

Roadmap for Scaling up Resource Efficiency

Israel

English Edition



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This document provides a brief description of a roadmap for the scaling up of Resource Efficient and Cleaner Production (RECP) in the industry of Israel based on the experience from the UNIDO MED TEST II component, implemented as part of the SwitchMed programme. The roadmap was developed between November 2016 and June 2017 throughout a series of bilateral consultations led by the Weitz Center building on the active participation and contribution of the following key stakeholders: Government: Ministry of Economy (MoE), Ministry of Environmental Protection (MoEP), Ministry of Energy (MoEnergy), Ministry of Finance (MoF). NGOs: Manufacturers' association, Weitz Center. Private sector: Industries, Green Target, Sher Consulting and Training.

BAT	Best Available Technique	MoE	Ministry of Economy
CP	Cleaner Production (This refers to manufacturing procedures that prioritise reduction of losses and pollution at their sources, or "source solutions", rather than "end of pipe solutions")	MoEnergy	Ministry of Energy
		MoEP	Ministry of Environmental Protection
		MoF	Ministry of Finance
		OECD	Organisation for Economic Co-operation and Development
		RECP	Resource Efficient and Cleaner Production
EC	European Commission	SME	Small and Medium-sized Enterprises
EE	Energy Efficiency	TEST	Transfer of Environmentally Sound Technology
FP	SwitchMed Focal Point	UNIDO	United Nations Industrial Development Organization
IPCC	Intergovernmental Panel on Climate Change		
KPI	Key Performance Indicator		

1. Starting Situation

The Israeli government's awareness about RECP and its benefits has been growing for some time. For example, the first Cleaner Production (CP) centre in Israel was established in 2001. Later, a comprehensive process of "Green Growth" round tables led to the development of the "National Green Growth Plan 2012-2020" which recognised the importance of RECP. This plan was not implemented due to lack of financial resources and, ultimately, to a low level of commitment to RECP by the highest levels of government. More recently, two twinning programmes between Israel and Germany have focused on Resource Efficiency. The 2016-2017 edition of the programme represented an important milestone for the uptake of RECP at the policy level, as clear objectives and tools were provided to the MoEP.

It was, however, the TEST approach implemented in Israeli companies for the UNIDO MED TEST II programme that led to a significant turning point in acceptance of RECP by the government and industry. This was due to the programme's encouraging case studies and the opportunities for stakeholders to directly experience RECP and its measurable benefits. The results of the programme show that industries lack awareness about the potential for cost savings and economically profitable environmental improvements from the adoption of RECP approaches. For instance, flows of natural resources in many industries are poorly managed, leading to significant and unnecessary losses of raw materials, water and energy. Some losses – such as packaging losses – are not managed at all.

Prior to the MED TEST II programme, the main barrier for implementation of RECP by plants was lack of know-how and the need for technical assistance. In addition, the rapid advances in regulatory requirements have pushed the industry towards quickly available "end of pipe" solutions. Currently, of the 3 billion NIS invested

annually by the Israeli manufacturing industry to comply with environmental regulations, 87% are spent on end of pipe solutions. This is a particularly high percentage when considering that the average for this statistic among OECD countries is 62%.

Finally, RECP plays a prominent role in Israel's SCP National Action Plan, which has foreseen the establishment of an RECP knowledge centre for the manufacturing industry.

Based on this starting situation, the following instruments were suggested for further investigation within the TEST Policy Module:

Resource Efficiency Platform

A key insight from the mapping process was that there is currently no active platform for the manufacturing sector in Israel for the promotion of RECP. Such a platform could support manufacturers of all sizes (small, medium and large) looking to improve their environmental performance through economically sound measures. As indicated in the "National Green Growth Plan 2012-2020", the first Twinning Project (2013-2015) outcomes, as well as the SCP National Action Plan, there is great potential and a need for the creation of a platform offering specific guidance and support for manufacturers in Israel on implementation of RECP.

The National Emission Reduction and Energy Efficiency Plan

One of the two tracks, the NIS 500 million for state loan guarantees accessible to companies that want to invest in energy efficiency, presents an opportunity for broadening the scope extending the economic incentive to resources efficiency investments.



2. Vision and its Leverage Points

The vision for resource efficiency is a widespread implementation of RECP in the Israeli Manufacturing Industry.

The goal is to put in place a closed loop of actions that will address all aspects of RECP. This will be achieved on the one hand by providing support for satisfaction of all related industry needs, and on the other hand by stimulating action through regulation and financial incentives.

The government's recent allocation of 52 million NIS for the establishment of a RECP Center for Sustainable Industry has resolved the major issue of a lack of commitment and demonstrates the requisite shift in mindset regarding acceptance of RECP. This was due to a culmination of several factors, including the outcomes of the UNIDO MED TEST II programme and the scaling up efforts which played a pivotal role in this shift.

The establishment of the RECP Center for Sustainable Industry is the major leverage

point for achieving the vision, as there will be one body with the sole mandate of promoting RECP in Israel.

Matrix of ideas for scaling up resource efficiency

The purpose of this matrix section is to summarise all major approaches for scaling up identified prior to the development of the present Roadmap for Scaling Up (for example within the policy study or the dedicated session at SwitchMed Connect 2016) as well as those which emerged from the discussion of stakeholders. This discussion led to the development of the Roadmap which is described in Section IV. Ideas for scaling up are presented in a structure suggested within the '*Green Paper on the Scaling-Up of MED TEST II Activities*' and on the basis of leverage points within the whole system influencing an uptake of RECP.

Summary of approaches for scaling up identified prior to development of the Roadmap for Scaling Up

Level of Intervention	Desired Output	Institutional Support	Activities Top Down Perspective	Activities Bottom Up Perspective
Mindset and commitment	Adoption of an integrated approach – environmental improvements and business competitiveness go side by side. RECP is the win-win strategy to overcome those two seemingly conflicting challenges.	National RECP committee comprising ministries (FPs, MoEnergy, etc.), representatives of industry and academia	<p>Establish national RECP committee.</p> <p>Change mindset of policy makers and industry through demonstration and awareness raising (cooperate with UNIDO on RECP marketing materials and tools).</p> <p>Expand focus from Energy Efficiency only to the broader concept of Resource Efficiency.</p> <p>With the support of the EC, involve a recognised international body in efforts to continue promoting RECP at the national level, for example: a) EU Delegation in Israel asking Israeli government to support follow up, and b) OECD collaboration.</p>	<p>Present TEST results.</p> <p>Use results of TEST demonstrations and compare them with situation if traditional approach of endorsing Emission Limit Values is applied (without prior systematic introduction of resource efficiency approach).</p> <p>Commit other ministries. Utilise roundtable in May to gain participation at the level of the Directors General.</p>
Policy	<p>Integrated approach to industrial environmental management</p> <p>Life cycle approach</p>	<p>Approach accepted and institutionalized in:</p> <p>Government,</p> <p>Tax Authority,</p> <p>Financial institutions (banks, environmental fund).</p>	<p>Obtain commitment of government to introduce IPCC regulation (note: this is under negotiation).</p> <p>Develop policy instrument(s) for SMEs.</p> <p>MoEP adopts several methodologies - including TEST – as standard for RECP and BAT. MoEP introduces new instructions for business licences, such as “plant should submit RECP Plan”, making reference to the TEST methodology and providing an appropriate hyperlink.</p> <p>Allow a “Grace Period” for implementing source solutions.</p> <p>Establish financial mechanism(s) for: a) measures that require investment, and b) provision of technical assistance.</p> <p>Implement new rules for tax authority to promote RECP (e.g., the Tax Agency could provide some incentives to proactive companies).</p>	<p>Lobbying</p> <p>Knowledge transfer</p>
Management	<p>New programs: Follow up with a new TEST program or with the demonstration companies.</p> <p>New feedback loops: - Green labelling - RECP loans - Tax</p>	<p>RECP Center for Sustainable Industry</p> <p>Bank(s)</p>	<p>Establish data source centre(s) to: a) Introduce statistics on Key Performance Indicators (KPIs), b) Facilitate exchange of information on Best Available Techniques (BAT), and c) Provide access to rules and institutional support for green labelling.</p>	<p>Raise funds for follow up of RECP programme with support of Ministry of Finance.</p> <p>Establish programme on building capacities for technical assistance on supporting tools.</p> <p>Voluntary reporting on selected KPIs.</p>
Operation	Resource efficiency implemented within industry	<p>Government (BAT offices, inspection)</p> <p>Industry Service providers</p> <p>Other stakeholders at operational level</p>	Support development of new capacities.	<p>Amend TEST methodology for commercial use (simplification, reduced implementation period and resource intensity)</p> <p>Implementation of follow up of the TEST programme and related capacity building.</p>



3. Roadmap for Scaling Up

Overview of the Roadmap

Activity	Ownership	Implementation	Period	Budget	Output
Management	MoEP, MoE and MoF	Implementing agency to be selected through competitive bidding	2018-23	€12 Million	Knowledge centre promoting RECP and delivering technical assistance services to industries
Policy	MoEP and MoE	MoEP and MoE	2018	Existing funds	Upgraded business licencing procedure introducing "Grace Period" for environmental compliance to companies implementing RECP
Access to Finance	MoE	Investment Authority and Innovation Authority	2018-19		New financial mechanisms for implementation of RECP

Goal: Put in place a closed loop to address all aspects of RECP implementation in the manufacturing industry in Israel (See Figure 1).

Management

The first activity is to address the lack of know-how by establishing a RECP Center for Sustainable Industry. The budget for the RECP Center has been allocated and shall originate from several ministries (Economy, Environmental Protection, Finance). The intergovernmental team working on establishing the RECP Center should serve as the national RECP committee. The initiation of this activity is planned for early 2018 with the publishing of the tender for the operation of the RECP Center. The RECP Center will operate for five years starting from mid-2018, with a planned budget of 52 million NIS (€12 million) and with ownership by the MoE, MoEP and MoF.

The RECP center is intended to:

- Provide partly subsidized advisory services to the plants. A commercialised abridged version of the TEST methodology should be developed for the operational level.
- Provide trainings on RECP and other methodologies, including TEST.
- Maintain a roster of experts on RECP issues and specific industry sector experts, from Israel and abroad.
- Maintain constantly updated data on BAT, industry sector key performance indicators and benchmarks. Publish this data.
- Raise awareness regarding the potential for RECP for industry.
- Serve as the national focal point for RECP and intergovernmental coordinator addressing barriers and exploring opportunities for promotion of RECP.

Performance indicators: Economic savings achieved and percentage of reduction in pollution (Energy, Waste, Waste water etc.)

Policy

At the policy level and as a supportive measure, the relevant regulation needs to be adopted. It is suggested to leverage the point in time when a renewal of business license occurs. The regulator shall instruct the plant to conduct an RECP assessment through the RECP Center.

It is suggested that plants wishing to implement RECP solutions leading to reduction of pollution at the source (rather than end of pipe solutions) could receive a “grace period” for implementation and compliance by the MoEP. Under this arrangement, temporary terms and emission standards could be set forth in the business license for a limited period of time. These can either be the previous terms or updated and more ambitious standards. They will not specify the mode of operation. During the grace period, the plant shall

implement the RECP measures and monitor the results. The MoEP must be oriented towards RECP and solutions that prevent pollution and waste at their source, encouraging and enabling plants to adopt source solutions rather than end of pipe solutions. This practice needs to be standardised, equal and transparent in all regions of the MoEP. Actions to support this shift in practice have been implemented, but not in a systematic and uniform manner. This practice should be widely implemented by the end of 2018.

Performance indicator: Number of plants that have approached the MoEP to implement source solutions to prevent pollution and have been granted a “grace period”.

Access to finance

The third area of activities is dedicated to providing industry with access to finance for RECP solutions.

The next step is to engage the current governmental financing schemes to provide finance opportunities for the industry for RECP investments such as the National Investment Authority and National Innovation Authority of the MoE. This shall be explored by the RECP Center, which should provide recommendations on how this should be done, based on a needs assessment of the industry. The details of this activity shall be evaluated by the end of 2018, and implemented by mid-2019. The ownership of this activity rests with the MoE, which will be assisted by the RECP Center.

Performance indicator: Capital invested in Resource Efficiency and economic and environmental benefits from pollution prevention at the source.

“The next step is to engage the current governmental financing schemes to provide finance opportunities for the industry for RECP”

Figure 1: A round table consultation was carried out on the 24th of May 2017 at the MoE with the participation of all major stakeholders. During this consultation, the roadmap was presented and no significant revisions were proposed. The roadmap was subsequently validated by the National Focal Points.

Goal: Create a closed loop to cover all industry needs to achieve widespread implementation.



- 1. Management RECP Center for Sustainable Industry:**
- Provide technical assistance
 - RECP assessments
 - BAT
 - Train service providers
 - International Experts

- 2. Policy**
- Incentivize adoption of resource efficient within regulatory compliance schemes

- 3. Access to finance**
- Investment Authority
 - Innovation Authority

The roadmap addresses all aspects of mainstreaming resource efficiency in Israel. It offers a wide range of instruments to respond to the needs of industries, from technical assistance to financing opportunities, aligned with the regulatory system. A closed loop for scaling up RECP in Israel should be in place by mid 2019 with the establishment of a financing mechanism. Within a period of 4 years, a survey should be conducted to evaluate the level of uptake of RECP in Israeli industry. Should the results be positive, this shall serve as justification for continuing the funding of the RECP center.