	289	522	1,810	561	0
HPMP stage II	9,303	67,246	69,653	146,202	222,841	708
Demonstration - low GWP alternatives	0	0	0	0	0	0
Demonstration PRP - low GWP alternatives	0	0	0	0	0	0
Technical assistance - District cooling	214	0	0	214	0	0
MB technical assistance	268	0	0	268	0	0
<b>Not Required for compliance</b>						
Not required by model - MB - DEM PRP	0	0	0	0	0	0
Not required by model - MB - DEM	0	0	0	0	0	0
<b>Standard cost activities</b>						
IS	864	1,091	864	2,818	3,045	0
Core unit	2,041	2,055	2,069	6,165	6,295	0
<b>Grand total</b>	<b>37,364</b>	<b>86,413</b>	<b>77,829</b>	<b>201,606</b>	<b>254,213</b>	<b>891</b>

## Performance indicators for UNIDO

25. A summary of UNIDO's performance indicators pursuant to decision 71/28 is provided in Table 5.

**Table 5: Performance indicators**

Type of indicator	Short title	Calculation	2015 target
Planning--Approval	Tranches approved	Number of tranches approved vs. those planned*	19
Planning--Approval	Projects/activities approved	Number of projects/activities approved vs. those planned (including project preparation activities)**	43
Implementation	Funds disbursed	Based on estimated disbursement in progress report	22,350,000
Implementation	ODS phase-out	ODS phase-out for the tranche when the next tranche is approved vs. those planned per business plans	473.9 (including 326 for individual)
Implementation	Project completion for activities	Project completion vs. planned in progress reports for all activities (excluding project preparation)	41
Administrative	Speed of financial completion	The extent to which projects are financially completed 12 months after project completion	12 months after operational completion
Administrative	Timely submission of project completion reports	Timely submission of project completion reports vs. those agreed	On time
Administrative	Timely submission of progress reports	Timely submission of progress reports and business plans and responses unless otherwise agreed	On time

26. According to the 2015 business plan, UNIDO's target for tranches approved should be 18 including 15 approved MYAs and three new ones, the target for projects/activities approved for individual projects should be 45 including 23 preparation, 15 demonstration, five IS and two technical assistance activities and the target for ODS phase-out for tranches should be 423.8 for MYAs projects only.

## Policy issues

27. UNIDO raised one policy issue in its business plan narrative, i.e., the need for demonstration projects on alternatives to MB for QPS applications in five selected countries. Since MB for QPS is not a controlled substance, the Secretariat requested UNIDO to remove these demonstration projects from its business plan and to address this issue as a policy issue as was the case when similar projects were included in the 2014-2016 business plan. The Executive Committee may wish to consider whether funding for these demonstration projects should be reinstated to UNIDO's business plan as they were removed from the Consolidated Business Plan<sup>5</sup> submitted to the 73<sup>rd</sup> meeting.

## RECOMMENDATIONS

28. The Executive Committee may wish to consider:

- (a) Noting the 2015-2017 business plan of UNIDO as contained in document UNEP/OzL.Pro/ExCom/73/22;

<sup>5</sup> Document UNEP/OzL.Pro/ExCom/73/18.

- (b) Whether to:
  - (i) Reinstate demonstration projects for avoiding unintended transfer of methyl bromide from non-controlled to controlled used to the business plan of the Multilateral Fund for 2015-2017;
  - (ii) Add the project preparation activities for district cooling projects; and
- (c) Approving the performance indicators for UNIDO as set out in Table 5 of document UNEP/OzL.Pro/ExCom/73/22 while setting a target of 18 for tranches approved, 45 for projects/activities approved for individual projects and 423.8 for ODS phase-out for tranches.

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**UNIDO**  
**BUSINESS PLAN 2015**



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

## **EXECUTIVE SUMMARY**

The 2015 Business Plan of UNIDO together with the forecast for 2016 and 2017 represents the Rolling Business Plan of Montreal Protocol activities of the Organization. Funding estimates up to 2020 and beyond have also been provided. This provides useful information for Executive Committee members on the funding needed to reach the 2020 control measures for HCFCs.

UNIDO's Business Plan was prepared based on the previous rolling business plan, taking into consideration the approvals and experience of previous years, the requests received from Article 5 countries, priorities established and the decisions taken by the Executive Committee, in particular Decision 60/44, 71/18, 71/42 and 72/40 . It also reflects the discussions held in Montreal during the Inter-Agency Coordination Meeting on 2-3 September 2014. It is also largely inspired from the historical decision of the 19<sup>th</sup> Meeting of the Parties agreeing on the acceleration of the phase-out of HCFCs, and the relevant ExCom decisions on HPMPs and HCFC investment and demonstration projects. The countries' needs have been calculated based on approved HPMPs and based on reported HCFC Baseline consumption.

In 2015, UNIDO will submit for approval by the Executive Committee forward commitments amounting to USD 23.68 million. New activities are focusing mainly on HCFC phase-out, the renewal of institutional strengthening projects, feasibility studies and the demonstration of alternative technologies to HCFCs with a total value of USD 25.85 million (including Core Unit Funding). In addition, USD 1.2 million is earmarked for the preparation of Stage II HPMPs in 2015. As listed in the business plan, about 63 % (US\$ 32.99 million) of UNIDO's 2015 Business Plan is focusing on the phase out of HCFCs.

Decision 67/15 has maintained the administrative cost regime with the following modifications: For new projects with a value over USD 250,000 as well as for institutional strengthening and project preparation activities approved at the 67<sup>th</sup> Meeting of the Executive Committee and after are subject to 7% agency fee. Support cost for Agreements made before the 67<sup>th</sup> Meeting of the Executive Committee remained valid, except for the second and subsequent tranches of HPMPs approved at the 66<sup>th</sup> Meeting of the Executive Committee, where the 7.5% agency fee has been reduced to 7 % in line with Decision 72/20. Furthermore, for Core Unit Funding an annual increase of maximum 0.7% is allowed for the current triennium. For this reason and in line with the Fund Secretariat's recommendation, Core Unit Costs for the years 2015-2020 have been budgeted based on a maximum 0.7 % increase. Thus, USD 2,040,715 has been allocated for the Core Unit for the year 2015.

The total amount foreseen in UNIDO's 2015 Business Plan, including forward commitments, new investment, non-investment activities, project preparation, demonstration activities and funding of core unit is USD 50,730,740 including support costs and with an impact of 450.3 ODP tonnes.

USD 88,248,472 million worth of projects are earmarked for 2016 with an impact of 928.3 ODP tonnes, while for 2017 USD 100,340,007 million with an impact of 904.3 tonnes of ODP tonnes are forecasted.

## A. MULTILATERAL FUND TARGETS

### 1. CONTEXT

UNIDO prepared its business plan for 2015 to 2017 based on ExCom Decisions 60/44, 71/18, 71/42, 72/20 and 72/40 as well as the Government requests received from Article 5 countries. An inter-agency coordination meeting was held on 2-3 September 2014 in Montreal, Canada. Considering the draft business plans submitted by all implementing and bilateral agencies and the compliance-oriented model, the Secretariat identified the countries that are in need of assistance in order to comply with the various phase-out schedules, for which no activities were included in the business plans of implementing agencies and pointed out cases where a duplication of activities occurred among the various implementing agencies. Agencies were also requested to include project preparation funding for Stage II HPMPs for 2018, for LVCs with Stage I going until 2020 as well as funding estimates for Stage II activities.

The countries' needs have been calculated for most countries based on the actual HCFC baseline data as well as based on approved HPMP Agreements.

The Business Plan is also largely inspired from the historical decision of the 19<sup>th</sup> Meeting of the Parties agreeing on the acceleration of the phase-out of HCFCs, and the Decision 71/42 on the draft guidelines for funding the preparation of Stage II HPMPs and other relevant ExCom decisions on HPMPs and HCFC investment and demonstration projects.

As agreed with the Secretariat, activities which were part of UNIDO's 2014 business plan, but could not be submitted either to the 72<sup>nd</sup> or to the 73<sup>rd</sup> Meeting of the Executive Committee, are not reflected in the present business plan, since the Secretariat plans recommending to the Executive Committee the carry-over of those activities to the year 2015. The following activities are to be carried over to 2015:

Country	Agency	Type	Chemical	Sector and Subsector	Value in 2014	ODP in 2014
Algeria	UNIDO	INV	MBR	Phase-out of MB in dates	228,900	1.8
Algeria	UNIDO	PHA	HCFC	REF-Servicing (Stage I)	154,800	1.0
Argentina	UNIDO	PHA	HCFC	REF-Servicing (Stage I)	338,208	4.6
Jordan	UNIDO	PHA	HCFC	REF-Servicing (Stage I)	24,181	0.2

Country	Agency	Type	Chemical	Sector and Subsector	Value in 2014	ODP in 2014
Kuwait	UNIDO	PHA	HCFC	FOA-XPS foam (Stage I)	3,660,586	80.9
Saudi Arabia	UNIDO	PHA	HCFC	REF-Air-conditioning (Stage I)	1,284,000	54.6

## 2. RESOURCE ALLOCATION

In 2015, UNIDO is planning to submit USD 50.73 million worth of projects, the majority of which is focused on phase-out of HCFCs.

HCFC phase-out activities form large part of UNIDO's 2015 Business Plan. Most HPMPs for non-LVCs include investment projects for the conversion of manufacturing enterprises to HCFC-free alternatives taking into consideration new technological developments to ensure sustainable conversion of HCFC-based manufacturing enterprises.

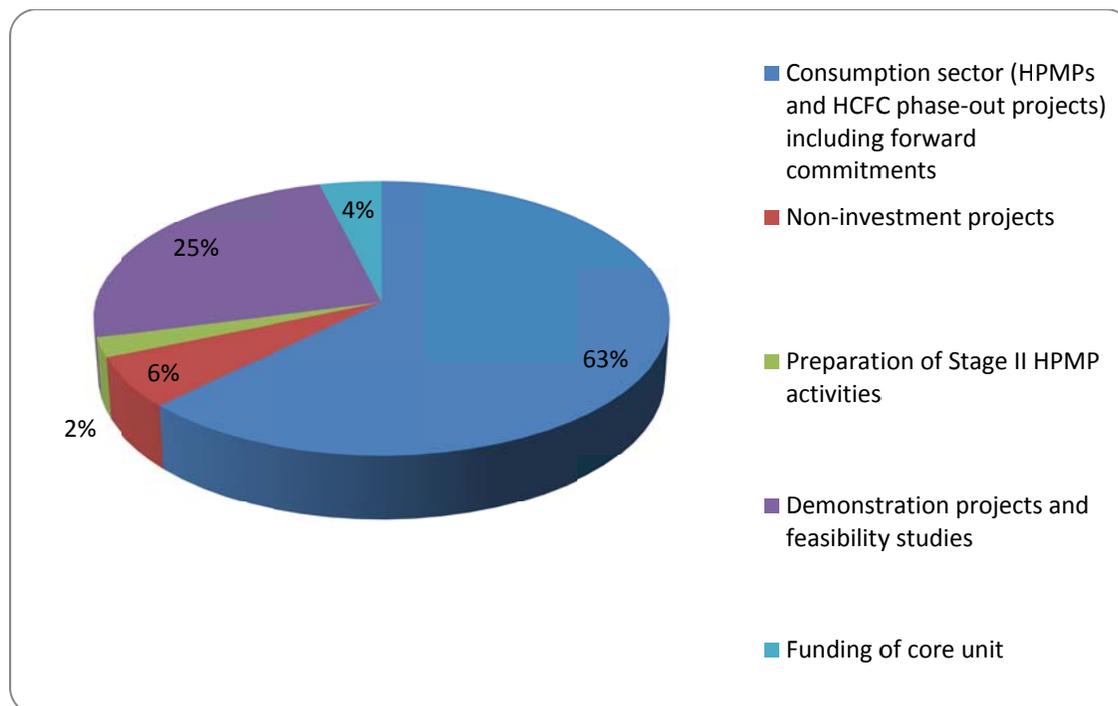
In line with the discussions held during the inter-agency coordination meeting in Montreal (early September 2013), funding requests for the preparation of Stage II HPMPs as well as funding estimates for Stage II HPMPs have been included in the 2015-2020 business plan. In general, it is estimated the project preparation funding should be approved 2 years before the last tranche of Stage I. However, there are exceptions, in particular in non-LVC countries with extended commitments, whereby no funding is scheduled between 2015 and 2017 or 2018. In such cases, project preparation is required 1 or 2 years before the penultimate tranche of Stage I. UNIDO made careful consideration of each country to ensure smooth implementation, without interruptions between Stage I and Stage II activities.

Furthermore, renewal of institutional strengthening projects, feasibility studies and demonstration projects form part of UNIDO's 2015-2017 Business Plan.

The total budget for 2015 for the above activities is USD 48,690,025 plus USD 2,040,715 core unit funding for UNIDO. Table 1 below summarizes the resource allocation of UNIDO's 2015 Business Plan.

**Table 1: Resource allocation**

Pos.	Type/sector	USD (incl. support cost)	Share of Business Plan allocation (%)
(a)	Consumption sector (HPMPs and HCFC phase-out projects) including forward commitments	32,994,773	63
(b)	Non-investment projects (INS and TAS)	3,171,849	6
(c)	Preparation of Stage II HPMP activities	1,207,042	2
(d)	Demonstration projects and feasibility studies	13,313,475	25
(e)	Funding of core unit	2,040,715	4
	<b>Total</b>	<b>50,730,740</b>	<b>100%</b>

**Resource Allocation as per Table 1**

The details of the 2015-2017 rolling Business Plan are spelled out in the Business Plan Database.

### **3. GENERAL OVERVIEW ON ASSISTANCE TO COUNTRIES IN NON-COMPLIANCE**

Until the last meeting of the Implementation Committee (July 2014) there have been no confirmed cases of non-compliance. All activities presented in UNIDO's business plan aim at providing assistance to A5 countries to comply with their obligations towards the Montreal Protocol. Should there be any countries in non-compliance under UNIDO's responsibility, UNIDO will work closely with the countries concerned to bring them back to compliance and will assist them to report the required data to the Ozone Secretariat.

### **4. PROGRAMME EXPANSION**

In the years 2015 to 2017 UNIDO aims to enhance its assistance to Article 5 countries by strengthening its project portfolio through the implementation of HCFC phase-out management plans and HCFC phase-out investment and demonstration projects.

UNIDO continues providing support with Stage II HPMPs to all the countries assisted during Stage I. Furthermore, Stage II HPMPs of Antigua and Barbuda, Brazil and Chile are added to UNIDO's portfolio.

The main objective of this Business Plan is to assist Article 5 countries in meeting their obligations under the Montreal Protocol, in particular the 35% reduction target in 2020 for HCFCs.

The analysis of the activities of UNIDO's Business Plan reveals that the major share of UNIDO's MP project portfolio consists of HPMPs including HCFC investment activities in different sub-sectors.

In line with Decision 72/40, several demonstration projects are planned in the following regions/countries: West Asia, Africa, Latin America and the Caribbean, China, Saudi Arabia, South Africa and Turkey. These projects target to demonstrate climate-friendly and energy-efficient alternative technologies to HCFCs in the refrigeration and in the foam sector.

In addition, feasibility studies for district cooling are also planned to be submitted by the 75th Meeting according to Decision 72/40 (c) targeting Middle East countries.

UNIDO has been successfully supporting its client countries to reach by 1 January 2015 the elimination of MeBr and it is committed to provide further assistance when it comes to avoid the unintended transfer of MeBr from non-controlled to controlled uses. To ensure compliance, a demonstration project targets particularly this aspect of the use of MeBr in Article 5 countries.

In 2015, UNIDO will continue to cover all regions (Latin America and the Caribbean, Africa, Asia and Pacific, Europe) with planned activities in various sectors and countries (including project preparation, non-investment and demonstration activities).

The following section summarizes the activities contained in UNIDO's 2015 Business Plan sorted by region.

### **Africa**

In Africa, funding requests for six countries and for a regional project, with a total value of USD 3,152,909 will be submitted in 2015. The main concentration will be in HPMPs, HCFC investment projects, as well as preparatory assistance projects for HPMP Stage II. Furthermore, two institutional strengthening proposals, one technical assistance and two demonstration projects will be submitted. UNIDO is cooperating with UNEP on several HPMPs in African countries.

### **Asia**

In Asia requests for funding for ten countries and for two regional projects with a value of USD 35,615,718 will be submitted in 2015. This represents about 70 % of the total Business Plan for 2015. The main concentration will be in HPMPs, HCFC investment projects, demonstration projects, as well as preparatory assistance projects for HPMP Stage II.

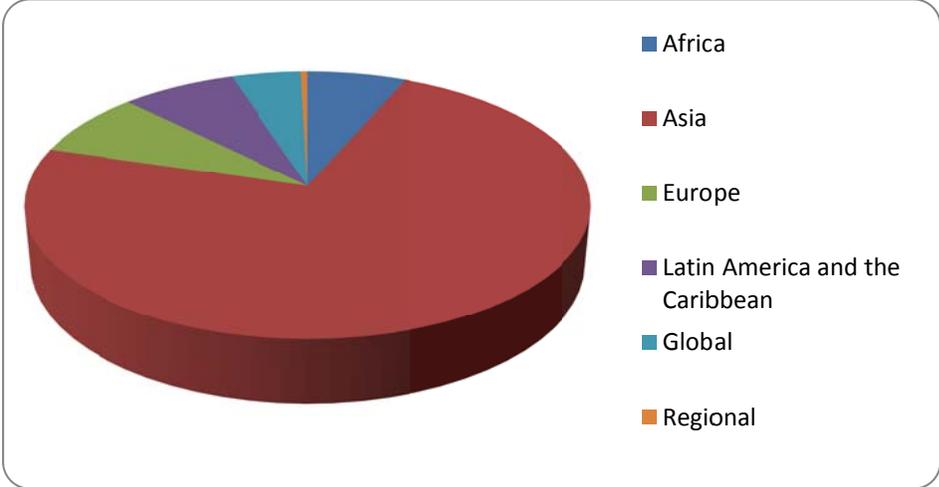
### **Europe**

In Europe, requests for five countries with a value of USD 3,835,869 will be submitted in 2015, five targeting the phase-out of HCFCs, two institutional strengthening and one demonstration project.

### **Latin America and the Caribbean**

In Latin America and the Caribbean Region, requests for nine countries and for a regional project in the Caribbean, with a value of USD 3,635,769 will be submitted in 2015. The main concentration will be in HPMPs, HCFC investment projects, as well as preparatory projects for HPMP Stage II. Furthermore, UNIDO will submit one demonstration project.

**UNIDO's 2015 Business Plan by Region**



## PERFORMANCE INDICATORS

The 71<sup>st</sup> Meeting of the Executive Committee has reviewed the performance indicators. The new weightings, based on Decision 71/28 , are indicated in the below table.

Type of Indicator	Short title	Calculation	Weighting	Target 2015
Planning--Approval	Tranches approved	Number of tranches approved vs. those planned	10	19 (16 A/3P)
Planning--Approval	Projects/activities approved	Number of projects/activities approved vs. those planned (including project preparation activities)	10	43 (incl. 21 prp)
	<b>Sub-total</b>		<b>20</b>	
Implementation	Funds disbursed	Based on estimated disbursement in progress report	15	29,591,870
Implementation	ODS phase-out	ODS phase-out for the tranche when the next tranche is approved vs. those planned per business plans	25	473.9 (incl. 326 for individual)
Implementation	Project completion for activities	Project completion vs. planned in progress reports for all activities (excluding project preparation)	20	41 (inventory number)
	<b>Sub-total</b>		<b>60</b>	
Administrative	Speed of financial completion	The extent to which projects are financially completed 12 months after project completion	10	12 months after operational completion

<b>Type of Indicator</b>	<b>Short title</b>	<b>Calculation</b>	<b>Weighting</b>	<b>Target 2015</b>
Administrative	Timely submission of project completion reports	Timely submission of project completion reports vs. those agreed	5	On time
Administrative	Timely submission of progress reports	Timely submission of progress reports and business plans and responses unless otherwise agreed	5	On time
	<b>Sub-total</b>		<b>20</b>	
	<b>Total</b>		<b>100</b>	

Based on Decision 71/28, the performance indicator on milestone activities for MYAs was changed as listed now in the above table.

## **AVOIDING UNINTENDED TRANSFER OF METHYL BROMIDE FROM NON-CONTROLLED TO CONTROLLED USES TO ENSURE COMPLIANCE**

As the deadline for the complete phase-out of Methyl Bromide (MeBr) for controlled uses approaches (i.e. 1 January 2015), any incorrect interpretation of MeBr consumption as Quarantine and pre-shipment (QPS) use may bring countries at risks of non-compliance to the phase-out of substances in Annex E of the Montreal Protocol.

Detailed analysis of QPS reports showed that in some cases the understanding of the requirement for licensing QPS uses was not completely accurate and, indeed, those uses should have been reported as controlled consumption. As a consequence, there appears not only to be unreported consumption; it also appears as if new MeBr uses develop in the related countries, which will represent a barrier to return to full phase-out of consumption once the potential non-compliance has been noticed.

There are three main compliance issues related to this wrong interpretation, licensing and reporting of MeBr for QPS instead of controlled uses:

- If correctly reported, those uses could have been eligible for funding;
- If those uses are correctly reported after 1st January 2015, countries will be in non-compliance with the total phase-out for controlled applications;
- If support is not provided to those users, recovery of compliance might be difficult if scope of intervention is only left to policy measures, reporting and awareness activities.

Though the MeBr phase-out projects implemented so far have been successful and countries assisted by the MLF have received adequate support to replace Methyl Bromide for controlled applications, it should be noted that no support has been provided to those users historically operating under the QPS framework.

Users that operate under the QPS framework are often different from those that have received technical support from projects financed by the Multilateral Fund. Furthermore, alternatives to MeBr may defer as well for controlled and QPS applications even with some substantial degree in terms of efficacy. The latter is also notable when alternatives are applied to same commodities but under different conditions.

UNIDO has identified several cases where MeBr is reported as QPS but should, indeed, be reported as controlled application. Among those identified cases, the below 5 are considered to be the most common and risky situations:

1. When MeBr reported to comply with the ISPM 15 is indeed used for products that do not necessary need the ISPM 15 certification (i.e. goods already certified, thickness of goods less than 6 mm, etc.);
2. Countries where import of MeBr for QPS applications has increased dramatically (e.g. +400%) after the achievement of 0 consumption for controlled uses, despite the historical data on QPS was relatively small before the phase-out programme started;
3. Applications on goods approved by quarantine authorities for long-term storage;

4. Fumigation of commodities before export though there is no evidence of official requirement from importing country/exporting country;
5. Treatment is authorized for export of goods that are lately not exported but transported within the same national territory.

In light of the above, UNIDO proposes a DEMO project in five countries to:

- Cover at least the above five common cases on a balanced regional distribution;
- To identify all stakeholders operating under QPS framework and assess their technical knowledge on alternative to MeBr;
- Provide technical support to those users falling under the above 5 cases with necessary technical knowledge to quickly terminate the MeBr application for uses that are controlled applications;
- Facilitate the adaptation of already-existing alternative technologies to the new treatment conditions;
- Should wrong reporting be identify, the project will propose strategies to educate the various stakeholders with tailored-made training sessions;
- Define the best approach and strategy for NOUs to make sure all stakeholders have the proper understanding of the QPS definition and estimate how much of MeBr, if any, consumed for QPS is indeed for controlled applications.

## INITIATIVES TO ENSURE COMPLIANCE

Successful and timely implementation of ongoing activities is essential for the current compliance period.

Special attention is provided to countries that may previously have been in non-compliance and that have decisions outlining plans of actions with time-specific benchmarks for return to compliance.

UNIDO has continued to provide supportive initiatives in order to ensure timely project completion of projects approved so far, and to facilitate compliance of the recipient countries with their MP obligations, which supported successful project implementation:

- Regular follow up of the implementation process is being done by the staff of the ozone office together with UNIDO's national and international consultants and project managers. This ensures that effective actions on critical issues such as resolving bottlenecks in site preparation, customs clearance, installation, commissioning and safety certification, monitoring of CFC-related equipment are taken.
- UNIDO is frequently attending Regional Network Meetings and respective workshops providing additional support to our counterpart countries.
- Communication and interaction between regional and country offices about the implementation process has ensured the smooth flow of project plans. As in previous years, directors of UNIDO regional and country offices are regularly briefed at UNIDO HQs on ongoing and possible future activities. They are involved in the implementation process and are following up the progress of the programmes. In turn, the representatives brief headquarter staff working in a specific country on the regular activities in the field and problems faced, if any.
- UNIDO also provides, when requested, support such as policy assistance, putting in place relevant legislation etc. Additionally, UNIDO project managers are visiting the project site, if definitely required.
- Based on recommendation of the Implementation Committee, additional assistance will be offered to the countries with delays in reporting of its ozone-depleting substance data

Country	HCFC Status (LVC, non-LVC)	Type	Sector and Subsector	Title in BP	Value (\$000) 2015	ODP 2015	Remarks	Working title	Brief description / comments
China	Non-LVC	DEM	REF-Commercial refrigeration	Demonstration project based on dec. 72/40 in the refrigeration sector (I)	800.000	0.0	cross-subsectorial	Demonstration project: Transition to low-GWP alternatives in transport refrigeration	Transport refrigeration, or mobile refrigeration in general, is a frequently overlooked but substantial source of refrigerant use; HCFC-22 is fairly prevalent in medium to lower temperature systems due to the compact design possible. Problems related to this issue are the availability of sufficiently qualified service and of refrigerant at different locations, often different countries, the reduction of leaks, and the qualified handling and operation of equipment by the different handlers related to mobile equipment. Project is currently aimed at road transport in China, developing, assembling and operating road transport equipment and learning how to address the related infrastructure and possibly regulatory needs. In terms of technology the project will assess low-GWP technologies including non-conventional cooling processes, such as evaporative cooling using N2 or CO2 direct injection. Currently preliminary discussions are under way with one major transport enterprise related to the use of flammables in transport of refrigerated containers; should this bear fruit in the short term (before project preparation discussion), adjustment of this project is possible.
China	Non-LVC	PRP	REF-Commercial refrigeration	Project preparation: Demonstration project based on dec. 72/40 in the refrigeration sector (I)	50.000	0.0	cross-subsectorial		
China	Non-LVC	PRP	REF-RAC	Project preparation: Demonstration project based on dec. 72/40 in the refrigeration sector (II)	30.000	0.0		Demonstration project: CO2 compressor for domestic heat pumps	The project will develop a CO2 compressor for use in domestic heat pumps; in particular air-to-water heat pumps for hot water generation. The project beneficiary is known. Project will also support the necessary modifications in the production area.
China	Non-LVC	DEM	REF-RAC	Demonstration project based on dec. 72/40 in the refrigeration sector (II)	2.500.000	0.0			
China	Non-LVC	PRP	REF-RAC	Project preparation: Demonstration project based on dec. 72/40 in the refrigeration sector (III)	30.000	0.0		Demonstration project: CO2 technology for domestic heat pumps	The project will develop a CO2 heat pump for domestic hot water production; and do necessary modifications at the assembly line to replace HCFC-22 by CO2.
China	Non-LVC	DEM	REF-RAC	Demonstration project based on dec. 72/40 in the refrigeration sector (III)	1.500.000	8.3			
China	Non-LVC	PRP	REF-Refrigeration Industrial	Project preparation: Demonstration project based on dec. 72/40 in the refrigeration sector (IV)	50.000	0.0	3 sites with 3 different applicat	Demonstration project: Leak reduction in large refrigeration equipment	Demonstration project to develop a generic methodology addressing leak reduction in particular large, decentralized refrigeration equipment with charges above 100 kg of HCFC. The project will assess 3 different applications at 3 different sites.
China	Non-LVC	DEM	REF-Refrigeration Industrial	Demonstration project based on dec. 72/40 in the refrigeration sector (IV)	450.000	2.8	3 sites with 3 different applicat		
Global (3 countries)	Non-LVC	DEM	REF-Commercial refrigeration	Demonstration project based on dec. 72/40 in the refrigeration sector (V)	1.500.000	0.0	cross-subsectorial		Assembly covers the wide range of commercial refrigeration, which is not easy to address since the charging does not take place at a specific facility and with specific tools, thus eligibility is difficult to assess. In addition, IOC are not being paid. However, this sector is of paramount importance when addressing the commercial refrigeration sector - we need to work on concepts and understand cost and incentive structures to find a cost effective way to deal with the assembly sector. The concept will include at least one low-GWP demonstration in the retail sector in each country.
Global (3 countries)	Non-LVC	PRP	REF-Commercial refrigeration	Project preparation: Demonstration project based on dec. 72/40 in the refrigeration sector (V)	80.000	0.0	cross-subsectorial	onstrate needs for REF assembly/installa	
Qatar	Non-LVC	DEM	REF-Servicing	Feasibility study on district cooling systems in Qatar	100.000	0.0		Feasibility study on district cooling systems in Qatar	Classical district cooling project. Overall economics are favouring district cooling in that region. Objection is to prepare the ground for an externally funded district cooling project, identify a template for preparation and distribute the experience gained
Regional (2 countries)		DEM	REF-Servicing	Demonstration project based on dec. 72/40 in the refrigeration sector (VI)	150.000	0.0		Project preparation: Impact of Refrigerant Containment and Leakage Prevention on Reduction of Virgin HCFC Refrigerants in A-5 Countries	Based on the assumption that servicing sector work in the future needs to rest on two pillars: Ability to handle next-generation refrigerants, and massively reduce use of HCFC in current systems. Demo project aims to develop in practice an approach to identify underlying causes of consumption in service, develop and test approaches and prioritise them according to cost/benefit.
Regional (2 countries)		PRP	REF-Servicing	Project preparation: Demonstration project based on dec. 72/40 in the refrigeration sector (VI)	50.000	0.0			
Regional (2 West Asian countries)	Non-LVC	DEM	REF-Servicing	Demonstration project based on dec. 72/40 in the refrigeration sector (VII)	300.000	0.0	In cooperation with UNEP.		Refrigeration systems contain substantial amount of re-usable HCFC at end-of-life, which can be recycled to replace virgin HCFC. The necessary set-up has never been fully studied and tried. It will require conceptual work to develop a process tailored to the country's situation, incentivising, training and upgrading those who disassemble locally assembled systems and those who deal with portable systems (window AC, ...), ensuring collection etc. Since the gain per system is substantially larger than in case of service and the number of stakeholders typically smaller, such an approach should yield excellent results while reducing emissions across the board (HCFC, but also HFC). Addresses this region because there is most likely to be economical, refrigerant reclaim centers are established through HPMP stage I; and they have the biggest problem with consumption in the service sector
Regional (2 West Asian countries)	Non-LVC	PRP	REF-Servicing	Project preparation: Demonstration project based on dec. 72/40 in the refrigeration sector (VII)	50.000	0.0	In cooperation with UNEP	Strategy for the servicing sector: enforcement of ODS legislation and handling of end-of-life equipment	
Regional (3 West Asian countries)	Non-LVC	DEM	SEV	Feasibility study on using non-conventional technologies in district cooling systems in the Middle East Region	100.000	0.0	In cooperation with UNEP	Feasibility study on using non-conventional technologies in district cooling systems in the Middle East Region	Meant to provide dual benefit of facilitating one (or several) district cooling projects with external funding, plus collecting information and assessing possibilities on several non-conventional approaches to reduce load = reduce system size (e.g. ground heat sink / cold reservoir), use non-conventional alternatives for systems (e.g. absorption, HFO's, ammonia), and provide information on the impact of such alternatives also outside district cooling (i.e. for stand-alone office towers etc.), again reducing refrigeration needs and use of HCFC or HFC. Finally, distribution of results.
Regional (4 African countries)	LVC	DEM	REF-Servicing	Demonstration project based on dec. 72/40 in the refrigeration sector (VIII)	640.000	0.0		Demonstration project on the adoption of the best strategy to ensure market availability of high quality refrigerants, including the introduction and update of safety standards on refrigerants	Addresses the challenges of substantial mislabelled imports of replacement refrigerants into countries, with a number of negative impacts on MLF projects, such as reverting back to HCFC, system losses blamed on MLF projects, ... Aiming to develop the necessary legal and institutional basics, as well as providing equipment, training and coaching.
Regional (4 African countries)	LVC	PRP	REF-Servicing	Project preparation: Demonstration project based on dec. 72/40 in the refrigeration sector (VIII)	80.000	0.0			
Regional (5 Caribbean countries)	LVC	DEM	REF-Servicing	Demonstration project based on dec. 72/40 in the refrigeration sector (IX)	590.000	0.0		Demonstration project on HPMP stage II servicing sector activities with focus on service for systems using and being designed for flammable refrigerants	Objective is to train technicians in the use of flammable refrigerants in systems operating with those; and define/procure the minimum set of service tools needed to perform service on such systems. Precondition for introducing flammables of any type
Regional (5 Caribbean countries)	LVC	PRP	REF-Servicing	Project preparation: Demonstration project based on dec. 72/40 in the refrigeration sector (IX)	60.000	0.0			
Saudi Arabia	Non-LVC	DEM	REF-Air conditioning	Demonstration project based on dec. 72/40 in the refrigeration sector (X)	1.800.000	10.0			
Saudi Arabia	Non-LVC	PRP	REF-Air conditioning	Project preparation: Demonstration project based on dec. 72/40 in the refrigeration sector (X)	30.000	0.0		sw technologies (e.g. HFOs) in refrigerati	Conversion of one factory to HFO/HFC blend technology (client is identified, appears committed to such a project)

Country	HCFC Status (LVC, non-LVC)	Type	Sector and Subsector	Title in BP	Value (\$000) 2015	ODP 2015	Remarks	Working title	Brief description / comments
South Africa	Non-LVC	DEM	FOA-XPS	Demonstration project based on dec. 72/40 in the foam sector (I)	500.000	0.0		Joint POPs/MP projects for system houses	Introduction of non-POPs flame retardents in XPS foams; current technology has just made it onto the POPs list (HBCD), blowing agent replacement towards flammables will need re-adjustment of flame retardent, which is difficult to justify using increased amounts of an identified POPs. Project aims at identifying, testing and introducing alternatives at one manufacturer, and at developing legislation to address the issue from the governmental side
South Africa	Non-LVC	PRP	FOA-XPS	Project preparation: Demonstration project based on dec. 72/40 in the foam sector (I)	30.000	0.0			
Turkey	Non-LVC	DEM	FOA-Rigid PU foam	Demonstration project based on dec. 72/40 in the foam sector (II)	432.500	5,5		HFOs as Foaming Agents in the Rigid PU Foam Applications	Reefer manufacturer to try out HFOs as foam blowing agent in one of few applications which are sensitive to insulation thickness, i.e. in this case reefers where increased insulation thickness leads to decreased transport volume (other application is domestic refrigerators, particularly in Europe where outside dimension fixed to 60 cm width)
Turkey	Non-LVC	PRP	FOA-Rigid PU foam	Project preparation: Demonstration project based on dec. 72/40 in the foam sector (II)	30.000	0.0			