Roadmap for Scaling up Resource Efficiency

Egypt

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 Egyptian Industry based on the experience of UNIDO MED TEST II component implemented as part of the Switch Med Program. The Roadmap was developed between August 2017 and April 2018 through a series of bilateral consultations, which were conducted with the support of UNIDO MED TEST II project and in cooperation with the Ministry of Trade and Industry (MTI) and the Egyptian National Cleaner Production Center (ENCPC). These consultations were held with key stakeholders and were used to build their active participation and contributions: The Ministry of Trade and Industry (MTI), the Egyptian Environmental Affairs Agency (EEAA), the Center for Environment and Development for the Arab Region and Europe (CEDARE) and the Ministry of Environment (MoE).

This document builds on the Sustainable Consumption and Production (SCP) National Action Plan that targets the industrial sector and which was developed by the MoE in 2016 with the support of UN Environment and within the framework of the SwitchMed Program.

AfDB  African Development Bank  MoU  Memorandum of Understanding
BAT  Best Available Technique  MTI  Ministry of Trade and Industry
CBE  Central Bank of Egypt  PPSI  Private/Public Sector Industry Project
EBRD  European Bank for Reconstruction and Development  PSI  Private Sector Industries program
EEAA  Egyptian Environmental Affairs Agency  RECP  Resource Efficient and Cleaner Production
EPAP  Egyptian Pollution Abatement Project  SEAM  Support for Environmental Assessment and Management
FODEP  Egyptian National Cleaner Production Center  SCP  Sustainable Consumption and Production
FACE  Facility for Financing Environmental Protection  TEST  Transfer of Environmentally Sound Technology
FEI  Federation of Egyptian Industries  UNIDO  United Nations Industrial Development Organization
GEFF  Green Economy Financing Facility
IDA  Industrial Development Agency
MoE  Ministry of Environment
1. Starting Points

Egypt’s Ministry of Environment has been working in recent years with the support of international partners, especially the United Nations Environment Programme (UN Environment) to pave the way for mainstreaming green economy and sustainable consumption and production-related policies as tools to achieve sustainable development. The Sustainable Consumption and Production Action Plan (2016) and the Green Economy Work plan and Strategy (2010) were developed in line with Egypt’s 2030 Sustainable Development Strategy adopted by the Cabinet.

Scaling up resource efficiency is an important step for the implementation of the goals stated in the Sustainable Development Strategy.

The first policy measure proposed in the National Action Plan is to facilitate industry access to finance through the provision of financial packages that promote different Sustainable Consumption and Production (SCP) industrial applications to be implemented to create green industry applications, including waste to energy, waste management and water and energy savings. Another important policy measure is to support and encourage eco-innovation.

Removing subsidies on water and energy prices in 2015 has been a major driver for the implementation of RECP projects as well as the devaluation of the Egyptian Pound which encouraged savings on imported raw materials and chemicals.

The TEST (Transfer of Environmentally Sound Technology) approach developed by UNIDO for a system implementation of RECP in industry, recently implemented in 30 industrial facilities in Egypt, is showing a growing business case for RECP within industry in Egypt.
The proposed Roadmap aims at increasing competitiveness of the national industries while preserving natural resources. It is building also on past experience through a large number of successive programs from 1994 till now (SEAM, FACE, EPAP, PSI, PPSI, ENCPC). Cooperating with these initiatives is essential to the successful implementation of the Roadmap.

Due to the large number of industrial establishments (about 50,000) covering all sectors, replicability of projects in the same industry sector is high. This can be achieved through dissemination of information and success stories as well as capacity building on Best Available Techniques and training in the TEST approach. There are also 118 Industrial parks where collective solutions could be addressed.

The Roadmap is also building on the existing Egyptian legal framework which consists of environmental laws and regulations issued by a number of ministries: Environment, Industry, Planning, Labor, Irrigation, Housing and Interior.
3. **Roadmap for Scaling Up**

The development of the Roadmap was based on consultations with stakeholders, donors, banks and existing donor funded programs. Moreover, the results from implementing the UNIDO TEST approach within 30 industrial facilities were analyzed to incorporate the recommendations of the companies and service providers into the Roadmap.
Goal 1  
**Financial Support**

Financial support is one of the main enablers for RECP as highlighted by the majority of stakeholders. Within the framework of MED TEST II component, UNIDO has signed a cooperation agreement with EBRD to provide financial support and a pipeline of RECP investment projects through the Green Economy Financing Facility (GEFF). ENCPC also formalized a partnership with EPAPIII which allows projects that achieve compliance through RECP measures to receive financial support within EPAPIII. Continued efforts will be led by ENCP in Egypt to promote green financing in order to meet the private sector demand for sustainable financing.

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<th>Tasks</th>
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<th>Institutional set-up</th>
<th>Timeline</th>
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| Assess existing local financial institutions and exploit existing financial mechanisms | – Assess the conditions for loan approval at some local banks interested in RECP projects (Gap analysis)  
– Provide Technical support to MED TEST companies to access exiting green financing instruments | MTI/ENCPC | 3 months |
| Introduce new green financing mechanisms | – Set up a green fund within MTI by merging the 2 million USD of UNIDO grants for solar heating applications with the AfDB fund for Energy Efficiency and Renewable Energy Applications, and expand eligibility criteria to include RECP investments | MTI/ENCPC | 1 year |
| Cooperate with CBE initiative (SME loans at low interest rate) | – Link the CBE initiative with the other initiatives concerned with SMEs to avoid duplication of support  
– Examine applications rejected by CBE to identify needed services and reassess conditions  
– Direct part of the funds to enterprises financed by business angel investors and venture capital | MTI/ENCPC | 1 year |

Goal 2  
**Awareness and Capacity Building**

Boosting the demand for RECP investments by the private sector requires extensive awareness, increasing the business case for resource efficiency, promoting the results of MED TEST II, as well as the strengthening of national service providers’ base through training on BAT, RECP and TEST approach.

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| Raise awareness of stakeholders and service providers to increase demand for RECP projects | – Implement Workshops on BAT and RECP in collaboration with the Federation of Egyptian Industries for the targeted industrial sectors  
– Provide Training workshops for EEAA and Industrial Development Agency (IDA) staff on BAT and RECP  
– Implement Trainings for service providers on BAT and TEST approach  
– Organize dissemination Workshops on TEST results in different governorates  
– Launch a RECP award for implementing RECP as outlined within Goal 4 of this roadmap | ENCPC | 18 months |
| Reinforce competences of service providers | – Contact universities delivering continuous education program  
– Integrate RECP into the curriculum of environmental degrees at Universities | ENCPC | 18 months |
## Goal 3  
### Sector Technology Adaptation

The large number of industrial establishments and the representation of the Industry Sectors in the Federation of Egyptian industries facilitate a collective approach for the implementation of BAT and RECP measures through positive incentives, technical support and the development of guidelines with the goal to increase the number of facilities implementing BAT and RECP.

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| **Encourage industries to implement BATs** | - Develop Egyptian RECP benchmarks for selected sectors  
                               - Promote BATs adoption in private sector through dissemination of benchmarking and sector performance | MTI/ENCPC            | 18 months |
| **Provide technical support to facilities**   | - Apply TEST approach to identify BATs in form of RECP measures  
                                         - Provide support in developing technical and financial feasibility for RECP project identified by companies |                       |           |
| **Develop guidelines**     | - Promote existing BAT4MED guidelines and develop new ones for important sectors in Arabic to be used as training and information material and upload them to MTI web site |                       |           |

## Goal 4  
### Support Innovation Award

The Industrial Council for Technology and Innovation is presenting two types of innovation awards: one for equipment and the other for processes. ENCPC can assess and propose candidate applications in order to encourage innovation in RECP.

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| **Utilise existing MTI Innovation Award for promotion of RECP** | - Set up procedure for assessing particular RECP innovations and selecting award recipients using the existing award scheme launched by MTI for equipment and processes; provide support to link a service provider or an inventor with a manufacturer through the workshops and direct communication with the Industrialization Agency  
                               - Assess projects implemented by TEST for possible award nominees  
                               - Introduce potential award nominees to MTI | Industrial Council for Technology and Innovation ENCPC           | 2 years    |
Encouraging BAT implementation in Egyptian industries will result in accelerating the uptake of RECP projects since BATs are designed to increase resource efficiency. There has been previous work in this direction and it is important to build on it. As to awareness and capacity building, Arabic guidelines will be necessary to address a wider target group. One of the major barriers to implementation of investment needing RECP measures is the access to financing.

Already implemented RECP initiatives including MED TEST demonstrated that there is a business case for RECP in the Egyptian industry. Promoting RECP concepts on a national level, within the various industrial sectors, is extremely important in supporting Egypt’s reform program that aims to spur the economy and enhance the country’s business environment. Gradually the adoption of the RECP concept throughout Egypt’s industry would improve the competitiveness of Egyptian products on the local market, and their ability to compete on the export market, while also supporting a better resource resilience for the economy.