

Component 2. Pollution from land based activities, including Persistent Organic Pollutants: implementation of SAP MED and related NAPs			
Sub-Component 2.1. Facilitation of policy and legislation reforms for pollution control <i>Industrial Pollution pilot projects (based on NAP priorities)</i>:			
2.1.1 Phosphogypsum slurry management-	30%	<ul style="list-style-type: none"> - Delays due to: change of country Tunisia instead of Lebanon, political instability and change at ministerial level in Tunisia - National consultant recruited. - Report on the assessment of the country situation of phosphogypsum in Tunisia submitted in Oct 2012 (Step 1 of a 4-step Task) - Presentation of major findings of assessment of country situation by consultant to all major stakeholders during the meeting on 22 Nov 2012. Evaluation team was present. 	
2.1.2 Chromium and BOD control of tanneries effluent	60%	<ul style="list-style-type: none"> - National consultant (team from the Environmental Engineering Department, Istanbul Technical University) subcontracted by UNEP/MAP in 2010 - First report corresponding to Phase I (Assessment current status in Turkey) of the pilot project was submitted in January 2011. (Report not available) - Second report corresponding to Phase II and Phase III of the pilot project submitted in September 2012. 	
2.1.3 Lubricating oil recycling and regeneration	60%	<ul style="list-style-type: none"> - International consultant (Spanish) subcontracted by UNEP/MAP in 2010 - Three reports corresponding to the Phases I, II and III submitted by consultant. Language (English and French) of reports very poor level - National workshop organized on 25 April 2012 at the Ministry of Environment of Algeria. 36 experts coming from different ministries, local authorities, private sector, NGO, MAP national focal point as well as UNEP/MAP MEDPOL and CP/RAC attended. Agreed during workshop to establish an inter-sectorial working group under the direction of the Algerian MAP focal point to guide on the continuation of the project activities 	
2.1.4 Lead batteries recycling	60%	<ul style="list-style-type: none"> - Inception workshop undertaken in Syria and report drafted (not available) - International consultant subcontracted by UNEP/MAP in 2010 - Reports have been submitted: Report for Phase I (assessment of current status in Syria) submitted in Feb 2011. Report that covers part of phase II (60%), submitted in October 2011 - Due to political situation in Syria, implementation stopped 	
2.1.5 Assessment of the magnitude of riverine inputs of nutrients into the Mediterranean Sea	80%	<ul style="list-style-type: none"> - The <i>Centre de Formation et de Recherches sur les Environnements Méditerranéens</i> (Cefrem), University of Perpignan, subcontracted in 2010 to develop a database and GIS based modelling tool - Progress report submitted in Dec 2011. 	
2.1.6 Setting Emission Limit Values (ELV) in industrial effluents and Environmental Quality Standards (EQS)	80%	<ul style="list-style-type: none"> - Dutch company Deltares subcontracted by UNEP/MAP in 2010 for testing a model to assess the variations of EQSs with ELVs for nitrogen and mercury in the Gulf of Lion and Izmir Bay - Key tasks completed. Report submitted in January 2012. - The terms of reference on the preparation of ELV/EQOs web-based software and the relevant guidelines for its use for several pollutants have been developed. The bidding exercise is underway to recruit consultant to develop software. 	

Sub-Component 2.1. Facilitation of policy and legislation reforms for pollution control – Permit, Inspection and Compliance Systems:		<ul style="list-style-type: none"> • Activities 2.1.7, 2.1.8 and 2.1.9 are considered together
2.1.7 Permit, Inspection and Compliance Systems: meeting among agencies responsible for permitting, inspections and enforcement to form plans of action for permitting, compliance and control	5%	<ul style="list-style-type: none"> – One meeting was held in 2010 in Montenegro – A Regional meeting on strengthening environmental inspectorate work held in November 2011. A set of enforcement indicators approved for the LBS protocol and recommendations were made to develop enforcement indicators for the other protocols of the Barcelona Convention
2.1.8 Training workshop to provide practical guidance and uniformity on inspecting on the most commonly polluting and industrial facilities of the country.	5%	<ul style="list-style-type: none"> – Meetings planned for end 2012 and 2013
2.1.9 National final meeting for the assessment and feedback to propose solutions for the formulation of amendments to the existing legislation.	5%	
Sub-Component 2.2. Transfer of Environmentally Sound Technology (TEST-MED)		
2.2.1 Set up national focal points	100%	<ul style="list-style-type: none"> – Completed - The focal points in each country are the National Cleaner Production Centres.
2.2.2 Introduction of the TEST integrated approach	100%	<ul style="list-style-type: none"> – Completed - National counter parts (Ministries of Industry and Commerce, of Environment, for Morocco and Egypt and Commerce and Energy for Tunisia) identified and TEST integrated approach introduced
2.2.3 Set-up of the information management system	100%	<ul style="list-style-type: none"> – Completed - National TEST coordinator recruited in all countries and national task teams created
2.2.4 Identification and selection of demonstration enterprises	100%	<ul style="list-style-type: none"> – Completed - Companies from priority hotspots selected according to established criteria <ul style="list-style-type: none"> o Egypt: 16 companies from 4 industries: Food (4); Chemical and petroleum (5); Leather (1) and Pulp and paper (3) o Morocco: 12 companies from 4 industries: Food (5); textile (2); metallurgical (2) and ceramic (2) o Tunisia: 15 companies from 3 industries: Food (6); textile (6); and leather (3)
2.2.5 Preparation of initial review at demonstration enterprises including market and financial viability and initial environmental review	100%	<ul style="list-style-type: none"> – Completed – Assessment of financial viability and initial environmental review undertaken under guidance of UNIDO CTA
2.2.6 Implementation of a Cleaner Production Assessment (CPA)	100%	<ul style="list-style-type: none"> – Completed – Improvement of the operation of the existing processes and technology of companies by introducing and integrating three different 'soft' and complementary environmental management tools into the company's daily operations done.
2.2.7 Introduction of EMS principles and design of EMS at demonstration enterprises	100%	<ul style="list-style-type: none"> – Completed – Done in parallel with 2.2.6
2.2.8 Introduction of Environmental Management Accounting practices and design	100%	<ul style="list-style-type: none"> – Completed - Environmental Management Accounting (EMA) system on a pilot level done for internal organizational calculation and decision-making
2.2.9 Evaluation of Phase I of the TEST Project	100%	<ul style="list-style-type: none"> – Successfully completed - Measures for cleaner production identified
2.2.10 Preparation and promotion of EST projects	100%	<ul style="list-style-type: none"> – Completed - Pre-feasibility studies undertaken; potential technology suppliers identified and affordable sources of capital for technology investment contacted.
2.2.11 Investment promotion of identified EST project	100%	<ul style="list-style-type: none"> – Investment in identified environmental sound or energy/water efficiency measures undertaken:

		<ul style="list-style-type: none"> – Egypt: Annual investment: \$ 9,116,241; Annual profit: \$ 9,131,112 – Morocco: Annual investment: \$ 4,228,231; Annual profit: \$ 5,899,267 – Tunisia: Annual investment: \$ 4,456,870; Annual profit: \$ 3,286,530
2.2.12 Evaluation of Phase II of the TEST Project	100%	<ul style="list-style-type: none"> – Saving in water and electricity consumption yearly: – Egypt: 8 878 090 m³ and 212 600 MW respectively – Morocco: 153,806 m³ and 18,000 MW respectively – Tunisia: 650,000 m³ and 25,083 MW respectively – Environmental gain, yearly reduction in BOD and COD: – Egypt: 1,628 tonnes and 1,773 tonnes respectively – Tunisia: 1,610 tonnes and 2,762 tonnes respectively
2.2.13 Introduction of basic principles for the preparation of enterprise sustainable strategies (SES)	100%	<ul style="list-style-type: none"> – 10 companies have undertaken actions during project to obtain the ISO 14001 certification (Egypt: 4; Morocco: 2 and Tunisia: 4) – 6 companies have upgraded their existing EMS by integrating TEST approach
2.2.14 Preparation of National Publication on the application of the TEST approach;	100%	<ul style="list-style-type: none"> – National reports as well as brochures for TEST available
2.2.15 Organization of seminars	100%	<ul style="list-style-type: none"> – Completed. Seminars organized in all 3 countries
2.2.16 Organization of introductory seminars on TEST approach at other enterprises in each country	Ongoing	<ul style="list-style-type: none"> – Replication of TEST in new set of companies on-going since May 2012. Sixteen new companies signed contract and provided cash co-financing (approx. 30,000 USD) – Staff members of the national cleaner production centres & technical centres (Focal Points of the TEST project) have integrated the TEST approach in their portfolio of services and are promoting these in other enterprise (Interview data)
2.2.17 Organization of a regional workshop to present the results of TEST Med projects	100%	<ul style="list-style-type: none"> – Regional workshop held in Vienna in September 2012
2.2.18 Starting of networking activities	Ongoing	<ul style="list-style-type: none"> – Funds (7,000,000 Euro from EU) already secured by UNIDO for replication of TEST in 9 countries including the 3 participating countries
Sub-Component 2.3. Environmentally Sound Management of equipment, stocks and wastes containing or contaminated by PCBs in national electricity companies of Mediterranean countries		<ul style="list-style-type: none"> – Originally planned to run in Albania, Egypt, Lebanon, Libya and Syria. – Due to political unrest, this sub-component is being run in Albania, Egypt, Turkey and Bosnia Herzegovina. – CP/RAC and MEDPOL are the two co-executing agencies for this sub-component
2.3.1 Legislative and institutional framework for implementation of ESM of PCBs	15%	<ul style="list-style-type: none"> – Although PCB experts / consultants recruited by UNEP/MAP in February 2011 and reports submitted; no evidence of an in depth assessment of legal and institutional framework of the participating countries. (See Annex 6 sub-component 2.3)
2.3.2 Demonstration projects to improve the management programme of PCBs and facilitate the implementation of NIPs and MED-SAP Guidelines for PCBs management implemented	30%	<ul style="list-style-type: none"> – Missions to Egypt (Sept 2011), Albania (Jan 2011), Bosnia Herzegovina (May 2011) and Turkey (Nov 2011) undertaken by international consultants for assessment needs for ESM of PCBs. Reports submitted.
2.3.3 Awareness of importance of ESM of PCBs equipment	50%	<ul style="list-style-type: none"> – International consultant recruited by CP/RAC to coordinate activities. – A webpage created by CP/RAC (http://pcbsmed.org/), however, at midterm no national data of these four participating countries yet posted on this website. – At national level, a National Technical Advisor sub-contracted by CP/RAC to facilitate coordination of activities – PCB-POP awareness workshops planned in 2013.

2.3.4 Technical capacity for ESM of PCBs equipment	30%	<ul style="list-style-type: none">– Training activities for capacity building delayed in order to be linked and coordinated with MEDPOL activities (inventory, phasing out, storage and disposal) planned in 2013.– End 2012, CP/RAC undertaking missions to individual countries to identify needs of each country in terms of capacity building and training.
2.3.5 National capacity to implement PCBs phase-out and disposal programs	15%	<ul style="list-style-type: none">– According to reports: 92.9 tonnes of PCBs (Egypt: 17 tonnes; Bosnia: 10.9 tonnes and Turkey 65 tonnes) identified and declared ready to be disposed of.– Interim storage site for PCBs and wastes identified in Egypt, Albania, Bosnia and Turkey– New work plans devised

Annex 6. Review of Component 2 Pollution from Land-Based Activities, Including Persistent Organic Pollutants: Implementation of SAP-MED and Related NAPs

A. Introduction

A-1. The objective of Component 2 is to develop, draft and issue national and regional legal, policy and institutional reforms that address SAP-MED and the NAP priorities, to implement targeted actions for reducing pollution in the Mediterranean and to facilitate the financial sustainability of future NAP implementation activities. It is divided in three sub-components as follows:

- 2.1. Facilitation of policy and legislation reforms for pollution control;
- 2.2. Transfer of environmentally sound technology (TEST-MED); and
- 2.3. Environmentally Sound Management of equipment, stocks and wastes containing or contaminated by PCBs in national electricity companies of Mediterranean countries.

A-2. The implementing partners for the three sub-components are respectively MEDPOL, UNIDO, and MEDPOL & CP RAC.

A-3. According to the Project Document (PD), the total budget for this component is \$ 9,716,500 (GEF: \$ 4,400,000 and co-financing including participating country co-financing: \$ 5,316,500) representing 19.7 % (GEF: 8.9% and co-financing: 10.8%) of overall project budget (\$ 49,447,200) including the PDF-B phase. The breakdown of the budget within the component is: \$ 2,036,000, \$1,950,500 and \$ 5,730,000 for the three sub-components 2.1, 2.2 and 2.3 respectively. GEF funds for the sub-component 2.1 are managed by UNEP/MAP, for sub-component 2.2 (TEST-MED) by UNIDO and for sub-component 2.3 the funds by UNEP/MAP for some activities and by CP/RAC for others (awareness and capacity building activities; agreement signed between CP/RAC and UNEP/MAP).

A-4. It should be noted that the introduction to Component 2 under the description of activities in the Project Document (Paragraph 112) lists four sub-components as follows:

- 2.1. Facilitation of policy and legislation reforms for pollution control;
- 2.2. Sustainable financing mechanisms for pollution control activities;
- 2.3. Transfer of environmentally sound technology (TEST-MED); and
- 2.4. Support to the implementation of the Stockholm Convention regarding the disposal of PCB stockpiles in Mediterranean countries

A-5. However, reference is made only to three sub-components in the remainder of the project document (for detailed activities, work-plans, costing, indicators for sub-components, annexes etc.); the "*sub-component 2.2 Sustainable financing mechanisms for pollution control activities*" has been removed. It is clear that this Component has been redesigned, but the text of the objective has not been corrected accordingly. Without this sub-component, the objective objective of this component should have been "*to develop, draft and issue national and regional legal, policy and institutional reforms that address SAP-MED and the NAP priorities, to implement targeted actions for reducing pollution in the Mediterranean*" as there are no longer activities planned that would allow to meet the third part of the objective "*to facilitate the financial sustainability of future NAP implementation activities*"

A1. Overview of Activities and Results

Sub-component 2.1: Facilitation of policy and legislation reforms for pollution control

(GEF 950,000 \$, Co-financing 1,086,000 \$)

A-6. The objective of this sub-component is to develop and improve the legislative and institution framework in the region and to implement NAP priority actions that will protect and reduce the inputs of contaminants to the Mediterranean marine environment from land based activities. This sub-component is comprised of seven activities (mainly pilot projects) for which the achievements are discussed in the sections below.

A-7. Each of the pilot projects is constituted of four distinct phases. Although there are slight differences in the content of the four phases for the different pilot projects, in general these phases are constituted as follows: Phase I: Assessment of country situation; Phase II: Proposals for policy reforms, implementation plan and for small scale pilot project; Phase III: Identification of partners, technical design and actual implementation of small scale pilot project; Phase IV: Dissemination of results to other countries for replication purposes.

2.1.1 Management of phosphogypsum wastes coming from phosphate fertilizer production

(GEF 120,000 \$, Co-financing 140,000 \$)

A-8. The Pilot Project on management of phosphogypsum was to be carried out in three eligible countries: Lebanon, Tunisia and Syria, in according to specific actions in the NAPs. Phosphogypsum is a by-product of the phosphate fertilizer industry, which is dumped into the sea or/and deposited in stockpiles at the coastal zone. The objectives of the pilot project are:

- to facilitate the transfer of know how related to environmental management of phosphogypsum from Tunisia to Syria and Lebanon in issues related to the improvement of legislative and institutional framework
- to manage the disposal of phosphogypsum slurry in Lebanon; the preparation and implementation of a management scheme for the phosphogypsum slurry in Lebanon;
- to trigger the cooperation with phosphate fertilizer companies and relevant national authorities from Lebanon, Tunisia and Syria.

A-9. However, Lebanon decided not to participate in the project and given the political situation in Syria it is unlikely that transfer of know-how to Syria could be undertaken. At midterm the following activities / results have been undertaken / achieved in Tunisia:

- At therecommendation of MEDPOL national focal point, a national consultant was recruited to assess the current situation of phosphogypsum wastes in Tunisia (phase 1). In that context a contract was signed between consultant and UNEP/MAP. The assessment was completed and report submitted in October 2012. The report included the assessment of: the national legal framework for the management of phosphogypsum; management systems including collection, transportation, storage and disposal phosphogypsum wastes; the quantities of generated by different production units; and existing international systems for storage, treatment and recycling of phosphogypsum wastes.
- A presentation of major findings of report by consultant was made during the meeting organized on 22 November 2012 where all major stakeholders were present. The evaluation team was also present during that meeting.

A-10. The four phosphate processing sites in Tunisia produce a total of 8,084,000 tons of dry phosphogypsum waste annually as follows: SIAPE site (120,000 tons/year), Skhira site (400,000 tons/year), Ghannouche site (900,000 tons/year) and Mdhilla site (842,000 tons/year). While the Ghannouche site releases all its phosphogypsum wastes in the Gulf of Gabes via an open canal without prior treatment, the phosphogypsum wastes of the three other sites are stockpiled as

heaps (also known as tabias) in the open air close to the phosphate processing plants. At the Ghannouche site, it is estimated that about 135 million tons of dry phosphogypsum waste have been released into the sea during the last 30 years, and this has impacted severely the marine environment and life of the Gulf of Gabes.

- A-11. According to planned activities and available budget, it is unlikely that the target values for stress reduction (Minimum of 90.75 tons of mercury (Hg), minimum 1.03 tons of Cd and minimum of 0.93 tons of lead (Pb) in Tunisia)¹ from phosphogypsum slurry into the sea be reached within the project life. Indeed, the activities planned are the development of proposals for policy reforms for the proper management of phosphogypsum wastes, and feasibility and economic studies on different available options for management of phosphogypsum. For the sound management of phosphogypsum wastes at the Gannouche site, a small scale pilot project is not envisaged as the only available sound option is to stop discharging the waste into the sea and store them in proper landfills. But the cost for building such a landfill is beyond the scope of the project. To solve the problems created by this discharge in the sea, the Groupement Chimique Tunisien (GCT), a state owned company and owner of the phosphate production company, is willing however to construct an adequate landfill at Sebkhia El Mkhachrma located 25 km from the Ghannouche site if this option is technically feasible and if funds are available². In any case, the building of this landfill will not happen during the project life.

2.1.2. Chromium and BOD control of tanneries effluent (GEF 170,000 \$, Co-financing 190,000 \$)

- A-12. The project on Chromium (Cr) and Biochemical Oxygen Demand (BOD) control in tanneries was to be developed in Turkey, Albania, Algeria and Egypt in accordance with planned actions on tanneries in their respective NAPs. The specific objectives of the pilot projects are:
- to improve the legislative and institutional framework for the control of Cr and BOD releases from tanneries in Turkey;
 - to prepare and to implement a pilot project on Cr and BOD control in a group of medium size tanneries in Turkey;
 - to prepare and to implement Guidelines on Cr and BOD control in tannery's effluents with the collaboration of all concerned countries (including Albania, Algeria, Egypt and Turkey).
- A-13. This pilot project is being implemented in Turkey. Out of the 4 phases, reports corresponding to Phases I, II and III of the pilot project have been submitted and to date the following activities / results have been undertaken / achieved:
- UNEP/MAP subcontracted a national consultant (team from the Environmental Engineering Department, Istanbul Technical University) in 2010 for assessment studies for "Control of Chromium and BOD Releases From Tanneries In Turkey"
 - The first report³ corresponding to Phase I of the pilot project was submitted in January 2011. This report contained information pertaining to legal framework, wastewater collection and treatment systems, wastewater, chromium and BOD quantities, permit and auditing systems, discharge standards and reporting to the authorized departments, in relation to the reduction and control of chromium and BOD loads in the tanning industry in Turkey.
 - The second report corresponding to Phase II and Phase III of the pilot project was submitted in September 2012. This report contains detailed information on new arrangements to improve the current legislation, institutional capacity, and recycling/abatement systems, as well as on formation of human resources, and implementation plans for proposed policy changes with regard to tanning industry.

¹ Figures taken from Table E-5 of Annex E of project document and Table I-2 of project Inception Report

² Information taken from report of nation consultant subcontracted by UNEP/MAP

³ A copy of report was not submitted to the evaluation team.

A-14. Currently, activities are being undertaken for the technical design of a small scale pilot project and identification of potential partner tanneries to control the release of BOD and chromium. The planned pollution stress reduction (minimum of 76.5 tons of Cr, minimum of 1755 tons of BOD and minimum of 525 tons of total nitrogen)⁴ in tannery effluents in Turkey is unlikely to happen as activities for scaling up and replicating of this small scale pilot project in all tanneries across the region of the country are not planned.

2.1.3 Recycling of used automobile lubricating oils (GEF 150,000 \$, Co-financing 160,000 \$)

The Pilot Project on management of Recycling and regeneration of used lubricating oil will be carried out in the following eligible countries: Albania, Algeria, Croatia, Egypt, Libya, Morocco, Montenegro, Syria and Palestinian Authority, in according of specific actions in the NAPs. The objectives of this pilot project are:

- to improve the legislative and institutional framework for the recycling and regeneration of used lubricating oil in Algeria;
- to prepare and to implement a Pilot Project on organizing a system for recycling and regeneration of lubricating oil in Algeria;
- to transfer the know-how and the expertise of the Tunisian and Bosnia-Herzegovina authorities on the organization of the lubricating oil recycling and regeneration system to Algeria and other concerned countries (Albania, Croatia, Egypt, Morocco, Montenegro, Palestinian Authority and Syria).

A-15. This pilot project is being implemented in Algeria. At midterm, the achievements for this pilot project are:

- International consultant (Spanish) subcontracted by UNEP/MAP in 2010 for (i) Assessment of state of the art (Phase 1); (ii) Proposal for policy reform (Phase 2); and (iii) Initiation of a lubricating oil pilot recycling system in Algeria (Phase 3)
- Three reports corresponding to the three phases have been submitted by consultant. However, it should be noted that the language (French and English) of the reports is very poor and this makes the reports quite incomprehensible.
- Algerian authorities held national workshop on 25 April 2012 at the premises of the Ministry of Environment and Urbanisation in Algiers to review the progress achieved on the implementation of the pilot project for management of lube oils and agree on the next steps. 36 experts coming from different ministries, local authorities, private sector, NGO, MAP national focal point as well as the task manager of component 2 (UNEP/MAP MEDPOL) and CP/RAC participated in the workshop. During this workshop, it was agreed to establish an inter-sectorial working group under the direction of the Algerian MAP focal point that should guide the continuation of the project activities that should assist in achieving the following:
 - Policy framework for effective lube oil management in Algeria improved
 - Introducing best practices for the management of lube oils in Algeria
 - Capacity Building; Public and decision maker awareness enhanced

A-16. At midterm, eight months after workshop, the agreement between UNEP/MAP and Algerian authorities has still not been signed. It is therefore recommended that actions are taken for this agreement to be signed as soon as possible in order not to further delay implementation of activities.

A-17. In the second part of the project, it is planned to set up a system in a small area in a city for the collection and transport of used lubricating oil but not for the actual recycling (unless recycling companies already exist in Algeria, since there is no mention in the project document for the setting up of an oil recycling unit in Algeria). Therefore, only a limited quantity of used oil will be collected only (much less than the 80,000 tons as indicated in Table E5 of annex E unless this small scale pilot is up scaled and replicated), and not recycled.

⁴ See indicators in Table E5 of annex E of project document

2.1.4 Recycling of lead batteries

(GEF 124,000 \$, Co-financing 140,000 \$)

A-18. The Pilot Project on management of recycling of lead batteries was to be carried out in the following eligible countries: Albania, Algeria, Croatia, Egypt, Libya, Morocco, Montenegro, Syria, Tunisia, Turkey and Palestinian Authority, in according of specific actions in the NAPs. The objectives are:

- to improve the legislative and institutional framework for the recycling of lead batteries in Syria;
- to prepare and implement a project on organizing a system for recycling lead batteries in Syria;
- to transfer the gained know-how and the expertise on the lead batteries recycling to Albania, Algeria, Croatia, Egypt, Libya, Morocco, Montenegro, Palestinian Authority, Tunisia and Turkey.

A-19. The initial phases of this pilot project were implemented in Syria. At midterm, the first and part of phase II of the pilot project are completed and reports submitted. The achievements are:

- Inception workshop undertaken and report drafted⁵
- International consultant subcontracted by UNEP/MAP in 2010 to carry out the first two phases of the pilot project
- Reports have been submitted
 - Report for Phase I (October 2010 – Feb 2011). Aim was to assess the existing situation concerning the overall management of lead batteries, namely:
 - How the overall environmental legislation focus on the environmentally sound management (ESM) of batteries
 - The level of the organization of the state institutions to cope with the enforcement procedures to control the batteries management
 - To what extent spent batteries are collected, treated and recycled
 - Report that covers part of phase II (60%), submitted in October 2011, deals in details with major issues of policy reforms and capacity needs for the ESM of lead batteries in Syria namely:
 - Modification of existing legislation
 - Building up institutional capacities
 - Improvement of the whole chain of batteries management (collection, transport, storage, treatment/recycling)
 - Requirements for the creation of national market for recycled products

A-20. Given that the implementation of activities has stopped in Syria due to war, the stress reduction with regarding to lead batteries will not be possible. To take advantage of results already achieved, it is recommended that practical guidelines for the ESM of used lead batteries be developed based on the Syria experience and on the Basel Convention guidelines and disseminated to the other countries of the project through a regional workshop. Even if it were possible to complete the final phases of the pilot project in Syria, the recycling of lead batteries would not be possible as there is no indication that a recycling company (lead smelter) for batteries exists in Syria, and the establishment of such a facility is not mentioned in the project document.

2.1.5. Assessment of the magnitude of riverine inputs of nutrients into the Mediterranean Sea *(GEF 90,000 \$, Co-financing 130,000 \$)*

A-21. Harmful Algal Bloom (HAB), eutrophication process are the direct results of the enrichment of marine ecosystem with nutrients, namely nitrogen and phosphorus, from land based sources and from diffuse sources. Rivers in the Mediterranean are considered as major diffuse sources

⁵ Copy of report not submitted to evaluation team

of nutrients into the sea. Satellite imaging showed that eutrophication process is always associated with the river mouths such as the Rhone, Po, Nile and other river in the Aegean Sea as well as high nutrients inputs from land based sources. The main aims of this activity are to:

- Collect quantitative information of the riverine inputs of water, sediments, nutrients to the Mediterranean Sea in a spatially and temporally explicit manner and develop database;
- Establish a geographical scale of inputs which should be distinguished at least at the scale of the major Mediterranean sub-basin (Alboran, North-Western, South-Western, Tyrrhenian, Adriatic, Ionian, Central, Aegean, North- Levantine and South-Levantine seas);
- Establish nutrients budgets associated to specific time periods (e.g., decades) to which they correspond and develop sophisticated models for prediction.

A-22. At midterm, the achievements are:

- The Centre de Formation et de Recherches sur les Environnements Méditerranéens (Cefrem), University of Perpignan, France has been subcontracted in 2010 to develop a database and GIS based modelling tool for the assessment of nutrient inputs into the Mediterranean Sea from diffuse sources.
- Progress report submitted in Dec 2011.

A-23. Creation of a data base on Mediterranean rivers has already been started in the framework of a previous collaboration with MEDPOL (UNEP-MAP, 2003) and further enlarged via the European integrated research project SESAME. This document reports on new and important effort made to update the database through:

- screening of the recent scientific literature and existing up-to-date databases
- adding of data for sub-catchments of river basins
- adding of information for each basin and sub-catchment on potential controlling factors of river nutrient fluxes (climate, topography, lithology, land use/land cover and human activities and infrastructures).

A-24. The progress report also elaborates on the *Construction of a Geographic Information System (GIS)*. All data were fed into a GIS system that has been especially designed for the Mediterranean (and Black Sea) drainage basin. The computer program used is ArcGIS (version 10). The GIS system allows delineation and visualization of the hydrological networks of major rivers, their drainage basins, the locations of water-quality and discharge stations as well as representation and crossing of spatial data layers on the potential controlling factors for riverine water and nutrient fluxes. Development of empirical models is also reported in the document.

A-25. However, further improvement on the work of Cefrem for the development of a database and GIS based modelling tool for the assessment of nutrient inputs into the Mediterranean Sea from diffuse sources is necessary to attain the objectives of this pilot project. This work is underway.

2.1.6. Setting Emission Limit Values (ELV) for industrial effluents and the Establishment of Environmental Quality Standards (EQS)

(GEF 120,000 \$, Co-financing 150,000 \$)

A-26. This Pilot Project is to be carried out in most of the eligible countries. Many countries lack appropriate ELV for their industrial effluents, as well as Environmental Quality Standards (EQS) for the receiving water bodies. In order to implement a control on industrial emissions, ELV and EQS should be introduced in the legislation of all Mediterranean countries. To that purpose a horizontal project including all GEF-eligible Mediterranean countries will be implemented to introduce ELV and EQS in their legislation and to propose changes in their institutional framework. The main objectives of this activity are:

- to introduce ELV and EQS in the legislation of Albania, Algeria, Bosnia-Herzegovina, Croatia, Egypt, Libya, Morocco, Montenegro, Tunisia and Turkey, for all substances included in the SAP targets for the protection of the Mediterranean marine ecosystem;
- to propose changes in the institutional framework of the GEF-eligible countries to ensure the proper use of the ELV and EQS for the protection of the Mediterranean Sea.

A-27. At midterm the achievements are:

- The Dutch company Deltares was subcontracted by UNEP/MAP in 2010 for testing a model to assess the variations of EQSs with ELVs for nitrogen and mercury in the Gulf of Lion and Izmir Bay
- Report submitted by Deltares in January 2012. The main recommendation of the report is that in view of the large amount of hot spots around the Mediterranean and the diversity of these sites, in terms of their natural environment and the socio-economic conditions, it is recommended that an easily applicable method to be made available to water managers and policy makers. This method should offer a clear framework, and allow for a generic, coherent and harmonized approach, which ensures a "level playing field" for the permitting policy around the Mediterranean. The successful implementation of such a method probably would require a Guidance Document and a supporting software tool.
- The terms of reference on the preparation of ELV/EQOs web-based software and the relevant guidelines for its use for several pollutants have been developed. The bidding exercise is underway to recruit consultant to develop software.

2.1.7 Permit, Inspections and Compliance Systems

(GEF 176,000 \$, Co-financing 176,000 \$)

A-28. The activities related to the preparation of the NAPs have shown a number of gaps in the Mediterranean. One of these gaps is strictly linked with the compliance and enforcement of control measures and, more precisely, the system, which will control measures for pollution reduction, and compliance, i.e. the inspectorates. The major objective of this activity is to enhance and update the inspectorates in the following countries: Albania, Bosnia and Herzegovina, Croatia, Lebanon, Morocco, Montenegro, Syria and Turkey. For strengthening the existing mechanism in the Mediterranean countries regarding environmental inspection activities, there is need to tackle the issue in an integrated manner. The set of activities would include meetings among agencies responsible for permitting, inspections and enforcement in order to set up the procedure, as it is indicated in the regulatory cycle, as well as a training workshop.

A-29. At midterm, the achievements are:

- One meeting was held in 2009, and no other activities have been undertaken although countries have requested for actions.
- Meetings planned for 2013

A-30. According to feedback gathered during field missions, the planned meeting for end 2012 has not taken place due to movement of staff at MEDPOL; the task manager for this activity has been transferred for other duties and has not been replaced. It is unlikely that the meetings planned for 2013 will take place unless actions are taken by MEDPOL or MAP to assign a new task manager for these activities.

Sub-component 2.2: Transfer of Environmentally Sound Technology (TEST-MED) Executing Agency: UNIDO (GEF 1,000,000 \$, Co-financing 950,500 \$)

A-31. The objective of the TEST-MED component is to build national capacities in South Mediterranean countries; to apply the UNIDO-TEST integrated approach to facilitate the transfer of Environmentally Sound Technology (EST) that will improve the environmental performance

and the productivity of priority industrial pollution hot spots of the South Mediterranean region. The project will have a demonstration component at pilot enterprises to be selected among the priority industrial sectors (among others releasing significant amounts of PTS are tanneries and derivatives, cement works, metallurgy, agro-industries, organic and inorganic chemical industry) that are significantly contributing to transboundary pollution by releasing particularly PTS into the Mediterranean basin.

A-32. This TEST-MED project is being successfully implemented in three countries namely: Egypt, Tunisia and Morocco. The main achievements are discussed country wise:

- Egypt
 - 16 participating companies from 4 different industries: Food industry (4 companies); Chemical and petroleum industry (5 companies); Leather industry (1 company) and Pulp and paper industry (3 companies)
 - Saving in water and electricity consumption yearly: 8 878 090 m³ and 212 600 MWh respectively
 - Environmental gains, yearly reduction in BOD and COD: 1,628 tonnes and 1,773 tonnes respectively
 - Four participating companies have undertaken actions during project to obtain the ISO 14001 certification
 - National seminars on TEST approach organized and national documents (e.g. brochures) published
- Morocco
 - 11 participating companies from 4 different industries: Food industry (5 companies); textile industry (2 companies); metallurgical industry (2 companies) and ceramic industry (2 companies)
 - Saving in water and electricity yearly: 153,806 m³ and 18,000 MWh respectively
 - Two companies have undertaken actions to obtain ISO 14001 certification whilst two others are seeking assistance to finalize their Environmental Management Systems (ESM)
 - National seminars on TEST approach organized and national documents (e.g. brochures) published
- Tunisia
 - 15 participating companies from 3 different industries: Food industry (6 companies); textile industry (6 companies); and leather industry (3 companies)
 - Saving in water and electricity consumption yearly: 650,000 m³ and 25,083 MWh respectively
 - Environmental gains, yearly reduction in BOD and COD: 1,610 tonnes and 2,762 tonnes respectively
 - Four participating companies have undertaken actions during project to obtain the ISO 14001 certification
 - Two companies have obtained the "Oeko-Tex Standard" certification
 - National seminars on TEST approach organized and national documents (e.g. brochures) published

A-33. A regional workshop to present results of MED TEST was held in Vienna in September 2011

A-34. At the start-up of MED TEST, waste waters were not properly managed by most of participating companies. Through the project, many companies have started to have their waste waters analysed before discharge and some were planning to build wastewater treatment plants. For example, in Morocco a company has completed the tendering phase during the project, selecting the contractor that will build the facility.

A-35. Significant progress has been made in this sub-component and a total of 765 measures for cleaner production and for energy and water saving have been implemented by the 43 enterprises of the three countries resulting in annual reduction of 3,238 tons of BOD5 and 4,535 tons of COD and an estimated of 9.7 M m³ of water savings and 255,700 MW of energy savings. Ten companies have undertaken actions to obtain the ISO 14001 certification and six have upgraded their existing EMS by integrating the TEST approach. Many companies started

to have their waste waters analysed before discharge and some are planning to build wastewater treatment plants.

Sub-component 2.3: Environmentally Sound Management of equipment, stocks and wastes containing or contaminated by PCBs in national electricity companies
(GEF 2,450,000 \$, Co-financing 3,280,000 \$)

A-36. The purpose of this sub-component project is:

- To introduce environmentally sound management (ESM) to all stages of the 'life-cycle' of electrical equipment containing or contaminated by PCBs.
- To assist national authorities and owners in developing a sound policy for the ESM of PCBs based on principles of ESM, taking into account the provisions of the SC and the BC.
- To create conditions for a sound decision making process with respect to the demonstration/disposal activities.
- To pave the road for the implementation of NIPs through on-the-job training on PCBs contaminated oil and equipment disposal process.

A-37. Activities of this sub-component are being implemented by MEDPOL (activities 2.3.1; 2.3.2 and 2.3.5) and CP/RAC (activities 2.3.3 and 2.3.4). Originally planned to be run in Albania, Egypt, Lebanon, Syria and Libya, this pilot project are presently being run in Albania, Egypt, Turkey and Bosnia Herzegovina due to political unrest in Syria, Lebanon and Libya. For this sub-component the following five activities are to be undertaken:

- Activity 2.3.1: Review and reforming institutional and legal frameworks for implementation of ESM of PCBs
- Activity 2.3.2: The implementation of demonstration projects to appropriately management and disposal of PCBs and facilitate the implementation of NIPs and SAP-MED
- Activity 2.3.3: Technical capacity for ESM of PCBs equipment
- Activity 2.3.4: Awareness of importance of ESM of PCBs equipment and
- Activity 2.3.5: National capacity to implement PCBs phase-out and disposal programs.

A-38. At midterm, the following achievements have been made:

- Three international PCB experts / consultants were recruited by UNEP/MAP in August 2010 for policy reforms for life cycle management of PCBs, for PCB inventory, and for the design and establishment of temporary storage facilities in the five countries respectively. A first mission was undertaken by the three consultants in Albania in Jan 2011. During the Arab Spring in March/April 2011, as the consultants could not fully perform their duties according to the relevant Terms of Reference (TOR), it was mutually agreed between UNEP/MAP and the first two consultants to terminate the contracts. However, the third consultant is still under contract and he undertook missions to Egypt (Sept 2011), and the new countries Bosnia Herzegovina (May 2011) and Turkey (Nov 2011) and reports were submitted. Despite those missions, there is no evidence that the assessment of legal and institutional framework of the participating countries (Activity 2.3.1) has been undertaken. For this reason, an implementation status of 10% has been given by the evaluation team for this activity (see activity table of annex 5) whilst 70% has been reported in the PIR of October 2012.

1.

- The third consultant developed a short guide for preliminary identification of PCBs to help countries in the identification of PCBs. A progress report was submitted in July 2012 and it highlights these main findings:
 - The project management team is operational in each country
 - Only 1 demonstration sites have been identified. (Egypt)
 - For all 4 countries the equipment needed for the implementation of the project have been evaluated.
 - The primary inventory evaluation in all countries leads to the conclusion that most of transformers are not PCB oil transformers but mineral oil transformers contaminated with PCBs.

- The cross contamination in the maintenance workshops is the main source of PCB contaminated transformers.
 - Situation analysis reports for the four countries available but legal infrastructure review not done. Presently, 92.9 tonnes (Egypt: 17 tonnes; Bosnia: 10.9 tonnes and Turkey 65 tonnes) have been identified and declared ready to be disposed of. Tendering procedure for purchase of PCB analysers to be used during inventory exercise is underway.
 - International consultant recruited by CP/RAC to coordinate activities. A webpage has been created by CP/RAC (<http://pcbsmed.org/>) and countries (Albania, Egypt, Turkey and Bosnia) need to send information for continuous updating. However, at midterm no national data of these four participating countries or other country of the project and / or region has yet been posted on this website. At national level, a National Technical Advisor sub-contracted by CP/RAC has been recruited to facilitate coordination of activities and for compilation of PCB information. PCB-POP awareness workshops are planned for 2013.
 - Training activities for capacity building have been delayed in order to be linked and coordinated with MEDPOL activities (inventory, phasing out, storage and disposal). Presently, CP/RAC is undertaking missions to individual countries to identify needs of each country in terms of capacity building and training⁶.
 - As this sub-component has suffered significant delays, work plans have been revised by MEDPOL in consultation with CP/RAC. However, the evaluation team considers that these new work plans need to be revisited taking into consideration that new target values for PCB destruction will be set (see recommendation in text below).
- A-39. According to the project document, a total of 878 tons of PCBs were supposed to be destroyed by the project: Lebanon 42 tons, Syria 209 tons, Libya 209 tons, Egypt 209 tons and Albania 209 tons⁷. Given that there have been a change in countries due to Arab Spring and political change (new set of countries: Egypt, Albania, Turkey and Bosnia Herzegovina), it is recommended that the total amount of PCBs to be destroyed by the project be re-discussed and agreed upon as well as the amount to be destroyed for the “new countries”: Turkey and Bosnia Herzegovina. A significant amount work remains to be undertaken for this sub-component that include: ESM practical guidelines development and implementation, capacity building for ESM, PCB inventories, development of phase out plans, identification of temporary storage site, inventory exercise, phase out, transport and storage of PCBs, procedures to export PCBs for destruction amongst others.

A2. Relevance

- A-40. This component is highly relevant as it is built on priorities identified in the National Actions Plans (NAPs), the Stockholm Convention National Implementation Plans (NIPs), and on existing initiatives in some Mediterranean states. In particular, activities of sub-component 2.3 aiming to strengthen the institutional and legal frameworks for the ESM of PCBs (substances listed in Annex A Part II of the Stockholm Convention) including disposal of 878 tonnes of PCBs are fully consistent with the main aim GEF 4 POPS Strategic Objective, ‘to reduce and eliminate production, use and releases of POPs, and to the related Strategic Programme 2.
- A-41. At midterm awareness is already high amongst major stakeholders (ex. utilities) regarding the need to properly manage PCBs. It is anticipated that ESM systems will be implemented in electrical utilities during the second half of the project and that significant amounts of PCBs will be identified and disposed of safely. Furthermore, the planned activities in the pilot projects will provide a harmonized initiative to protect the Mediterranean environment including water bodies against chemical pollutants such as PCBs, heavy metals and other toxic chemicals. However, it is important that the pilot projects planned in sub-components 2.1 and 2.3 are successfully completed for continued relevance and impact. In that context, given that most activities of these two sub-components have suffered significant delays, it is essential that activities are

⁶ Interview data

⁷ Page 118 of annex F of project document

closely monitored by executing partners (MEDPOL, CP/RAC) and national executing partners to ensure successful implementation.

A3. Timing & timeliness

Sub-component 2.1: Facilitation of policy and legislation reforms for pollution control

- A-42. **2.1.1 Management of phosphogypsum wastes coming from phosphate fertilizer production.** This pilot project for management of phosphogypsum slurry started with more than 2 years delay due to Lebanon late decision not to participate in this activity⁸. Furthermore, due to political instability and also changes at Ministerial level, Tunisia requested to start activities in 2012.
- A-43. **2.2.2 Chromium and BOD control of tanneries effluent.** According to the implementing partner, activities are on track with no major problem foreseen for completion of activities so as to meet objective of this pilot project.
- A-44. **2.1.3 Recycling of used automobile lubricating oils** A national workshop was held in April 2012 regrouping major stakeholders to discuss the way forward regarding management of used automobile lubricating oil. It was agreed to establish an inter-sectorial working group under the direction of the Algerian MAP focal point that should guide the continuation of the project activities. In that respect, it was planned that a financial agreement of \$ 50,000 be signed between UNEP/MAP and the Ministry of Environment of Algeria to undertake these activities. According to information gathered during interviews, 8 months after workshop, despite reminders from UNEP/MAP, this agreement has still not been signed by the Ministry of Environment of Algeria. It is therefore recommended that this agreement be signed as soon as possible in order not to delay further the implementation of activities for this pilot project.
- A-45. **2.1.4 Recycling of lead batteries.** Given the political situation in Syria, activities have stopped in Syria. It is unlikely that the implementation phase of the pilot project could be undertaken. One option could be to develop practical guidelines for ESM of lead batteries based on the Syria experience (reports) and on Basel Convention guidelines that would be disseminated to the other countries through a regional workshop and subsequently dissemination at national level through workshops where major stakeholders would be invited.
- A-46. **2.1.5. Assessment of the magnitude of riverine inputs of nutrients into the Mediterranean Sea.** Activities for this pilot project are on track and the objectives are likely to be met as planned in the project document. For example, MEDPOL has already developed the terms of reference for the purchase two licenses of ArcGIS 10 for Desktop—Basic, software and there is provision for training on the use of the software. Adoption of model by countries is foreseen in 2013.
- A-47. **2.1.6. Setting Emission Limit Values (ELV) for industrial effluents and the Establishment of Environmental Quality Standards (EQS)..** No major delays encountered for this pilot project. Activities are being run as planned. For example, the terms of reference on the preparation of ELV/EQOs web-based software and the relevant guidelines for its use for several pollutants have been developed. The bidding exercise is underway to recruit consultant to develop software⁹. For impact, it is essential that end users (authorities that deliver permits and licenses, monitoring bodies, etc.) of this software receive the appropriate training.
- A-48. **2.1.7 Permit, Inspections and Compliance Systems.** According to feedback gathered during field missions, the planned meeting for end 2012 has not taken place and it is anticipated planned meetings for 2013 will also not be held as the task manager for that activity at MEDPOL has been transferred and not replaced yet. It is therefore recommended that a new task manager at MEDPOL be assigned for this activity as soon as possible

Sub-component 2.2: Transfer of Environmentally Sound Technology (TEST-MED)

⁸ Report of Second Coordination Group Meeting, Rome (Italy), 18-19 October 2010

⁹ Interview data

A-49. This sub-component is being successfully implemented and expected to be completed by June 2013 as planned in the project document. Replication initiatives in new set of companies have started since May 2012, and funds (7 M Euro from EU) have already been secured for the second phase (TEST MED II). This second phase will be run in 9 countries including the 3 participating countries (Egypt, Morocco and Tunisia) and 150 companies will be targeted, starting in the second half of 2013.

Sub-component 2.3: Environmentally Sound Management of equipment, stocks and wastes containing or contaminated by PCBs in national electricity companies

A-50. Overall, this sub-component has suffered significant delays for various reasons including the political situation and/or events related to the Arab Spring in Syria, Libya, Egypt and Tunisia). As a result there has been a change in countries: Libya, Syria and Lebanon replaced by Turkey and Bosnia Herzegovina. The change of task manager for component 2 at MEDPOL centralization was also responsible for causing delay of at least 6 months to the implementation of activities. In addition, the centralized tendering procedure through UNOPs, Nairobi for the purchase of PCB analysers and chemicals that cost more than 50,000 USD also caused much delay (8 months). As a result the implementation process has been seriously affected and the work plans that became inappropriate had to be reviewed and adapted three times, and approved at the three successive steering committees. At national level, the momentum that was created after the first mission of the international consultant and MEDPOL was lost due to these long delays. In Egypt for example, during the first mission undertaken in Sept 2011, MEDPOL indicated that PCB analysers would be provided for the PCB inventory exercise. In that respect, teams were set up in Cairo and Alexandria in consultation with the electrical companies, main owners of transformers, and work plans were devised for the inventory exercise. A good working spirit was established amongst the different stakeholders. However, during the evaluation mission carried out in Nov 2012, the Egyptian counterparts indicated that more than one year after this first mission, they still have not received those analysers necessary for inventory. They pointed out that the momentum created initially was fading out and that the utilities started to lose interest in the project. They also indicated that there were cases where potentially PCB contaminated decommissioned transformers were sold to metal recyclers as a result of this long delay.

A4. Sources of cost effectiveness

- A-51. MEDPOL has more than 30 years of experience in different aspects of environmental protection and monitoring. In particular, MEDPOL assists Mediterranean countries to protect the marine environment in the framework of the Barcelona Convention by the implementation of the Land-Based Sources, Dumping, and Hazardous Wastes Protocols.
- A-52. CP/RAC, established in 1996 based on a decision agreed by the Parties to the Barcelona Convention, has substantial experience in building capacity and contributing to the exchange of knowledge in such areas as adopting cleaner production and pollution prevention as well as factors of competitiveness and economic performance for SMEs or reducing the generation of hazardous chemicals including PCBs and their use by means of the best available techniques (BAT) and the best environmental practices (BEP).
- A-53. Sub-component 2.2, MED TEST, is built on the TEST program that UNIDO started in 2000 in the Danube River Basin to reduce transboundary river pollution coming from different industries including food, beverages etc. of the participating countries: Bulgaria, Croatia, Hungary, Romania and Slovakia. Since then UNIDO has accumulated significant amount of experience as TEST has been replicated in several Regions worldwide within industrial hot spots areas. In addition, the national executing partners of MED TEST, National Cleaner Production Centres of the participating countries, indicated that thanks to the good line of communication that exist between them and the enterprises, it was not difficult to convince potential enterprises to get embarked in the project. In the three countries, UNIDO indicated that they have been able to leverage a total of \$ 278,300 as co-funding from the participating enterprises. However, during the mission in Tunisia, the evaluation team was told that the funds paid by the companies correspond to fees that the NCPC normally charge for providing services.

A-54. All the participating countries of sub-component 2.3, except Bosnia & Herzegovina that has not yet submitted its National Implementation Plan (NIP)¹⁰, are benefitting from experience gained and the institutional structure set up in the context of the preliminary PCB inventory undertaken during NIP enabling activities. Egypt, which submitted its in NIP in June 2006, is further benefitting from experience gained in a project “*Sound Management for Hazardous Chemical Substances*” funded by the Japan International Corporation Agency (JICA) (2006 – 2008). This project included a partial inventory of the Shubra el Kheirma industrial area in the vicinity of Cairo. The JICA inventory assessed all the power stations in the area, as well as a sample of public and privately-owned facilities.

B1. Sustainability

Socio-political sustainability:

A-55. The Arab Spring turmoil that occurred in some of the participating countries has seriously affected implementation of activities in sub-components 2.1 and 2.3. For example, the contracts of the international PCB consultants recruited in Jan 2011, date at which the Arab Spring started, had their contract terminated as they were not able to perform their duties as per the TORs. As a result of the Arab Spring and other political changes, the pilot project on recycling of lead batteries has stopped in Syria and, Syria and Libya have been replaced by Turkey and Bosnia & Herzegovina in Sub-component 2.3 for the ESM of PCBs. Finally, the activity 2.1.1 (Phosphogypsum management pilot project) and most activities of sub-component 2.3 have suffered significant delays: more than 1 year in most cases, 2 years for activity 2.1.1.

A-56. Fresh protests erupted in Egypt in November 2012 (just after the field mission of the evaluation team) and these may be affecting day to day communications and project implementation. For instance, despite numerous requests (email) for information from the MedPartnership focal point of Egypt, the evaluation team did not receive any response.

A-57. On the other hand, TEST MED does not seem to have been affected by the Arab Spring. The timing of implementation may have contributed to this effect as activities were well on track before protests of Arab Spring started. Also the protests were in the capital cities whereas the participating companies were located generally far from the cities (e.g. Alexandria for enterprises in Egypt). This was confirmed during the field mission; interviewees indicated that the participating enterprises, mostly private companies, were generally not affected by the protests as the main reason for these protests was for change at governmental level.

Financial resources:

A-58. Sub-components 2.1 and 2.3: According to the revised budget planning, approved at the third project steering committee, there have been changes in the funds allocation for the different components. In particular, it is noted with some concern that for these two sub-components there have been a reduction of budget allocation of about \$ 1,000,000 (GEF: \$140,000 and cash co-funding: \$ 860,000) with sub-component 2.3 (PCBs) suffering a reduction of about \$ 910,000 (GEF: -\$160,000 and cash co-funding: - \$750,000) while for sub-component 2.1 budget allocation has been reduced by about \$90,000 (GEF: + \$20,000 and cash co-funding: - \$110,000). Reasons for these changes were not given and it is not clear to what extent this decrease will affect the delivery of outputs for these sub-components especially for sub-component 2.3 where the budget reduction is significant (16% reduction of initially planned budget including in-kind contributions).

A-59. In one clear example however, the reduction by USD 500,000 of MTF funds available for PCB destruction ((BL 2213) could theoretically reduce the quantity of PCBs that could be destroyed by some 180 tonnes. Failure to mobilise outstanding MTF co-finance linked to component 2 activities can be expected to affect many aspects of MEDPOL's work.

A-60. It is also worthy to note that activities of sub-components 2.1 and 2.3 correspond to pilot projects aiming to reduce or eliminate pollution stress (e.g. Cr from tanneries, Pb and mercury from phosphogypsum wastes or destruction of PCBs). For impact, it is necessary that these pilot projects are successfully implemented. Table 4 of the main text indicates that as at June

¹⁰ <http://chm.pops.int/Implementation/NIPs/NIPSubmissions/tabid/253/Default.aspx>

2012, a significant amount of co-funding (about £ 1.5 M from MTF) for component 2 had not been made available for project activities. It is essential that this cash co-funding be mobilised in order not to compromise chances of success for these two sub-components to ensure impact.

- A-61. Sub-component 2.2: The TEST approach has been successfully implemented in 43 enterprises of the three participating countries: Morocco, Egypt and Tunisia. For an initial investment of \$17,801,342 to implement identified measures for cleaner production and for energy, water and raw material saving, those enterprises have made an overall annual profit of \$18,316,909. It is clear that the TEST approach has proven to be very profitable. However, an issue was raised during interviews regarding the availability of funds at low interest rate (soft loans) for investment for those measures that require large investment. Many stakeholders indicated that the high commercial interest rate prevailing currently is seen as a deterrent for sustainability and replicability of TEST.
- A-62. Most probably, one of the main reasons why the enterprises were willing to invest is the opportunity for a high rate of profit return that this project offered. What is not sure, however, is the willingness of the companies to invest for the protection of the environment. Indeed, although 10 enterprises have undertaken actions to obtain ISO certification, only one enterprise has taken initiatives to construct a waste water treatment plant. Certainly, the general feedback during the evaluation at the industrial level is that once an enterprise has successfully obtained the ISO 14000 accreditation¹¹ it will make the appropriate effort to maintain this level rather than having to go through a new and costly reappraisal. For many companies that trade with European countries, obtaining ISO 14000 was a driving factor as it is becoming more difficult to export to EU zone as regulations are becoming more stringent and having products manufactured in ISO accredited enterprises certainly help in bringing down barriers. However, for the WWPT issue, although many participating companies have identified this option as a measure for environmental protection, it is not clear whether investment will be made for their constructions unless laws are enforced. UNIDO and national authorities should explicitly monitor / follow up activities to ensure that these treatment facilities are built.

Institutional framework and governance:

- A-63. Sub-components 2.1 and 2.3: Impact of the project for these two sub-components largely depends on whether the planned policy reforms would be actually adopted and enforced by respective governments of the participating countries. It is anticipated that this would happen for most activities but given the delays encountered, there are risks this may not be the case for some activities (2.1.1, 2.1.3 and 2.3.1) during the project life.
- A-64. For the different activities to ensure impact, the capacity of relevant authorities must also be built accordingly. For example, for activities 2.1.2 (Cr in tanneries), 2.1.3 (lube oil) and 2.1.4 (lead batteries), it is important that the capacities of inspectors be adequately enforced.
- A-65. For PCBs (sub-component 2.3), the capacity (for PCB identification in particular) of the customs must be built to make sure that PCBs do not enter the country. It is also important that ESM schemes be developed and implemented at utility level to ensure that cross contamination, likely to be the main source contributing to increase the amount of PCB contaminated equipment in a country, does not occur and that potentially contaminated PCB equipment are no longer being sold to metal recyclers.
- A-66. For activities 2.1.5 (assessment of riverine inputs) and 2.1.6 (setting ELV and establish EQS), it is essential that end users (e.g. authorities that deliver permits or set limits) of the software / database receive the appropriate training.
- A-67. In the case of the phosphogypsum pilot project (activity 2.1.1), awareness of the project is high at country level, and GCT, state company and owner of phosphate processing plants, has clearly indicated their will to find a solution for the Ghannoche production site that discharges all its phosphogypsum wastes into the Gulf of Gabes.

¹¹ ISO 14000 family addresses various aspects of environmental management. It provides practical tools for companies and organizations looking to identify and control their environmental impact and constantly improve their environmental performance

- A-68. Sub-component 2.2 TEST MED: For this sub-component, chances for sustainability beyond the project life are high as key changes have been brought by the project to sustain efforts for cleaner production, in particular: a) enhanced national capacity to deliver integrated services to the industrial sector; b) increased awareness within the industrial sector for cleaner production and environmental protection; and c) increased awareness within environmental authorities.
- A-69. During the evaluation mission, the national executing counterparts for this project, the National Cleaner Production Centres (NCPC), that have a long experience dealing with the industrial sector in their respective countries, have indicated that they have integrated the main elements of the TEST approach in their scheme of duties. However, they noted that there was a need to specifically identify individual consultants with the required skills to work with the CPCs and companies in future if they were to include other industrial sectors not covered by the project so far. Although their capacity has been built during the project, they also felt that support from UNIDO is still required.

B2. Catalytic role and replicability

Sub-component 2.1

- A-70. One of the objectives of activity 2.1.1 was “to facilitate the transfer of know how related to environmental management of phosphogypsum from Tunisia to Syria and Lebanon in issues related to the improvement of legislative and institutional framework”. Given that Lebanon has pulled out of this pilot project and the political situation in Syria, it is unlikely that replication in these two countries would occur. It is however anticipated that experience gained and lessons learnt in Tunisia would be shared with these countries and other countries of the region where phosphogypsum waste management is a problem.
- A-71. For activity 2.1.2, according to the project document, it is planned “to prepare and to implement Guidelines on Cr and BOD control in tannery’s effluents with the collaboration of all concerned countries (including Albania, Algeria, Egypt and Turkey)”. The evaluation team does not foresee any major constraint in the development of such guidelines if the small scale pilot project envisaged for this activity is successfully implemented in Turkey.
- A-72. For activity 2.1.3, being run in Algeria, one of the planned objectives is to “to transfer the know-how and the expertise of the Tunisian and Bosnia-Herzegovina authorities on the organization of the lubricating oil recycling and regeneration system to Algeria and other concerned countries (Albania, Croatia, Egypt, Morocco, Montenegro, Palestinian Authority and Syria)”. According to planned activities for the second part of this pilot project in Algeria, it is not envisaged, in the context of the small scale pilot project, for the actual recycling of used lubricating oil and the regeneration system, but rather for the collection only. So transfer of know-how in the context replication purposes is not possible within the project life. However, Tunisia and Bosnia-Herzegovina sharing their experience and expertise on recycling of used oil and regeneration system with the other countries within the project life is considered feasible by the evaluation team.
- A-73. In the case of activity 2.1.4 that was run in Syria, it was planned “to transfer the gained know-how and the expertise on the lead batteries recycling to Albania, Algeria, Croatia, Egypt, Libya, Morocco, Montenegro, Palestinian Authority, Tunisia and Turkey”. Implementation has stopped due to war. However, even if the situation in Syria allowed for project implementation to continue, it was not planned the actual recycling of lead batteries but rather to implement on a small scale a pilot project for collection of used lead batteries¹². As mentioned earlier, to benefit from outputs already delivered (reports of consultant) practical guidelines for the sound management of lead batteries based on reports for Syria and on Basel Convention guidelines could be developed, and disseminated to other countries through a regional workshop.
- A-74. For activities 2.1.5 and 2.1.6, it is planned “to introduce ELV and EQS in the legislation of Albania, Algeria, Bosnia-Herzegovina, Croatia, Egypt, Libya, Morocco, Montenegro, Tunisia and Turkey, for all substances included in the SAP targets for the protection of the Mediterranean marine ecosystem” and to “to propose changes in the institutional framework of the GEF-eligible countries to ensure the proper use of the ELV and EQS for the protection of the Mediterranean

¹² Interview data from MEDPOL

Sea” respectively”. The evaluation team does foresee any major difficulty for these objectives to be met as the main tasks (development of software and models, creation of data, GIS mapping, etc.) for these two activities are being undertaken by international consultants recruited by UNEP/MAP.

A-75. For activities 2.1.7 to 2.1.9, the major objective is to enhance and update the inspectorates in the following countries: Albania, Bosnia and Herzegovina, Croatia, Lebanon, Morocco, Montenegro, Syria and Turkey. At midterm, only one meeting has been organized so far. In that context, it is difficult to assess the replicability of these activities. It would be more appropriate to undertake assess this aspect at the end of the project.

Sub-component 2.2

A-76. The results, outcomes and lessons learned of the MED TEST project were shared with other countries of the Mediterranean Countries, EU and other stakeholders at a regional workshop held in Vienna in September 2012. This workshop was very successful as seven million Euro has already been secured from EU for a replication of MED TEST that will target 150 enterprises covering 10 countries. The results of the MED TEST project are also reported in the ‘Water Management page’ of the UNIDO sub-site “*Environmental Management*” at: www.unido.org/MEDTEST.

A-77. At national level, lessons learned were shared through organization of national seminars in each of the countries and results published in brochures for dissemination. The outcomes of the project were also promoted to other enterprises through introductory seminars on the TEST approach. The potential for replication is very high and many enterprises have shown interest in the TEST approach during those promotion activities¹³. However, as mentioned earlier under the sustainability section, the associated costs with the first phase of the TEST approach and high investment costs for change in technology were seen as a major barrier by many stakeholders of the industrial sectors. The availability of soft loans is seen as a possible solution by many of the stakeholders interviewed.

Sub-component 2.3

A-78. The Stockholm Convention (SC) recognizes that it will require time and resources for parties to eliminate PCBs on a global level. In that context, SC sets the goal of 2025 for phasing out the use of equipment containing PCBs (e.g. transformers, capacitors or other receptacles containing liquid stocks), and the treatment and elimination of the recovered PCBs by 2028.

A-79. This sub-component is helping the participating countries to build their capacities for the environmental sound management of PCBs, in particular to carry out a partial inventory, phasing out and disposal of an agreed quantity¹⁴ of PCBs and PCB contaminated equipment. It is anticipated that the capacity built through this project will help the countries to meeting the Stockholm Convention 2028 goal to totally phase out PCBs through other initiatives. For example, in Egypt, synergies of this project with a WB project being developed for the “*Integrated and sustainable POPs Management*” that include the total elimination of PCBs is expected. This WB project will cost \$ 23,600,000 with GEF financing at a level \$8,100,000 and other donors co-financing \$15,500,000.

C1. Preparation and Readiness

A-80. As discussed in the section A Introduction of this Annex 6, component 2 has been modified and the original sub-component 2.2 “sustainable financing mechanisms for pollution control” has been removed. The removal of this sub-component has impacted on the feasibility of activities of sub-component 2.1 where pilot projects are planned for recycling wastes that depend greatly on financial mechanisms for the set-up of recycling facilities. The evaluation considers this to be a weakness. The planned recruitment of a joint PMU/MAP sustainable finance officer may address this.

Sub-component 2.1

¹³ Interview data

¹⁴ Given the delays encountered by the project, this quantity needs to be re-discussed and agreed upon (see recommendations)

- A-81. Although the project document contains nearly 800 pages of annexes including a detailed description of the different components, the evaluation felt that the indicators¹⁵ proposed for some activities of this sub-component are poor probably due to inadequate consultation during the preparation phase of the project. For the activity 2.1.1 for example, the objectives as set in the project document are feasible within the scope of the project. However, the indicators proposed in the annexes (50% pollution reduction at the demonstration sites: min. 1.03 tons cadmium (Cd), 90.75 tons mercury (Hg) and 0.93 lead (Pb) indicate an inadequate preparation phase of this activity. If a proper consultation were carried out prior to the proposal of these indicators, it would have been evident that the only option to stop pollution in the Gulf of Gabes due to the discharge of phosphogypsum wastes is the construction of an appropriate landfill. This construction is beyond the scope of the project and the running of a small scale pilot project as proposed in the project document is irrelevant. The pulling out of Lebanon from this pilot project suggests an inadequate consultation with the relevant authorities during the preparatory phase.
- A-82. The evaluation also considers that the proposed indicators for activity 2.1.2 (Cr from tanneries) are inappropriate. Given that only a small scale pilot project is envisaged for this activity¹⁶ and up scaling is not planned, (at least planning and costing of activities in project document not appropriate for this), the reduction of minimum of 76.5 tons of Cr and 1,755 tons of BOD from tannery effluents avoided in Turkey as mentioned as indicators (Table E5, annex 5 of the project document) for this activity is not likely to happen during the project life.
- A-83. Activities 2.1.3 and 2.1.4 concern the recycling of wastes: used lubricating oil and used lead batteries respectively. Generally, the recycling of wastes is normally undertaken by private companies, which means investment and profit making. For these two activities, unless facilities for recycling these two wastes already exist in the two countries (Algeria and Syria) where the pilot projects are being run, otherwise no mention about the setting up of such facilities are mentioned in the project document. And this would have implied the identification of a private partner, risk assessment and environmental impact assessment permits, investment for construction of facilities and development of a business plan / model. On the other hand if such facilities existed, which is not stated in the project document, the pilot projects would have been for the implementation of collection systems only. The evaluation team considers that the design of this sub-component is poor and could have been improved by integration of the elements mentioned above as the information regarding of existence of such recycling facilities could have been easily obtained during the preparatory phases. Furthermore, as the actual recycling of used oil is not planned but rather the implementation of a pilot project for the collection of used oil on a small scale and no up-scaling
- A-84. In view of the above, this sub-component could have benefited greatly from a more prolonged preparatory phase, which would have allowed for more and better consultation with national counterparts that would have allowed a better understanding of the situation and an improved project design.

Sub-component 2.2

- A-85. The project strategy, design, in particular the intervention logic, and implementation approach is based on UNIDO's substantial experience in implementing industrial environmental projects and in particular the TEST programme in the Danube River Basin and in China. The criteria to choose countries having cleaner production centres, which eventually acted as national executing counterparts, helped also in facilitating the implementation process. Indeed, these centres, already involved with the industrial sector, helped in the identification of enterprises and facilitated the initial contacts between the project and the enterprises. As funds became available, activities were successfully executed by the national counterparts aided by locally recruited technical experts. The whole implementation process was adequately supervised and monitored by UNIDO.

Sub-component 2.3

¹⁵ Annex E, Table E5, page E-15

¹⁶ Interview data, MEDPOL

- A-86. The evaluation team considers that the Arab Spring, delays in procurement and change in task manager are not the only reasons for delays that this sub-component suffered. The lack of coordination at national level, due to unclearly defined roles of stakeholders in the project document, and poor communication between project management and national counterparts, (roles were not clearly defined) also caused delays seen in this sub-component. In that context, this component could have benefited from a similar team and expert group with clearly defined roles as those (constitutions reproduced below) planned for activity 2.3.4 in annex F of the project document.
- PCB capacity building team. This team will be in charge of the management and implementation of the capacity building activities of the PCB Project. This team is composed by the CPRAC with the collaboration of the Secretariat of the Basel Convention and the Basel Convention Regional Centre-Cairo. This budget item will cover some necessary administrative-technical support, equipment, accessories, travel, etc. for this overall management.
 - Establishment of an international and national expert group on capacity building. Ten (10) International and National consultants will be engaged for project implementation. These consultants consist of one (1) International Chief Technical Advisor (CTA), (1) Assistant for the Chief Technical Advisor (ACTA), five (5) National Technical Advisors (NTA) (one in each country), three (3) International technical /policy experts.
- A-87. Of course, the constitution of the PCB team for the whole sub-component 2.3 would have been different from that proposed for activity 2.3.4 above. It would have included national counterparts and other relevant stakeholders (e.g. utilities) and would have worked closely with the expert group that would have guided in the execution of activities especially those activities like inventory, phasing out, collection, transport and storage that require elaborate and proper planning and frequent field missions.
- A-88. This sub-component 2.3 could also have been improved by planning a proper PCB inventory and estimating the associated costs. The information on PCBs came mainly from NIP reports, and these data are very preliminary and they are not based on actual chemical testing but rather on estimate based methods. The cost associated with a proper inventory (e.g. the purchase of equipment for PCB analysis) was not considered in the costing of this sub-component.

C2. Implementation Approach

- A-89. Except for sub-component 2.2 (MED TEST), fully executed by UNIDO, the overall management of the component 2 is done by MEDPOL with the cooperation of CP/RAC and Basel Convention Regional Centre in Egypt making use of their in kind contributions for two activities (2.3.3 and 2.3.4) in sub-component 2.3.
- A-90. MEDPOL staffing for this component is a task manager with partial support for administrative purposes. Given the number of pilot projects in this component and the amount of work that this requires, the evaluation feels that the task manager could benefit from more internal support to ensure proper project implementation. As planned CP/RAC has recruited a chief technical advisor (CTA) for coordination at regional level, and at national level a National Technical Advisor has been recruited in each country for coordinating activities at national level. UNIDO staffing is considered adequate for the MEDTEST, a project manager (PM) for overall management and a CTA and providing supervision and guidance with the help of the PM.
- A-91. Generally, the approach adopted by the executing partners was similar. The first step is to establish or set up national counterparts. For the sub-components 2.1 and 2.3, they are generally the Ministry of Environment. For the TEST MED project, they were the NCPs and technical centres located at the Ministry of Industry. These national counterparts are responsible for executing activities at national level with technical support, whenever required, provided by national or international consultants recruited by UNEP/MAP on recommendation by MEDPOL or the executing partner (CP/RAC or UNIDO). For example, in the case of pilot projects on phosphogypsum wastes or used oil, national consultants have been recruited by UNEP/MAP for country situation assessment. For TEST, although UNIDO could provide some technical support, consultants were recruited to assist national counterparts for successful implementation of project activities.

- A-92. In the case of MED TEST, a Project Advisory Board constituted by relevant stakeholders from the NCPCs, pollution control institutes, and from government was also set up in each of the countries to monitor progress and to provide guidance. In particular, it has played an important role in the selection of enterprises. For the two other sub-components, similar national boards or steering committees are not planned. The evaluation feels that having such committees at national level would have definitely benefitted the project in terms of visibility, awareness at national level and ownership.
- A-93. For the MED TEST MED project, the approach is considered appropriate delivering successfully in terms of outputs (saving on water and energy, environmental gain, high rate of return) and outcomes (environmental awareness, cleaner production approach, adoption of TEST approach). For the other two sub-components, although the approach seems appropriate, it is however too early for a meaningful assessment.

C3. Country Ownership, Stakeholder Participation and Public Awareness

- A-94. For sub-components 2.1 and 2.3, the national counterparts of the project are generally ministries, and for the MED TEST the focal points were cleaner production centres and technical centres located at Ministry of Industry as well as private consulting firms.
- A-95. Whilst for MED TEST Project Advisory Boards were established in the countries, no formal national steering bodies are planned in the project document for sub-components 2.1 and 2.3. For many activities, ad-hoc stakeholder groups constituted by major stakeholders were formally created on the initiative of the lead authority. For example, in the case of the phosphogypsum pilot project (activity 2.1.1), the ministry of environment is leading the stakeholder group constituted by the relevant ministries and GCT, owner of the phosphate processing plants in Tunisia. At the first meeting of this group that coincided with the evaluation mission, the findings of the assessment of the country situation were presented to the group by the national consultant. For the lubricating oil pilot project, a national workshop was held in April 2012 at the Ministry of Environment to review the progress achieved and to decide on the next steps. During this workshop, attended by representatives of different ministries, local authorities, private sector, NGO, MAP national focal point, MEDPOL and CP/RAC, it was agreed to establish an inter-sectorial working group headed by the Algerian MAP focal point that would guide the continuation of the project. Similar activities have occurred for sub-component 2.3 where the national counterparts have been involved since inception, and in most countries the institutional capacity built since NIP enabling activities is likely to benefit the project.
- A-96. For sub-components 2.1 and 2.3, the country ownership seems to be adequate however the evaluation considers that if the appropriate national steering bodies with the appropriate terms of reference were planned in the project document, the country ownership would have been much higher and the project would have been more visible at national level.
- A-97. In the case of MED TEST, the evaluation considers the country ownership to be satisfactory. The Project Advisory Boards were directly involved in the monitoring and supervision of the project. They were also involved in the selection process for the enterprises, the identification of industrial sectors the project should focus on, and in negotiations between the enterprises and the project including signature of agreements. The NCPCs were directly involved in the execution of activities and have integrated elements of the TEST approach in their portfolios of service (e.g. Tunisia).
- A-98. In terms of dissemination, UNIDO has created a webpage www.unido.org/MEDTEST that reports the lessons and results of MED TEST within the UNIDO website where it is mentioned that MED TEST was run in the context of the MedPartnership project. CP/RAC has also created a website (<http://pcbsmed.org/>) but no national information or data regarding PCBs of the four countries (Egypt, Albania, Bosnia-Herzegovina and Turkey) has been posted yet. For the component 2, there is no evidence of general public awareness through popular media so far.

C4. Financial Planning and Management

- A-99. UNEP is managing the funds allocated for activities that MED POL is implementing while UNIDO and CP/RAC are managing their own funds.

A-100. For Sub-component 2.1 and 2.3, see section B1 Sustainability on financial resources, the discussion about changes in the funds allocation that may affect MEDPOL's work for these two sub-components and also the need to mobilise cash co-funding to ensure impact.

C5. Monitoring and Evaluation

A-101. A specific monitoring and evaluation procedure for Component 2 and its sub-components, except for sub-component 2.2 that reports directly to GEF, is given in Annex F of the project document. Following this procedure, the MEDPOL task manager indicated that reports on progress made by the project are submitted to the CU every six months. The task manager also indicated that biannual progress reports are submitted for the MEDPOL Focal Point meeting that is held every 2 years. Although the evaluation did not get copies of these reports, the task manager said that these are available.

A-102. For TEST MED, UNIDO indicated that the standard procedures for reporting and monitoring were followed and reports were submitted. UNIDO also indicated that they contributed to the annual PIR of the Medpartnership project. This is indeed reflected in the PIR reports that the evaluation consulted. At national level progress is monitored by the PAB. It is to be noted that midterm evaluation has not been undertaken for this stand-alone project.

Conclusions, Lessons and recommendations

Conclusions

A-103. Component 2 was originally planned to have four sub-components, however the sub-component "Sustainable financing mechanisms for pollution control activities" has been removed but the objective of Component 2 that reads "to develop, draft and issue national and regional legal, policy and institutional reforms that address SAP-MED and the NAP priorities, to implement targeted actions for reducing pollution in the Mediterranean and to facilitate the financial sustainability of future NAP implementation activities" has not been modified accordingly. The removal of this sub-component has impacted on the feasibility of activities of sub-component 2.1 as pilot projects for recycling depend greatly on financial mechanisms for the setting up of recycling facilities. The planned recruitment of a joint PMU/MAP sustainable finance officer may address this.

A-104. The Arab spring and other political events have caused country change or project implementation to stop. For example, Libya, Syria and Lebanon have been replaced by Bosnia-Herzegovina and Turkey for sub-component 2.3 and the implementation of the pilot project on recycling of lead batteries in Syria has stopped.

A-105. The Arab Spring plus other factors have affected the delivery of products / outputs for many of the activities of sub-components 2.1 and 2.3. However, in many cases the activities are back on track. For example, for most activities of sub-component 2.1, consultants have been recruited and reports submitted.

A-106. For activities 2.1.7 to 2.1.9 relative to enhancing national capacities of the countries for inspection and permits, due to movement of the task manager, implementation has stopped; only one meeting has happened so far.

A-107. For sub-component 2.1, the anticipated pollution stress reduction¹⁷ set out in the project document is not likely to happen due a poor design of this component and inappropriate consultation during preparation phases.

A-108. Sub-component 2.2, the MED TEST project, is being successfully implemented in Egypt, Morocco and Tunisia. Through an appropriate implementation approach with adequate supervision and monitoring from UNIDO, the MED TEST has delivered successfully both in terms of outputs (saving on water and energy, environmental gain, high rate of return) and

¹⁷ Stress reduction indicators given in Table E5 of annex E of project document

outcomes (environmental awareness, cleaner production approach, adoption of TEST approach). With appropriate sources of funding, potential for replication is high.

A-109. The Arab Spring and other political events have particularly impacted on implementation process for sub-component 2.3. For example, as the consultants could not fully perform their duties according to the relevant TORs in the countries (Egypt, Syria, Libya), their contract were terminated. As a result of the Arab Spring and also change in Task Manager and delays in procurement, this sub-component has suffered more than 2 years delay. Given the amount of work left to be done for this sub-component, an extension of the project would be required for successful completion of activities (see recommendation section).

A-110. Implementation of the some of the proposed recommendations below would require funding over and above what is currently allocated in the project budget. The evaluation considers that the associated costs to these recommendations would largely be covered by the funds that would be saved from recommendation 9. About US\$ 1.1 million would be saved against the original budget if only 500 tons of PCB are planned to be destroyed. The equivalent saving on the 2012 budget is USD 600,000.

A-111. There is also a need for a proper analysis on the extent to which delivery of sub-components 2.1 and 2.3 would be impacted if MTF funds are not mobilised.

Table 6-1. Lessons

Conclusion/Context	Lessons
<p>Component 2 has been redesigned. Originally, it was comprised of 4 sub-components but the sub-component 2.2 "<i>sustainable financing mechanisms for pollution control</i>" has been removed". The removal of this sub-component has impacted on the feasibility of activities of sub-component 2.1 where pilot projects are planned for recycling wastes that depend greatly on financial mechanisms for the set-up of recycling facilities. The evaluation considers this to be a weakness. As a result it is unlikely that the pollution stress reduction as planned in the project document is not likely to happen (Para A-4 & A-5)</p>	<p>Inappropriate redesigning of project proposals may lead to unrealistic expected outcomes</p>
<p>This pilot project for management of phosphogypsum slurry started with more than 2 years delay due to Lebanon late decision not to participate in this activity, political instability and also changes at Ministerial level. Tunisia requested to start activities in 2012. The late decision of Lebanon not to participate in the project suggests inappropriate consultation during preparatory phases. (Para A-41)</p>	<p>Proper consultation during preparatory phases avoids delays in project implementation.</p>
<p>The three reports submitted by the consultant (Spanish), recruited for the pilot project on used oil recycling, were of very poor quality. The reports were not comprehensible due to the poor level of the language (English). (Para A-15)</p>	<p>Recruiting consultants with adequate level in the reporting language ensures comprehensive reports.</p>
<p>For the MED TEST, a Project Advisory Board (PAB), constituted by relevant stakeholders from the CPCs, pollution control institutes, and from government was set up in each of the countries to monitor progress and to provide guidance. In particular, it has played an important role in the selection of enterprises. For the two other sub-components 2.1 and 2.3, similar national boards or steering committees are not planned. The evaluation feels that having such committees at national level would have definitely benefitted the project in terms of visibility, awareness at national level and ownership.(Para A-94)</p>	<p>Planning the appropriate institutional infrastructure / bodies with clearly defined roles / TORs increases chances for successful project implementation.</p>

