
Roadmap for Scaling up Resource Efficiency

Jordan

English Edition



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CPU at RSS within the framework of UNIDO MED TEST II project

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This document provides a brief description of the roadmap for scaling-up Resource Efficient and Cleaner Production (RECP) in the Jordanian industry based on the experience of the UNIDO MED TEST II component implemented as part of the SwitchMed Program. The roadmap was developed between November 2016 and October 2017 throughout a series of bilateral consultations led by the Cleaner Production Unit (CPU) at the Royal Scientific Society (RSS), building on the active participation and contribution with the key stakeholders: Ministry of Industry, Trade and Supply (MoIT), Ministry of Environment (MoEnv), Ministry of Planning and International Cooperation (MoPIC), Jordan Chamber of Industry (JCI), Amman Chamber of Industry (ACI), Jordan Standards and Metrology Organization (JSMO), Department of Statistics (DoS), Jordan Renewable Energy and Energy Efficiency Fund (JREEEF), Jordan Environment Fund (JEF), Central Bank (CB) of Jordan and King Abdallah II Centre for Excellence.

¹ For more information: switchmed.eu.

ACI	Amman Chamber of Industry	MoIT	Ministry of Industry, Trade and Supply
CB	Central Bank	MoPIC	Ministry of Planning and International Cooperation
CPU	Cleaner Production Unit	MoU	Memorandum of Understanding
DoS	Department of Statistics	MWI	Ministry of Water and Irrigation
EDP	Executive Development Program	NPO	Non-product Output
EIA	Environmental Impact Assessment	PPP	Public-Private Partnership
EMRC	Energy & Minerals Regulatory Commission	RECP	Resource Efficient and Cleaner Production
JAB	Jordan Association of banks	RSS	Royal Scientific Society
JCI	Jordan Chamber of Industry	SCP	Sustainable Consumption and Production
JEF	Jordan Environment Fund	SPs	Service Providers
JREEEF	Jordan Renewable Energy and Energy Efficiency Fund	TA	Technical assistance
JSMO	Jordan Standards and Metrology Organization	TEST	Transfer of Environmentally Sound Technology
KPI	Key Performance Indicator	TORs	Terms of Reference
MEMR	Ministry of Energy and Mineral Resources	UNIDO	United Nations Industrial Development Organization
MoEnv	Ministry of Environment		
MoICT	Ministry of Information and Communication Technology		

1. Background

In 2015, Jordan submitted its Nationally Determined Contributions (NDCs) to the United Nations Framework Convention on Climate Change (UNFCCC) secretariat; it faces a host of challenges in achieving the commitments spelled out in its NDC document. The NDC document stipulates a reduction of emissions of 14% by 2030, of which 1.5% are unconditional contributions to the availability of funding at a cost of USD 0.5 billion, while 12.5% are contingent upon the availability of funding totalling USD 5.2 billion. A series of measures are proposed in this regard, including fundraising for the implementation of 73 projects incorporated in the NDC document in priority sectors such as energy, transport, waste management, industry, water and agriculture.

To enhance the RECP implementation in different sectors and areas, the MoEnv established a green economy unit and the inclusion of green economy in the strategy of the MoEnv. Also, the Cabinet of Ministers approved the establishment of a high-level committee for green economy. Together with the Global Green Growth Institute (GGGI) and national stakeholders, and the support of the support of UN Environment and Government of Germany, the MoEnv have been working on formulating a comprehensive National Green Growth Strategy and Work-plan. The strategy

comprises 6 sectors; renewable energy and energy efficiency, water, transportation, waste, food/agriculture and sustainable tourism. Also, MoEnv together with national stakeholders and with the support of UN Environment, prepared a national action plan for sustainable consumption and production targeting 3 sectors; food/agriculture, waste and transport.

Also, the Jordan Environment Fund (JEF) at the MoEnv and Jordan Renewable Energy/ Energy Efficiency Fund (JREEEF) at the Ministry of Energy and Mineral Resources (MEMR) are governmental initiatives through which effective RECP projects could be financially supported, as well as the tax exemption for energy efficient and environment monitoring equipment and the availability of green financial schemes to encourage the implementation of RECP projects such as the Central Bank (CB) initiatives. JREEEF has a small-medium enterprises' (SMEs) program for the industrial sector in cooperation with Jordan chamber of industry (JCI). The CB is providing the money for loans to the commercial banks and JREEEF is covering the interest rate. The ceiling limit is 350,000 JOD (417,000 EUR) and the guarantee companies are participating to reduce the risk of the loan. Also, the technical assistance is supported by JREEEF through an approved list of service providers.

The Jordan 2025 National Vision & Strategy clearly demonstrates the governmental awareness and interest toward sustainable development (Sustainable Consumption and Production (SCP) and green economy) and its related principles. It promotes adoption of measures/tools such as the sustainable efficient use of natural resources with focus on water and energy, it encourages investments in renewable energy, the use of solar energy to heat water and of devices that are compatible with green standards. It also aims at raising the awareness about the long term financial benefits of energy efficiency and environmental protection, promoting partnership with the private sector, enforcement of legislation, financial incentives for the development and sustainability of SMEs, safe disposal and assortment, re-use and recycle of solid waste, improving the government's electronic information systems and supporting innovation and excellence, among others.

Based on desk survey and several consultation meetings that were conducted with different stakeholders, it appeared that green initiatives may be adopted and SCP mainstreamed in industrial sectors if the government would set appropriate incentives and financial instruments, besides the establishment of an effective information system for industry. A set of priority policy instruments were proposed within the

scope of the policy sub-component of MED TEST II project, and discussed with the National Focal Points of SwitchMed Project, the MoEnv and MoIT and the key stakeholders, such as:

- RECP Information and Communication System for the Industrial Sector
- RECP Finance Model for SMEs
- RECP Excellence Award and Eco-Label for green industries

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2. Roadmap for scaling-up resource efficiency

This section presents the Roadmap for scaling up resource efficiency in Jordan as developed and validated in consultation with relevant stakeholders.

There were two important events in developing the Roadmap. During the SwitchMed Connect 2015 in Barcelona, a session was convened on 30th October 2015, which brought together the country teams to begin working on developing a shared understanding of ‘Scaling-up Pathways and Leverage Points for Sustainable Manufacturing’. The teamwork on the Scaling-up study was continued in SwitchMed Connect 2016 in Barcelona during 19th and 20th October 2016.

The vision of the roadmap is to scale-up Resource Efficient and Cleaner Production (RECP) implementation in Jordan in order to establish and maintain sustainable industrial consumption

and production mode and model in Jordan. The scaling-up roadmap addresses all four levels of the scaling-up perspective as outlined in the Med TEST II scaling-up green paper (mind-set, policy, information and operation), listing for each perspective the institutional support activities, responsibilities, possible timeline and key performance indicators (KPIs). This roadmap is consolidated into a final deliverable in the form of the table summarizing the consultation process and its outcomes for publication and wide dissemination.

Table 1 *Roadmap for Scaling-up Resource Efficiency for the industrial sector in Jordan*

Goal 1		To set up RECP assessment as a common practice in Jordan		
Milestones / desired Outputs		<ul style="list-style-type: none"> • Effective RECP supportive policy framework. • Industries aware of the benefits of systematically applying RECP assessment and at conceptual design of new investments. • Well-developed RECP supply and demand in industry. • Qualified RECP service providers. 		
Activity	Responsibilities	Timeline	KPIs	
1.1 Developing a supportive policy framework by integrating RECP into relevant policies	Government, MoEnv, MEMR, MoIT, Ministry of Water and Irrigation (MWI), JSMO	Mid-term (2-5 years) to Long-term (> 5 years)	RECP policy instruments approved, Executive Development Program (EDP) integrates RECP	
1.2 Awareness raising within industry and dissemination of RECP case studies	MoIT, MoEnv, Chambers of industry, King Abdallah II Centre for Excellence, NGOs & private sector such as CPU-RSS, Industrial associations	Mid-term	Number of: awareness raising campaigns, industries participating in the events, promotional materials, dissemination and RECP technical assistance studies, new RECP applications	
1.3 Mobilizing the financial support for technical assistance	Local funds (JREEEF, JEF, etc.) & international fund from donors through MoPIC (EDP) MoIT, Chambers of Industry	Mid-term	Number of completed technical assistance studies	
1.4 Continuing capacity building within relevant stakeholders including service providers and consolidation of RECP	MoIT, MEMR, MoEnv, JSMO, chambers of industry NGOs and private sector such as CPU-RSS, EDAMA, Business Development Centre, etc. Industrial associations	Mid-term/ continuous	Number of training workshops and participating organizations, value of RECP services delivered by the trained SPs to industry	
1.5 Recognising the qualified RECP service providers (consultants)	MoEnv, MoIT, MEMR, JSMO, chambers of industry, NGOs such as EDAMA and national green building council	Long-term	Database of qualified SPs, number of qualified SPs	
1.6 Integrating resource efficient design (with focus on energy and water) as part of Environmental Impact Assessment (EIA) Bylaw	MoEnv, Energy & Minerals Regulatory Commission (EMRC), consultants, owners	Short-term (< 2 years)	Issuance of legal regulations, executed RECP integrated EIA studies	

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Goal 2		Enhance the implementation of RECP measures in industry		
Milestones / desired Outputs		<ul style="list-style-type: none"> • Effective finance of government, commercial banks and donors for RECP investments. • Effective conservation of natural resources, water and energy. • New regional and international markets for the green (eco-labelled) industries. • More green industries, green jobs and services that enrich the green economy of the country. • Improved legal framework to incentivise the green actions and investments. 		
Activity	Responsibilities	Timeline	KPIs	
2.1 Building the capacity of financing institutions, including the central bank and commercial banks, on RECP investments opportunities	MoIT, MoEnv (JEF), MEMR (JREEEF) Jordan Association of banks (JAB), NGOs and private sector such as CPU-RSS, EDAMA, etc.	Short-term	Number of trained staff of CB and commercial banks, new RECP financial products established by the banks	
2.2 Developing a sustainable RECP Finance model for SMEs including provision of technical assistance to industries to access existing financing mechanisms	Financing organizations, relevant ministries, NGOs, chambers of industry, industrial associations	Mid-term	New financial scheme in place, number of industries attending awareness raising, number of industries accessing the funds	
2.3 Providing the needed technical assistance to financial institutions (mainly commercial banks) to provide green-loans	JAB, MoIT, MoEnv (JEF), MEMR (JREEEF), CB, NGOs and private sector	Long-term	Number of participating banks, number of industries applying for funding	
2.4 Establishing RECP excellence award based on the existing “King Abdallah II Excellence Award (Environmental Sustainability)”	King Abdallah II Excellence Award, MoEnv, MEMR, MoIT, NGOs such as Green Building Council	Mid-term	RECP award, number of industries participating annually in the award competition	
2.5 Establishing RECP eco-labelling scheme	JSMO, MoEnv, MEMR, MoIT, King Abdallah II Excellence Award, NGOs such as Green Building Council	Mid-term	RECP Eco-label in place, number of industries applying for eco-labelling annually	
2.6 Improving the legal framework to integrate RECP financial incentives	Cabinet of ministries for tax exemptions, MoEnv, MEMR, MoIT, MWI, JSMO	Long-term	New legal framework, new incentives and related criteria, number of industries undertaking RECP investments	

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Goal 3		To transfer RECP knowledge, know-how and information		
Milestones / desired Outputs		<ul style="list-style-type: none"> • Well-developed and applicable RECP communication model between the industrial sector and relevant public and private stakeholders. • RECP know-how and best available techniques available to the industrial sector. • Database of national RECP benchmarking for the industrial sector. • Industries aware of the non-product output (NPO) costs in their different processes. • Scale-up the implementation of RECP projects (such as MED TEST II) to demonstrate the business case in more companies and sectors. • Effective public-private partnership in RECP. 		
Activity	Responsibilities	Timeline	KPIs	
3.1 Developing a national RECP information and communication system for the industrial sector	MoIT, Ministry of Information and Communication Technology (MoICT), DoS, chambers of industry, industries, NGOs such as RSS, EDAMA, etc.	Long-term	RECP information and communication platform in place, number of industries signed in accessing information system	
3.2 Utilizing the results of on-going RECP supporting programmes to develop and present new concept notes to donors	MoPIC (EDP), MoEnv, MoIT, MEMR, chambers of industry, NGOs, associations, industries, DoS	Mid-term	New concept notes and proposals submitted to donors, number of accepted concept notes, available budget	
3.3 Enhancing the public-private partnership through a new technical committee for promotion of RECP within industry	Cabinet of ministries, MoEnv, MEMR, MoIT, JSMO, chambers of industry, NGOs, private sector, Public-Private Partnership (PPP) Unit at Ministry of Finance, relevant stakeholders	Mid-term/continuous	Adoption of this committee by i.e. MoIT, number of projects developed through public-private partnership, number of stakeholders included in this committee number of qualified SPs	

This Roadmap is an action oriented and focused on the areas where concerned stakeholders can participate in taking actions. Most of the proposed activities need high-level decision makers' orientation and support to facilitate their implementation and an effective coordination and cooperation between the relevant stakeholders. The common challenges for RECP scaling-up that have the highest priority to act against the desired developments are the lack of awareness and lack of finance. Accordingly, the activities proposed in this regard have the priority to be implemented as soon as possible.

The relevant stakeholders showed their ownership and commitment to cooperate and effectively participate in implementing the activities proposed in this roadmap, however, they need to have their institutions' top management support to insert these goals and activities in their strategies and action plans for the coming years in order to be able to allocate the needed resources and time for the planned actions.

Moreover, it is clear that there is a strong need for leadership of the government, especially the Ministry of Environment or Ministry of Industry, Trade and Supply to coordinate the national efforts in this regard.