

**Regional Meeting on NAPs
implementation – Lessons
learned and the way forward
Marseille, 17-18 October 2016**



Updated National Action Plans/POM of Lebanon

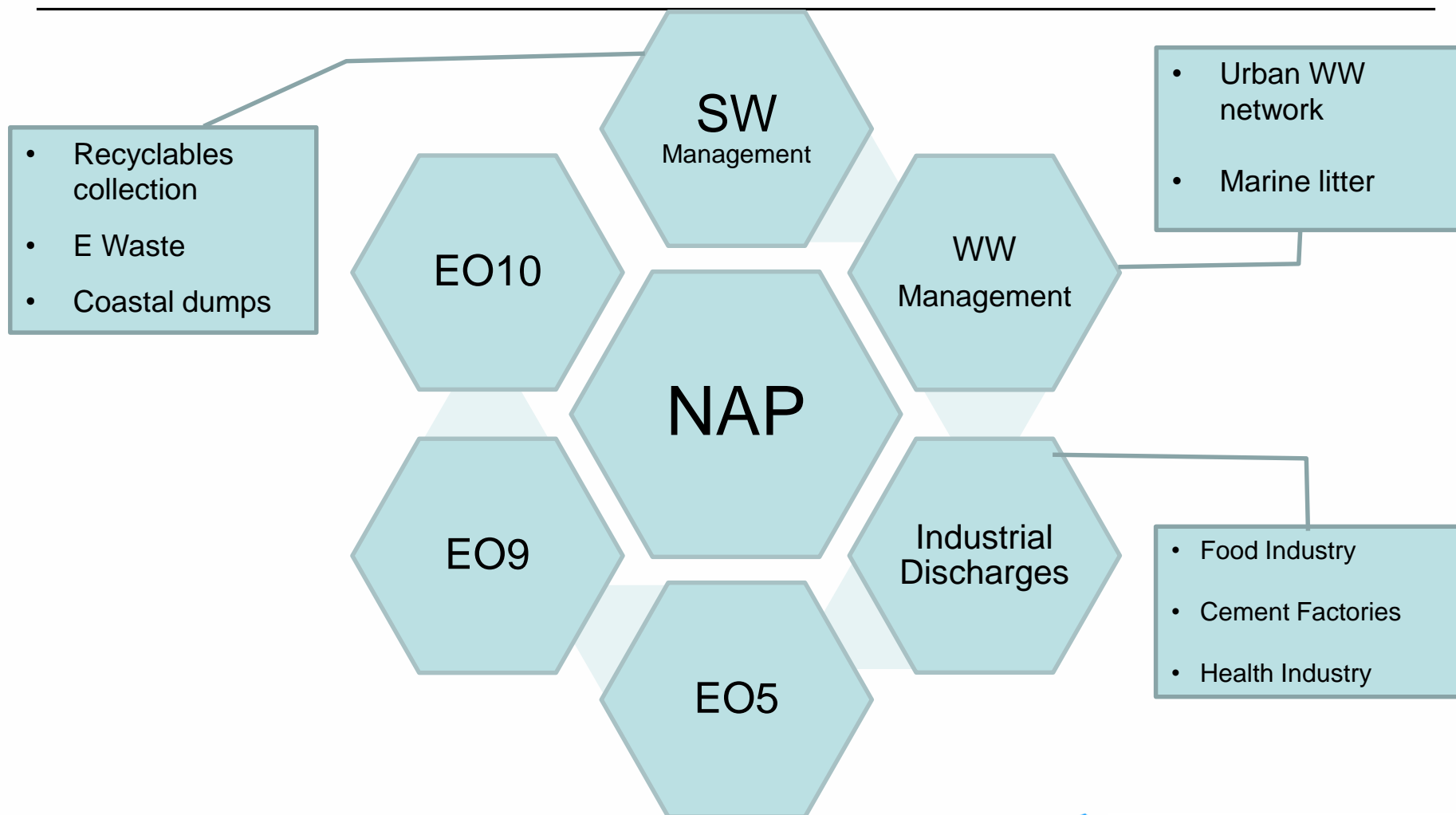
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Ministry of Environment
Lebanon
Marseille, October 2016



United Nations Environment Programme /
Mediterranean Action Plan (UNEP/MAP)
Barcelona Convention



Focus of Updated NAPs/POM



Objectives for Updating the NAPs

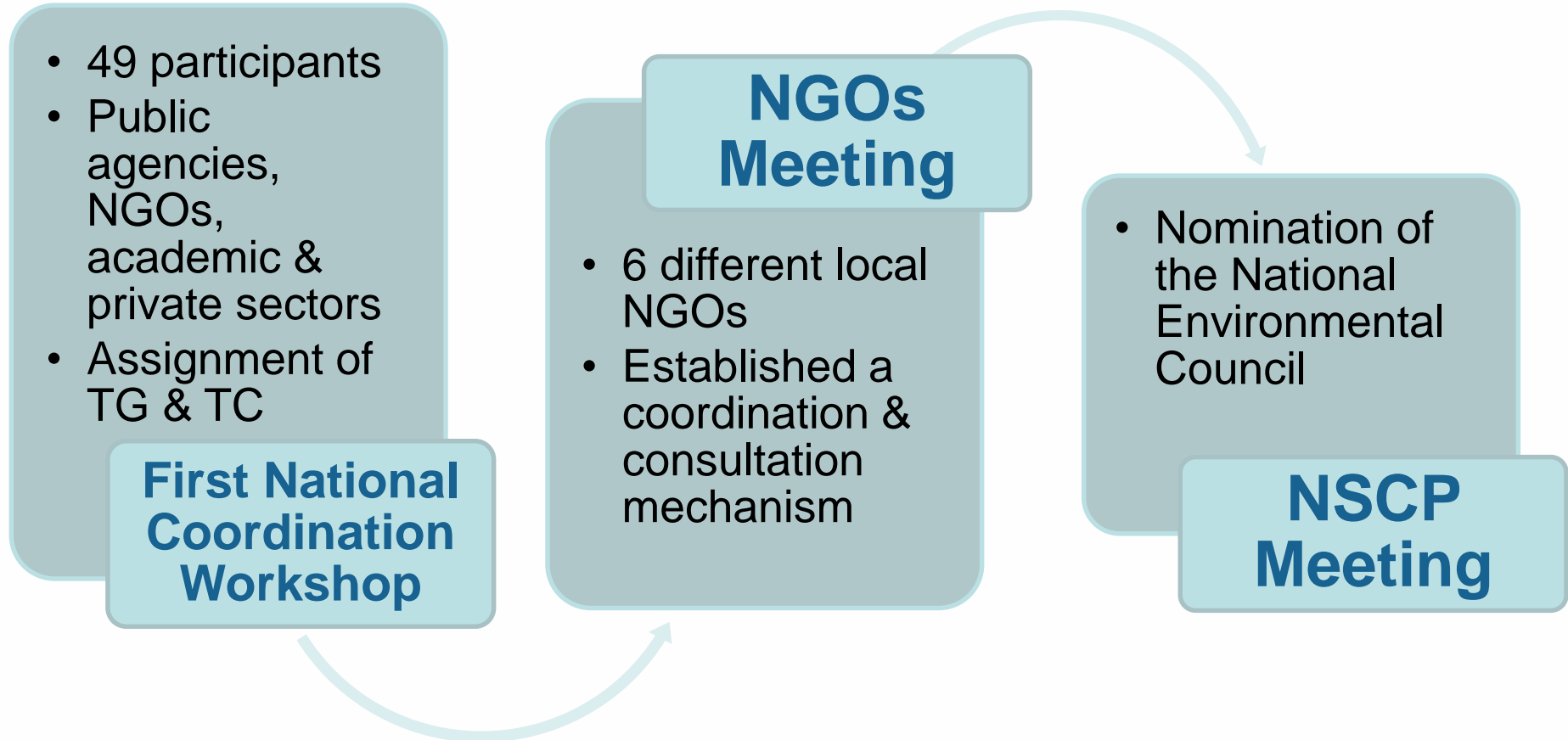
Overall objective:

Evaluation of progress of **NAP of 2005**
& chart the roadmap for enhancing
compliance to **Barcelona Convention**

Specific Objectives:

1. Identification of measures to achieve GES
2. Prioritization of investment needs
3. Strengthening of synergies (policy frameworks, programs, projects, initiatives...)

Process followed



Content of Updated NAPs – Main Parts

Assessment

- LBS of pollution
- Environmental services & Pollution trends
- Updated hotspots
- Legal-institutional frameworks
- Monitoring mechanisms
- Economic & Financial tools
- Implemented measures for pollution prevention & control
- Implemented and ongoing projects since 2005

Objectives

- Methodology & Rationale
- Presentation of operational targets

Gaps

- Legal & Institutional frameworks
- Requirements for pollution prevention & control measures
- Public participation, awareness & info access
- Monitoring
- Reporting

Content of Updated NAPs – Main Parts

PoM

- Prioritization issues & identification of potential measures
- Selecting the PoM
- Limitations

Monitoring Plan

- Rationale
- Monitoring Program
- Institutional arrangements

Capacity Building

- Capacity building & awareness raising
- Public participation



Hot Spots and Sensitive areas

| Category | Nbr | Priority pressures |
|-----------------------------------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hot spots (A) | 8 | <ul style="list-style-type: none"> • Large population centers (main cities) • Coastal landfills • Poor wastewater treatment infrastructure • High levels of contaminants in sea water (discharges from residential, industrial or power generation centers) • Environmental and economic sensitivities • River discharges |
| High risk areas Hots Spots (B) | 14 | <ul style="list-style-type: none"> • Urban densities • Poor municipal waste management infrastructure • Poor municipal wastewater treatment infrastructure • Industrial discharges • Environmental and economic sensitivities |
| Sensitive areas (C) | 1 | <ul style="list-style-type: none"> • Population density • Municipal Liquid and solid waste discharges • Environmental and economic sensitivities |

National Operational Pollution Reduction Targets

| Operational targets | Sectors | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----|
| Ensure that all Industrial Food Plants discharging more than 4000 PE into <u>water bodies</u> comply with the discharge requirement of a maximum COD 160 mg/l and BOD 30 mg/l by 2020 | Industrial Pollution & WW | EO5 |
| Update ELVs for effluent discharged by food sector installations directly in the <u>sewerage system</u> and develop a discharge authorization system compatible with the operation and the emission discharge values of the urban waste water treatment plant by 2020 | Industrial Pollution & WW | EO5 |
| Reach 100% urban WW network and treatment coverage for agglomerations of more than 2000 inhabitants by 2019 | WW | EO5 |

National Operational Pollution Reduction Targets

| Operational targets | Sectors | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----|
| Reach 50% reduction in discharges, emissions and losses of mercury, cadmium and lead originating from the cement industry by year 2020 and 100% by year 2025 | Industrial Pollution | EO9 |
| Reach 50% reduction in discharges, emissions and losses of zinc, copper and chrome originating from the cement industry by year 2020 and 70% by year 2025 | Industrial Pollution | EO9 |

National Operational Pollution Reduction Targets

| Operational targets | Sectors | | |
|-----------------------------------------------------------------------------------------------------------|---------|-----|------|
| Ensure safe and environmentally sound disposal of e-waste produced by 2025 | SW | EO9 | EO10 |
| Ensure safe storage and containment of mercury waste produced by healthcare sector by 2025 | SW | EO9 | EO10 |
| Reach 15% recyclables recovery from the general MWS by 2020 and 20% recovery by 2025 | SW | | EO10 |

National Operational Pollution Reduction Targets

| Operational targets | Sectors | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|------|
| Close 10% and 30% of illegal municipal solid waste dump sites identified as top 20 priorities (by the Master Plan for Closure and Rehabilitation of Uncontrolled Dumps) by 2020 and 2025 respectively | SW | EO5 | EO10 |
| Strengthen existing national programs for Marine Litter Clean-up to reach a 50% reduction in marine litter deposition on the beaches by 2019 | SW | EO5 | EO10 |
| Implement adequate waste reducing/reusing/ recycling measures in order to reach 3% plastic recovery from the general MSW stream by 2019 | SW | | EO10 |

Priority Measures



- ▶ Developed based on the gap analysis
- ▶ Covered all operational objectives



- ▶ Included legal, institutional, economic and/or technical interventions



Priority Measures

| Measure categories | Number of measures | Relevance to EO | | |
|--------------------|--------------------|-----------------|-----|------|
| | | EO5 | EO9 | EO10 |
| Legal | 3 | 2 | | 3 |
| Institutional | 9 | 7 | | 3 |
| Economic | 7 | 4 | | 3 |
| Technical | 15 | 5 | 8 | 8 |

List of indicators

| EO | Indicators |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eutrophication | <ul style="list-style-type: none"> • BOD5 and COD loads prior to discharge from Industrial Food Plants discharging more than 4000 PE • Companies (LBS Protocol) applying Cleaner Production/BAT/BEP • Population with access to an improved sanitation system • WW collected and treated (in population equivalent) • Treated WW by type of treatment (primary, secondary, tertiary) • Number of industrial discharge authorization issue |
| Contaminants | <ul style="list-style-type: none"> • Cement industry's discharges/emissions/losses of Hg, Cd and Pb • Cement industry's discharges/emissions/losses of Zn, Cu and Cr • Accredited laboratories equipped to test for heavy metals |

List of indicators

| EO | Indicators |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Marine litter | <ul style="list-style-type: none"> • MSW generation per capita • Treatment or disposal method of MSW (recycled, composted, incinerated, treated in waste-to-energy facilities or landfilled) • Composition of MSW (paper/paperboard, textiles, plastics, glass, metals, other inorganic material, organic material) • Closed/remediated illegal dumpsites at coastal area • Trends in the amount of litter washed ashore and/or deposited on coastlines, including analysis of its composition, spatial distribution and, source. |

Project Fiches

| Project Title | Objectives | Relevant EO | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|-------|
| 1- Strengthening MSWM in the coastal zones of Lebanon | | | |
| <ul style="list-style-type: none">• Rehabilitation of hot spots• Improve solid waste management• Reduce marine litter | | EO 5 | EO 10 |
| 2- Upgrade and expansion of Saida’s sewer network and STP | | | |
| <ul style="list-style-type: none">• Improve wastewater collection & treatment coverage• Reduce direct discharges of wastewater into water bodies | | EO 5 | EO 10 |

Project Fiches

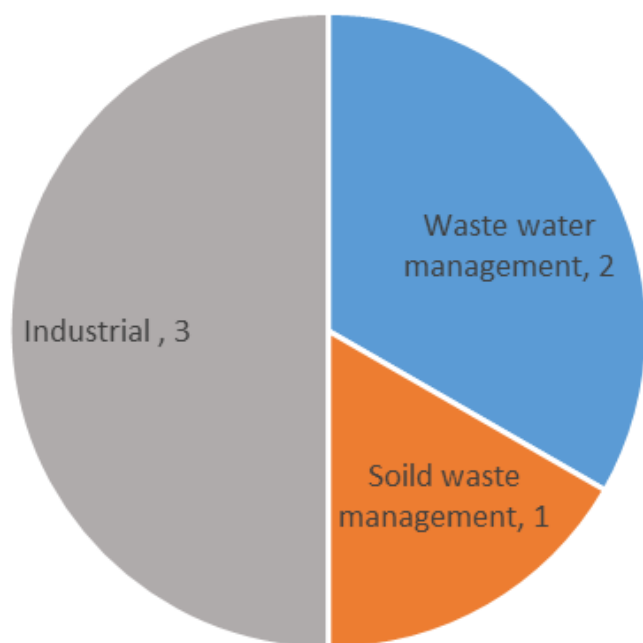
| Project Title | Objectives | Relevant EO |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|
| 3- Technical assistance to improve WW management in the coastal areas Rehabilitation and expansion of the sewer network covered by the Tripoli STP | | |
| <ul style="list-style-type: none"> • Rehabilitation of hot spot • Improve wastewater collection coverage • Reduce direct discharges of wastewater into water bodies | | EO 5 |
| 4- Technical assistance to improve reduction and monitoring of emissions from cement industries | | |
| <ul style="list-style-type: none"> • Reduce industrial pollution • Improve monitoring capabilities | | EO 9 |

Project Fiches

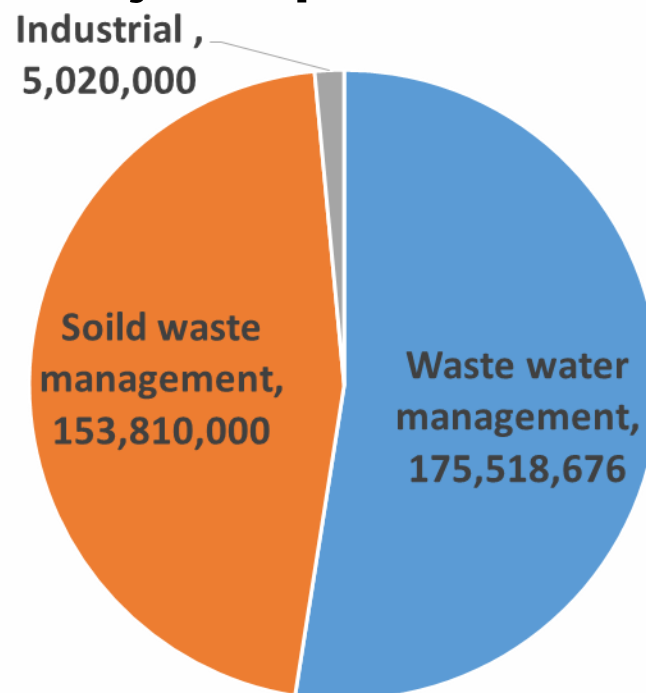
| Project Title | Objectives | Relevant EO | |
|--------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|------|
| 5- The preparation of Business plan for abatement of industrial pollution in the Al-Ghadir drainage area | | | |
| <ul style="list-style-type: none">• Reduce industrial pollution• Improve monitoring capabilities | | EO 9 | |
| 6- Technical assistance to food sector industries to adopt cleaner production and reduce and control emissions and discharges | | | |
| <ul style="list-style-type: none">• Reduce direct discharges of organic matter• Improve wastewater management | | EO 5 | EO 9 |

Project Fiche Breakdown

Number of Projects per sector



Total Cost (€) of Projects per sector



Limitations of NAP update process

- Faulty public and stakeholder participation process
- Lack of a quantitative data collection
- Pollutant reduction percentages set by operational targets lack scientific validation
- Inability to identify effective solutions for the municipal solid waste management (MSWM) sector

Questions?

Thank you for your attention



Republic of Lebanon
Ministry of Environment