

Roadmap for Scaling up Resource Efficiency

Lebanon

English Edition



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This document provides a brief description of the roadmap for scaling up Resource Efficient and Cleaner Production (RECP) in industry in Lebanon based on the experience of the UNIDO MED TEST II component implemented as part of the SwitchMed Program¹. The roadmap was developed between June and November 2017 through a series of bilateral consultations, which were conducted with the support of the UNIDO MED TEST II project and in coordination with the Industrial Research Institute (IRI). These consultations were held with key stakeholders and were used to build their active participation and contributions: the Ministry of Industry (MoI), the Ministry of Environment (MoE), the Association of Lebanese Industrialists (ALI) and the Chamber of Commerce and Industry and Agriculture of Beirut and Mount-Lebanon.

This document builds on the Sustainable Consumption and Production (SCP) National Action Plan that targets the industrial sector, which was developed by the Lebanese government with the support of UN Environment in 2015 and within the framework of the SwitchMed Program².

¹ For more information: switchmed.eu.

² Ministry of Environment, Ministry of Industry, UN Environment, SwitchMed. 2015. Sustainable Consumption and Production Action Plan for the Industrial Sector in Lebanon: www.switchmed.eu/en/news/news-1/full-report-sustainable-consumption-and-production-action-plan-for-the-industrial-sector-in-lebanon.

ALI	Association of Lebanese Industrialists	MoI	Ministry of Industry
IPPC	Integrated Pollution Prevention and Control	RECP	Resource Efficient and Cleaner Production
IRI	Industrial Research Institute	SCP	Sustainable Consumption and Production
LCPC	Lebanese Cleaner Production Center	TEST	Transfer of Environmentally Sound Technology
MoE	Ministry of Environment	UNIDO	United Nations Industrial Development Organization

1. Initial Situation

As a part of the policy component of the SwitchMed MED TEST II project, in 2016, the IRI conducted a baseline study to assess the extent to which existing legislation and policies related to sustainable development address the concept of Resource Efficient and Cleaner Production (RECP) in the industrial sector in Lebanon.

The study revealed a limited number of legislative texts that clearly point to the use of RECP as a preventative strategy for handling and going beyond environmental compliance in industries, which would be in line with the concept of Integrated Pollution Prevention and Control (IPPC) that is adopted in other parts of the world, including the European Union.

In addition, the study revealed a lack of financial incentives, such as soft loans for RECP investments that integrate water, material and energy solutions. The soft loans that do exist are mainly directed at financing energy efficiency, renewable energy and/or end-of-pipe technologies for environmental compliance.

In Lebanon, several institutional players are responsible for establishing the framework for industry's environmental and energy performance (Ministry of Environment, Ministry of Industry, Lebanese Cleaner Production Center, Lebanese Center for Energy Conservation, etc.). This fact poses some challenges to coordinating the scaling-up of and support for promoting RECP in the industrial sector.

Nevertheless, Lebanon has significant potential to adopt SCP as a win-win strategy for addressing competitiveness and improving the environmental performance of the industrial sector, as it has been demonstrated by the MED TEST II project and the Lebanese Cleaner Production Center, which has been active since 2004.

Based on the aforementioned, a number of RECP policy instruments for mainstreaming RECP in the Lebanese manufacturing sector were identified within the scope of the SwitchMed MED TEST II project. These policy instruments were conceived by institutional stakeholders and have been facilitated by UNIDO to set up a favorable environment for RECP and establish the appropriate incentives regarding legislation, financing and communication.

“The soft loans that do exist are mainly directed at financing energy efficiency, renewable energy and/or end-of-pipe technologies for environmental compliance.”

2. Roadmap for Scaling-Up

This document outlines the direction for mainstreaming the concept of industrial resource efficiency in Lebanon, based on the experience gained in the SwitchMed Med TEST II project. It presents a set of possible actions to be carried on by national organizations at various levels, beginning with the government's high-level commitment and mindset interventions (influencing the way people think about RECP) and continuing with policy and operational interventions (introducing RECP in industries and at service providers).

The proposed set of actions have been drawn up to target industrial companies, service providers and institutional stakeholders, in line with the Green Paper for scaling up resource efficiency in industry³.

Vision and goals

The adoption of RECP in Lebanon is expected to boost the competitiveness of industry by merging both environmental and economic goals. The goal of this roadmap is to outline the capacities and actions that are needed in the short-medium term (2018-2020) for scaling up the application of RECP in the Lebanese industrial sector. It builds on the results of previous RECP activities, particularly the MED TEST II project, and it is expected to further increase the market demand for and the supply of sustainable production services to industry during this period.

Process of roadmap development

The development of the roadmap for scaling up RECP in the industrial sector in Lebanon required several consultations with key stakeholders, as well as discussions with potential donors, as it is outlined in Table 1.

Activities

The activities of the roadmap are in line with national policy priorities, as they were expressed by the majority of the consulted stakeholders, and implementing these activities within the time frame of the roadmap is likewise feasible.

Table 2 indicates not only the priority actions of the roadmap for scaling up RECP, but also the stakeholders who would be involved in the implementation and the estimated budget by activity.

Measurement of progress on the roadmap's objectives

Progress on the objectives would be measured using indicators such as the following:

- Number of industrial companies participating in activities.
- Number of service providers trained on/ active in technical assistance in industry.
- Number/volume of soft loans provided for RECP investments.
- Pollution prevented through RECP activities.
- Economic savings that result from implemented RECP measures.
- Amendment of the MoE decision 189-1/2016 related to environmental compliance.

³ SwitchMed. 2016. Green paper on the scaling-up of MED TEST II activities. Available at: www.switchmed.eu/en/e-library/green-paper-on-scaling-up-of-med-test-ii-activities

Table 1 *Development milestones of the roadmap for scaling up resource efficiency in industry.*

No.	Milestone	Time frame (2017)
1	Sharing the roadmap with stakeholders, together with a summary report of the main results of the MED TEST II project.	July 3
2	Bilateral meetings with stakeholders to discuss their views of scaling-up.	July 12-13
3	Modification of the scaling-up roadmap based on comments from stakeholders.	July 14-July 15
4	Modified roadmap (2nd draft) shared with stakeholders.	July 20
5	Workshop to discuss the scaling-up roadmap with stakeholders.	July 27
6	Potential funding of scaling-up discussed with donors (EU, Italy, GEF through MoE, etc.).	Beginning in August 2017
7	Validated version of the national scaling-up document ready for publication.	November 2017

Table 2 *Priority actions of the RECP roadmap, partners/stakeholders and estimated budget by activity.*

Level of intervention	Activity	Partners and Stakeholders	Estimated budget per activity (€)
1. Operation	1.1 Capacity-building initiatives that target national service providers and industries through demonstration activities at companies, including a financing instrument to incentivize RECP investments. Capacity-building actions will also target public administrations (e.g., MoI, MoE).	MoI, MoE, IRI, ALI,	1,200,000
	1.2 Promote the adoption of information systems on resource use and resource efficiency by companies: support for industries to install resource metering equipment and upgrade their accounting systems to include the determination of the cost of lost resources.	MoI, IRI, MoE,	550,000
	1.3 Establish a qualification scheme for service providers (consulting firms: target 10 SPs), including theoretical and on-the-job training, eventually combined with demonstration initiatives (i.e. 1.1 Capacity building). This would constitute a first step towards establishing a national certification scheme for service providers.	IRI, MoI, MoE	270,000
2. Management	2.1 Develop resource efficiency guidelines and benchmarks, and incorporate them into ministerial decisions (10 sectors). For example, MoE decisions on various sectors to strengthen permitting procedures and auditing systems of industries, or MoI decisions regarding the licensing requirements of companies.	MoI, MoE, IRI,	75,000
	2.2 Support RECP investments in the industrial sector: creation of an RECP soft loan for industrial companies in coordination with relevant stakeholders. A cash payback mechanism for companies after they successfully comply with RECP loan requirements would be also developed.	IRI, ALI	300,000
	2.3. Incorporate RECP courses into the academic curricula of universities and vocational schools. Courses will be designed in different versions not only for engineering and environmental faculties/programs but also for accounting/business programs. They would have both a theoretical and a practical component.	IRI-LCPC, academia (Lebanese University/ Faculty of Agronomy, Université Saint-Joseph/Faculty of Sciences, others)	45,000
3. Policy	3.1 Draft an amended version of MoE decision 189-1/2016 relating to environmental compliance so that it incorporates RECP elements.*	MoE	
	3.2 Training for the MoE and for environmental consulting firms on reviewing RECP aspects in audits related to the amended version of MoE decision 189/1-2016.	IRI-LCPC	75,000
	3.3 Issue a ministerial decision to enact MoE decree 167/2017 such that it favors tax reductions for industries that adopt resource efficient and cleaner production technologies and practices.**	MoE	
4. Mindset	4.1 Organize a yearly event (e.g., forum) on sustainable industry or the circular economy with a focus on RECP.	ALI, IRI-LCPC	300,000
	4.2 Awareness-raising activities that highlight RECP benefits and success stories (TV spots, billboards, documentaries, awareness seminars, etc.).	ALI, IRI-LCPC	100,000
			2,915,000

* In-kind contribution from the MED TEST II project and MoE.

** In-kind contribution from the MoE.

The roadmap for scaling up and mainstreaming RECP in the Lebanese industrial sector is one of the outputs of the SwitchMed MED TEST II project, particularly its policy component. Wide adoption of resource efficiency requires that industry, service providers and institutions be fully engaged through various actions that, when implemented, can effectively result in a system change within the short-medium term of 2018-2020.

Priority actions, as identified by the key stakeholders, involve capacity-building and awareness-raising for industries, business intermediaries, service providers, academia and institutions. They also include integrating the efficient use of resources into mandatory auditing and permitting procedures of the MoE and MoI, developing and adopting sector guidelines and resource efficiency benchmarks and establishing proper financial and economic incentives for RECP investments and information systems.

National ownership of each of the specific actions suggested in this roadmap is a critical element for setting up the basis of a circular and resource-efficient industry in Lebanon.