המשרד להגנת הסביבה
وزارة لحماية البيئة
Israel Ministry of Environmental Protection

Ministry of Economy and Industry
Environment & Sustainable Development Administration

SCP National Action Plan

SUSTAINABLE CONSUMPTION AND PRODUCTION ROADMAP FOR ISRAEL | 2015 – 2020

UNEP

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FOREWORD

It is said that a goal without a plan is just a wish. We might know how to formulate our goals quite well – to have sustainable consumption and production; to decouple our economic growth from environmental degradation; to have a more inclusive economic prosperity for all; to achieve the Agenda 2030's Sustainable Development Goals. However, without a clear roadmap to reach these goals they will be no more than a wish and will remain unattainable.

That is why the SwitchMed Programme is so vital for bringing sustainable consumption and production to Israel and the Mediterranean. As part of the SwitchMed Programme the Ministry of Environmental Protection, together with the Ministry of Economy have conducted a thorough process to study the best practices and policy tools to achieve sustainable consumption and production. These were adapted and compiled into a five-year roadmap that will help to turn our wishes into achievable goals. This document summarizes this process and its results.

I would like to thank the dedicated team that managed these efforts in the SwitchMed Programme and in the different ministries. May our work be another footstone in the long path to a sustainable world.

Avi Gabai

Minister of Environmental Protection

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About SwitchMed

The EU funded SwitchMed project is implemented jointly by the project countries (Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine and Tunisia) and the institutional partners UNEP, UNIDO and SCP-RAC. SwitchMed is divided into 3 components addressing different parts of the transition process to Sustainable Consumption and Production (SCP) - SDG12:

(i) A policy component, built around the Barcelona convention (for the Protection of the Mediterranean Sea and Coastal Regions) and SCP national action plans;

(ii) Demonstration activities linked both to the policy component and the private sector;

(iii) Networking function to allow for exchange, joint learning and further scaling up;

UNEP-DTIE is coordinating the national policy component – Reinforcing circular economy in the Mediterranean governance framework and mainstreaming SCP in national policies. Under the national policy component the project countries will develop Sustainable Consumption and Production National Action Plans (SCP-NAP).

The implementation methodology used under the SwitchMed national policy component has been adapted to each countries' specific needs and requests. To assure coherence between ongoing and previous national work, the activities at country level build on already existing work and projects (Green Economy, SCP assessments, sustainable development assessment and strategies, SCP projects, etc). In this process UNEP works with national consultants in the project countries to allow a transfer of knowledge and reinforcement of national capacity. The SCP-NAP methodology assures that a large and diverse group of national stakeholders are involved in the national process (government, civil society, private sector, media, academia, bi- and multilateral partners, UNCTs, etc). Furthermore collaborations with UN institutions and other bi-lateral partners have been established at country level.

Main objectives:

- Leapfrogging to socially inclusive Sustainable Consumption and Production practices preserving the environment;
- Integrating the natural capital and the environment in the core business of Mediterranean companies
- Creating a critical mass of citizens for SCP;

The successful development of eight SCP-NAPs demonstrates that:

(i) in-country activities have to be nationally owned and nationally driven to be successful;

(ii) the involvement of a large and diverse group of national stakeholders from the beginning of the planning process is crucial;

(iii) linkages and synergies have to be established with already existing projects and initiatives and collaboration with other partners should be encouraged and fostered.

Each country has chosen to follow its own path to develop an SCP-NAP and this series of publications clearly shows the diversity of processes as well as outputs. In some countries the SCP-NAPs are based on SCP national assessments, while in other national partners decided to build upon already existing national SCP information and knowledge.

Sustainable Consumption and Production Roadmap for Israel 2015-2020

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Executive Summary

The challenge of achieving economic growth and development in the face of the limited carrying capacity of the environment has become increasingly apparent in recent years. In order to meet this challenge there is a need to develop Sustainable Consumption and Production (SCP) strategies. In this context, the SWITCH-Med sustainable consumption and production programme aims to promote a switch of the Mediterranean economies towards sustainable consumption and production patterns and green economy.

As part of the SWITCH-Med Programme, Israel, as one of the nine participating countries, began to formulate its own national SCP roadmap. This was done under the guidance of an advisory team from the Israeli Ministries of Environmental Protection and Economy and based on a year-long scoping review process which included over 300 participants from all sectors.

The roadmap was divided into three chapters, according to their relative consumption vs. production emphasis. Each chapter includes a series of SCP initiatives that are due to be launched and implemented by 2020 (see Table 1: Structure of the SCP Roadmap**Error! Reference source not found.**).

Table 1: Structure of the SCP Roadmap

Sustainable Production	**Sustainable Consumption**

• Sustainable Development Strategies in Government Companies
• Promoting Best Practices for Small and Medium Enterprises (SMEs)
• Supporting Social Environmental Businesses
• Resource Efficiency Knowledge Center
• Promoting Green Investments
	• Green Public Procurement:
	  ○ Servicizing and Innovation in Procurement
	  ○ Green Public Procurement in Housing
	  ○ Green Public Procurement in Transport
	  ○ Green Public Procurement in Local Authorities
	• Lifestyle Labs
	• Behavioral Economics

Connecting the Dots: **Between Sustainable Production and Sustainable Consumption**	
• Sustainable Materials Management Strategy • Circular Economy: The Case of Household Food Waste • Sustainable Urbanism • Environmental Standards and Labeling • Prevention of Greenwash and Promotion of Reliable Environmental Claims	

Introduction

In line with the growing recognition that sustainable consumption and production (SCP) is a universal concern, a first formal acknowledgment by the 21 Mediterranean neighboring countries on the need to shift to SCP was expressed in the Mediterranean Strategy for Sustainable Development (MSSD), approved by the Contracting Parties of the Barcelona Convention in 2005. The SWITCH-Med SCP program was subsequently launched to promote a "switch" of the Mediterranean economies toward SCP patterns and green economies through the demonstration and dissemination of methods that improve resource and energy efficiency.

The SWITCH-Med programme is divided into three components; each one of the components is addressing a different part of the transition process to Sustainable Consumption and Production:

1. a policy component, built around the Barcelona convention and national sustainable consumption and production (SCP) plans;
2. demonstration activities linked both to the policy component and the private sector;
3. Networking function to allow for exchange, joint learning and further scaling up.

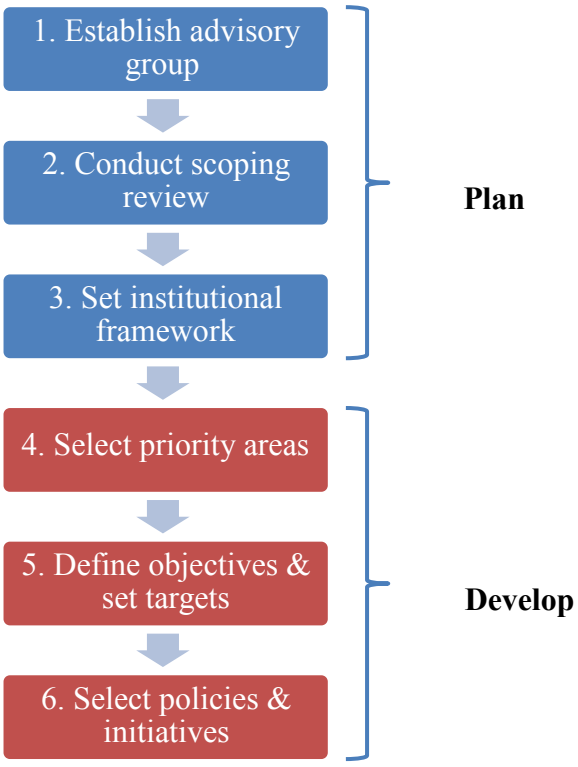
The policy component works to further integrate sustainable consumption and production into the regional and national Mediterranean policy and governance framework.

Under the demonstration component, a set of regional or national demonstration projects promoting the adoption of more sustainable ways to design, produce, use and recycle products in the Mediterranean region will be selected and carried out. These will help to increase SMEs' use of environmentally-friendly technologies and practices, improve their overall resource efficiency and reduce their emissions of pollutants, and increase the production and consumption of 'green' and 'fair' products. At the same time, the project will empower civil society and actively promote green entrepreneurship, as key drivers of sustainable consumption and production, and ensure the implementation of specific priorities identified by the SCP national action plans.

Finally, the networking mechanism ensures linkages between the demonstration activities and the policy component, identifying best practices, lessons learned and replication potential.

Within the framework of the SWITCH-Med, Israel, as one of the nine participating countries, began to formulate its own national SCP roadmap at the end of 2013. The outline for this roadmap was developed based on UNEP's guidelines "Planning for Change: Guidelines for National Programmes on Sustainable Consumption and Production"[1]. The guidelines recommend a 10-step process for developing and implementing national SCP programme and action plans. The formulation of the roadmap is delivered through stages 1-6 of the guidelines (see figure bellow) and intended to be completed within 12 months.

Figure 1: Creating a National SCP Roadmap



Accordingly, as part of a year-long process, an advisory team was assembled, composed of representatives from the Ministry of Environmental Protection (MoEP) and the

[1] United Nations Environment Programme, 2008

Ministry of Economy, which steered the project and conducted an extensive scoping review.

In order to build capacities, review and discuss the various relevant topics, eight professional workshops were held in Israel between the end of 2013 and the beginning of 2015, with over 300 participants from all sectors: government, civil society, academia and the private sector (see the table below).[2]

Table 2: List of workshops

Date	Subject	Target Groups
16-17 December 2013	**National Strategies for SCP**	Multi stakeholders
18 December 2013	**SD in Government Companies**	Government Companies
17-18 June 2014	**Policy Tools for Circular Economy**	Government
19 June 2014	**Mainstreaming Life Cycle Thinking**	Practitioners
24 June 2014	**Toward Sustainable infrastructure**	Government Companies
6 January 2015	**Environmental Funds Management**	Government
7 January 2015	**Environmental RIA**	Government
8 January 2015	**SCP Roadmap consultation meeting**	Multi stakeholders

Finally, an assessment of existing and future potential initiatives in the field was made by the advisory team. Together these processes were integrated into the following national SCP roadmap.

Background: Existing SCP-related Strategies and Initiatives in Israel

Israel's SCP initiatives have been promoted within the context of the international discourse on the subject based on the recognition, as stated by UNEP, that "sustainable

[2] For more information please see SWITCH-Med publication on "SCP Policies in Israel: Workshops Summary"

patterns of consumption and production in a world of limited resources is an essential requirement for sustainable development." The importance of SCP is reflected in the United Nations' Post 2015 Development Agenda and the Sustainable Development Goals and in the Ten-Year Framework of Programs on Sustainable Consumption and Production Patterns (10YFP) which was adopted by world leaders at Rio+20.

On a national level, numerous strategies have been promoted in Israel over the past decade to promote SCP. They include a Sustainable Development Plan in 2003, a Green Government program in 2009, a National Plan for Greenhouse Gas Reduction in 2010, a Green Growth Action Plan in 2011, a "Let's Think Green" campaign in 2011, Indicators for Well-Being Sustainability and Resilience in 2013 and an Environmental Justice Strategy in 2014. Following are some highlights:

Green Growth Action Plan: In October 2011, Israel's government decided to approve the proposal of the Minister of Environmental Protection and the Minister of Economy to prepare a national green growth strategy for the years 2012-2020. Main points in the government decision include removing obstacles to green growth, promoting cleantech industries, advancing green employment, transitioning to sustainable consumption, transitioning to sustainable industry and transitioning to a more environmentally-friendly business sector. As part of the process, a tri-sectoral round table looked at three elements which are critical for sustainable development: sustainable production, sustainable consumption and eco-innovation. Several levers for change were identified in the process including: an integrated environmental licensing system, a green growth knowledge center, green labeling, life cycle analysis, green procurement, green taxation, greenwash prevention, locally approved best available techniques (BATs), green employment training programs and establishment of a research center focused on the study of materials and waste management. However many of these initiatives were only partly implemented so far, mainly due to long legislation processes or lack of resources.

Indicators for Well-being, Sustainability and Resilience: In December 2012, Israel's government resolved to develop indicators on well-being, sustainability and resilience and to appoint an interministerial team to formulate them. A consultation forum was set up to formulate recommendations on domains, indicators, methodologies and public

participation, intersectorial teams were appointed to identify sub-domains and indicators for these domains, and a public participation process was initiated for review and feedback. Nine well-being domains for Israel were recommended: material standard of living, quality of employment, housing and infrastructure, health, environment, education and skills, personal and social well-being, personal security and civic engagement and governance. This process is on-going and continuous.

Environmental Justice Strategy: The MoEP drafted an environmental justice program in 2014 to help assure the equitable distribution of environmental costs and benefits among different population groups. The program, dubbed "Equal Environment," is based on the conviction that every citizen has the right to clean air and water, to habitable land, to free access to landscape and heritage sites, and to protection from environmental pollution and hazards. The strategy includes such components as an Environmental Justice Covenant, national environmental service, support to social-environmental businesses and the allocation of funds toward the collection, treatment and recycling of household waste in low socio-economic ranking communities, without need for matching funds.

Green Government: At the end of 2009, Israel's government adopted a resolution entitled *"Green Government – Operational Efficiency of Government Ministries."* The decision was meant to position the government as an example of environmental performance and sustainable practices and to reflect the commitment of the government to efficient management and environmental responsibility. To accomplish the goal of leading by example, the government decision defined quantitative targets and means of implementation. The targets related to environmental efficiency (including increased use of recycled, environmentally efficient materials), reduction of resource consumption (water, electricity and paper), reduction of waste, and transition to renewable resources. In a September 2012 decision, the government broadened the targets to include a reduction target for vehicular fuel consumption, an increased purchasing target for paper with improved environmental performance and a new target for green government procurement of 20% by 2020.

Let's Think Green: A wide-scale campaign to promote an environmental lifestyle, dubbed "Let's Think Green," was launched by the MoEP in 2011, with full media coverage and a dedicated website. It used traditional marketing tools to reduce rather than increase consumption. Using a positive psychology approach, the campaign sought to convince individuals and businesses that a few simple actions every day can both protect the environment and save money. It used clear messages with simple advice on five main topics – paper savings, eco-driving, responsible food consumption, cleanliness in public areas, electricity savings, and at a later stage, green building.

Household Survey: In 2011, Israel participated in the second round of the Environmental Policy and Individual Choice (EPIC) Project that was initiated by the OECD to better understand what affects people's attitudes and decisions and households' responses to environmental policies in order to guide policy-making in five areas: energy use, food consumption, transport choices, waste generation and recycling, and water use. Each subsequent round of the survey allows behavioral changes to be tracked over time and to explore new and emerging issues.

Outline for an SCP Roadmap for Israel

Building on the past experience the focus of the SCP roadmap was on achievable, innovative and high impact projects. Some of the projects are developments and updates of previous plans, and some introduce new concepts and strategies into the existing policies. Although SCP strategies are by definition spanning the complete life cycle of products and services, most of the designed projects have either producer or consumer oriented approach, which complements each other. Therefore, the roadmap was divided into three main parts, according to consumption vs. production focus:

1. **Sustainable Production** – Initiatives that give emphasis to the supply side (i.e., manufacturer or service provider).
2. **Sustainable Production** – Initiatives that give emphasis to the demand side (i.e., households or procurement).
3. **Connecting the Dots –** Initiatives that are positioned in the interface between sustainable production and sustainable consumption.

The different initiatives reviewed in this roadmap are at different levels of development. Some are a continuation of previous projects and some are still in early stages of planning. However, all are designed to be launched and implemented over the next few years. Several of the projects will be conducted in part under the SWITCH-Med policy component starting in 2015. The planning horizon of this roadmap is of five years, ending in 2020.

Sustainable Production

It is now well-accepted that there is no contradiction between industrial development and environmental performance. There is a necessity to decouple the destructive link between economic growth and environmental degradation. As part of the scoping process several key issues were identified by stakeholders and the advisory team, including a need for emphasis on SMEs, the prospects of driving change though governmental and public companies and the role of innovative business models in the adoption of sustainable production. In line with these insights and in order to promote sustainable production, the MoEP and the Ministry of Economy have developed or are in the process of developing a number of projects.

1. Sustainable Development Strategies in Government Companies

One of the early initiatives in the SCP process was the promotion of sustainable development in 100 government companies whose environmental and social impact is especially significant. They include major companies such as the Israel Electric Corporation, Israel Railways, Mekorot – Israel's National Water Company and many others. The initiative drew on the 2003 government decision on the preparation of a strategic plan for sustainable development for Israel and on a circular issued in 2009 on the implementation of this strategic plan in government companies in Israel.

Accordingly, the Government Companies Authority (GCA) together with the MoEP published a manual on sustainable development in government companies in December 2013, based on the premise that government companies should lead the way and serve as an example to the economy as a whole, due to their size and significance in the economy, on the one hand, and their environmental, economic and social impacts, on the other hand. The manual presents a methodological framework meant to facilitate the formulation of a comprehensive sustainable development strategy in government companies that relates to policy making, action-oriented objectives and applicable and measurable targets. It aims to promote continuous improvements in the conduct of government companies – reducing their adverse impacts on the environment and

increasing their ability to positively impact on society while at the same time improving their economic performance and competitive ability.

Government companies are required to report to the GCA about their targets and their progress toward implementation. The reporting obligation in itself creates a process and drives the change without dictating the specific policies and actions that government companies should take to implement the strategy and also provide public transparency to the process. In order to further facilitate the correct implementation of sustainable practices, the MoEP plans to conduct a series of professional workshops on SCP, designed for the diverse array of government companies. In addition, in collaboration with the Society for the Protection of Nature in Israel (SPNI), the MoEP will provide a few selected government companies with consulting services on biodiversity protection measures, targeted at incorporating biodiversity considerations into their decision making processes.

2. Promoting Best Practices for Small and Medium Enterprises (SMEs)

Until recently, inadequate emphasis has been placed on the sustainable development of very small, small and medium enterprises in Israel. Therefore, Israel has begun to provide resource efficiency tools to small and very small enterprises, mostly through the preparation of manuals and green labels that certify that these enterprises conduct themselves in accordance with environmental criteria.

As an example, a pilot project in Tel Aviv which focused on restaurants facilitated the way for the preparation of a green restaurant label by the Standards Institution of Israel (SII). Restaurants will be eligible for accreditation based on such criteria as reduction of waste, water and energy as well as additional factors such as education of clients (consumers) and food waste reduction. The restaurant sector was chosen as a pilot project due to its large ecological footprint in terms of water and energy consumption and waste generation. At the same time, restaurants, as gathering points for people, offer a unique opportunity to serve as agents of change.

In addition, in the wake of the pilot project, a manual on environmental friendly restaurants will be prepared in order to set out a series of steps aimed at transforming a restaurant into a sustainable business. The manual will consist of five chapters with sets of recommended actions in each area:

- An organizational culture that promotes environmental considerations and resource efficiency.
- Inventory and waste management based on life cycle management from the stage of raw material to the final product.
- Reduced energy consumption through more efficient conduct and infrastructure change.
- Reduced water consumption through more efficient conduct and infrastructure change.
- Branding and community involvement to create a green identity that brings about increased community awareness.

An additional pilot project will include commercial centers in Ashdod and Tel Aviv, and will be aimed at incorporating sustainable development principles based on waste, energy and water efficiency surveys. Other pilot projects will focus on retail stores, including a project in Beer-Sheba, aimed at providing small businesses with consulting services and recommendations on energy and water savings and resource savings. In the Beersheba case, the focus will be on very small enterprises such as groceries, pharmacies, toy shops, and similar retail stores, and the intention is to replicate the model in other parts of the country in the future.

The ultimate aim is to expand these pilot projects to different sectors in different areas of Israel and to prepare manuals and green labels for specific business sectors that will encourage them to adopt sustainable practices while increasing their visibility and branding capacity. Implementation of SCP best-practices in the private sector in several selected businesses will help create a showcase of SCP best practices and success stories

which can serve as a model for a wide range of businesses and activities throughout the country.

The selection of business will be done with emphasis on SMEs and retail activities which have an on-going relationship with end-consumers.

The project will include the following components and outputs:

- Selecting 15-20 businesses.
- Conducting energy, waste and material flow surveys in the selected businesses and issuing recommendations for improvements.
- Conducting a course on implementation for participants.
- Publishing a practical guide to disseminate the results of the pilot projects.

3. Changing the DNA of Businesses: Supporting Social Environmental Businesses

In recent years, the concept of social purpose businesses, including social environmental businesses (SEBs), has grown and gained acceptance. A social business, which can be organized as either a for-profit or non-profit organization, applies business strategies and commercial approaches to improve human and/or environmental well-being by generating its own revenue stream. In Israel, an SEB has been identified as an enterprise that meets the following three criteria:

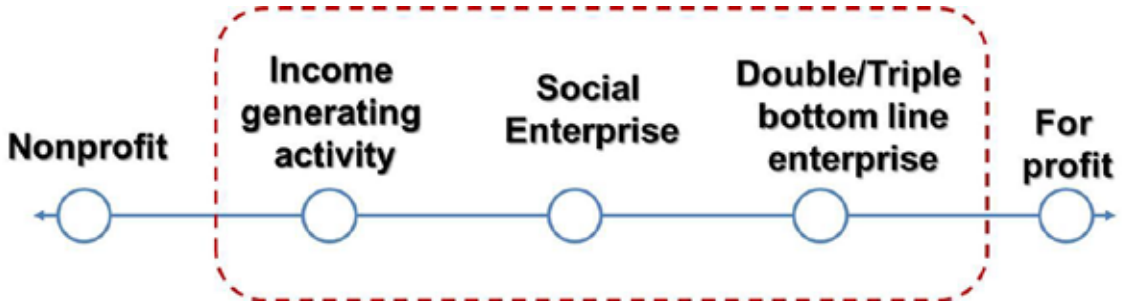
- It has environmentalism and/or sustainability as a stated goal;
- It uses a profit-seeking model to carry out its aims;
- At least 50% of profits or eventual profits are reinvested in the business itself or invested or donated on behalf of social environmental goals consistent with the enterprise's social environmental aims.

Several SEBs exist in Israel, of which the largest is Ecommunity (Ecology for Sheltered Community), a registered company whose core goal is for people with special needs to be seen as full partners in Israel's society and economy. The company uses electronic waste

recycling as a means to achieve this goal. Profits come from the sale of reusable and recyclable materials and all profits are reinvested in the company.

An extensive survey of 21 SEBs in Israel was conducted and at least 20 more such businesses were identified in a study published by the MoEP in 2013. As part of the study, the legal structure, financial sources and social-environmental goals of these SEBs were examined. The survey found, among others, that most of the organizations lack business experience, have difficulty in recruiting funds, and are faced with regulatory and other obstacles. Based on these observations, a series of policy recommendations was presented. The survey concluded that capacity building and increased financial resources to SEBs are required to ensure that this new social-environmental change agent will reach its potential.

Figure 2: The "Social Business" Spectrum



Within the framework of the SCP roadmap, efforts are focusing on setting up a system of support to SEBs through the different stages of their development. The support program will include regional training programs for about 10 businesses in different areas of the country every two months and national training programs for about 40 businesses on a quarterly basis, help with the writing of business plans, provision of personal mentors and financial aid and professional support on additional matters such as legal counsel and accounting.

4. Resource Efficiency Knowledge Center

Open access to knowledge on pollution prevention at source, clean production and resource efficiency is imperative in order to promote sustainable production. Therefore, establishment of a Resource Efficiency Knowledge Center is an important lever for sustainable production. The aim of such a center, which is currently in planning by the

MoEP and the Ministry of Economy, is to bring best environmental practices and eco-innovation to industry in line with regulatory requirements. The budgetary allocation for the center has been approved and efforts are focusing on the appropriate framework for its establishment.

Figure 3: Joint Steering of the Resource Efficiency Knowledge Center

The center aims to be a national, professional knowledge center on reduction at source, resource efficiency and savings, and environmental innovation while contributing to the competitiveness of industry in Israel.

The envisioned outputs of the Resource Efficiency Knowledge Center include:

- Compilation of knowledge and development of tools and methodologies for achieving environmental efficiency and reduction at source, including a database, manuals, material specifications and energy and water surveys.
- Training of consultants and professionals in industry to incorporate the tools and methodologies on resource efficiency and source reduction.
- Compilation and management of consultation processes.
- Increasing awareness of the center's activities by means of a website, publications, seminars and conferences and direct contacts with professionals in the field.
- Identifying financing sources, both government and private, for implementing environmental efficiency processes in industry.
- Helping industry and the private sector to comply with regulatory requirements and incorporating environmental efficiency and clean production processes.

5. Promoting Green Investments

In recent years, the MoEP has made major headway in increasing transparency as a tool for better environmental performance and green investment. In 2012, the ministry began publishing an annual environmental compliance rating aimed, for the most part, at providing information to companies, investors and society at large about the environmental compliance of publicly traded companies and to better link environmental and social risks with financial risks. In 2013, Israel's Pollutant Release and Transfer Register (PRTR) was first published, further advancing the availability of information to decision-makers, the general public and industry itself. In 2014, the two ratings were integrated to provide information about the environmental risks and environmental performance of Israel's largest public industrial companies – 44 publicly traded companies, holding some 100 factories and some 1000 gas stations.

The index was developed by the MoEP in conjunction with European experts and in consultation with industry and the public. It aims to present the environmental impact of government and public companies and their subsidiaries, including factories and gas stations, by weighting "hard" parameters such the quantity of pollutants or waste that are emitted or transferred, the risks of using hazardous materials, and the environmental sensitivity of their location. These factors are then balanced by the level of compliance to regulatory and permit requirements and by "soft" parameters such as environmental management systems and/or voluntary reporting, based on the recognition that wise environmental conduct and management in a company or facility will reduce environmental risks. Positive scores in the index are based on three criteria: accreditation with environmental management standards (ISO 14001 or EMAs or equivalent), accreditation with an energy management standard (ISO 50001 or equivalent), or voluntary environmental reporting to one of the following: Carbon Disclosure Project (CDP), the Greenhouse Gas Registry of the MoEP or the Global Reporting Initiative (GRI).

The integration of environmental data in one index aims to provide the ministry with a tool for prioritizing its resources and assessing the efficacy of its policies; to provide industries with a reliable indicator of their environmental performance in comparison to

other industries; to provide the public with information on environmental risks; and to provide investors (general public and institutional) with vital data on the economic risks to which they may be exposed due to environmental risks and non-compliance of companies with environmental regulations. Data on the compliance of public companies with environmental standards and regulations is considered an additional tool in the due diligence process when evaluating the exposure of such companies to financial risks. The addition of this data to the broad range of investment considerations is designed to encourage corporations to reduce the adverse environmental impacts of their activity and thereby to reduce the financial risks of investments in their companies.

Summary of Projects

Table 3: Sustainable Production Projects Summary

Project	Outputs	Responsibility	Partners	timeframe	Estimated Budget
Sustainable Development Strategies in Government Companies	Publication of guidelines	Government Companies Authority	Government Companies, MoEP	Completed	No budgetary requirements
	Mandatory reporting implemented			2015-2017	No budgetary requirements
	Professional training			2014-2018	50,000 $
	Monitoring progress			2015-2018	40,000 $
Promoting Best Practices for Small and Medium Enterprises (SMEs)	Conducting energy, waste and material flow surveys in the selected businesses	MoEP	Ministry of Economy, Local Authorities	2015-2017	21,000 $
	Implementation course	MoEP	Ministry of Economy, Local Authorities	2016-2017	12,000 $
	Publication of practical guide books	MoEP	Ministry of Economy	2016-2018	10,000 $
	Creation of Specific Green Labels	The Standards Institution of Israel	MoEP	2016-2020	No budgetary requirements
Supporting Social Environmental Businesses	Social entrepreneurs training program	MoEP	JAI	2015-2020	450,000 $
	Financing support	JAI	MoEP	2016-2020	To be determined
	Round table dialogue group	MoEP	Social entrepreneurs, Ministry of Economy, Local Authorities, Ministry of Finance	2016-2020	To be determined

Project	Outputs	Responsibility	Partners	timeframe	Estimated Budget
Resource Efficiency Knowledge Center	Establishing the center	MoEP and Ministry of Economy	Industry	2016	250,000 $
	On-going operation	Resource Efficiency Knowledge Center	MoEP, Ministry of Economy and Industry	2016-2020	5 million $
Promoting Green Investments (Environmental Performance Index)	Developing the index methodology	MoEP		2015	
	Annual compiling and publication			2015-2020	500000 $

Sustainable Consumption

As part of the scoping process for developing an SCP roadmap for Israel, a range of topics were identified by stakeholders in workshops that took place in Israel in 2013-2014. In the first round of table discussions in December 2013, stakeholders identified topics, target groups and policy tools for addressing sustainable consumption, as follows:

- Identified topics: sustainable lifestyles, food, transportation, housing, new business models, public awareness of environmental impacts and solution, behavior change through the socio-psychological approach and collective consumption.
- Identified target groups: government, local authorities, industry and businesses, special sectors such as the religious sector, youth and seniors, NGOs and communities.
- Identified policy tools: use of a basket of policy tools, mobilization of leaders of public opinion (such as media people), determination of ambitious goals, information, green labeling and case studies so as to learn from best practices (such as water conservation in Israel).

In subsequent discussion, key levers for change were identified for special focus including green public procurement, household behavior and behavioral economics.

1. Green Public Procurement

As the share of public procurement in GDP in Israel is high (10.24% in 2010), the public sector was recognized as a key player in catalyzing the demand for green products and services and serving as an example of sustainable consumption. Therefore, in recognition of the potential impact of green public procurement on the supply of green products, on the development of green markets and on the behavior of both public and private consumers, the Ministry of Finance's Government Procurement Administration, as the administrative body that implements government purchasing policy, together with the MoEP, have promoted green procurement.

As per a government decision calling for a minimum of 20% green public procurement out of the total procurement expenditure by 2020, cooperation has been strengthened with three major administrations in the Finance Ministry which deal with purchasing, housing and vehicles. A joint working procedure is in place between the Government Procurement Administration and the MoEP whereby the ministry examines planned tenders six months in advance of their publication, reviews their environmental impacts, prepares product sheets (with criteria for the selection of products or services and data on their environmental impacts and cost benefit analyses), and prepares lists of potential suppliers that meet the criteria as well.

With the professional support of the MoEP, dozens of product sheets with environmental criteria have been prepared for products and services that have been or will be integrated in relevant tenders. Environmental criteria have already been integrated in several government tenders including tenders for energy-efficient computers and computer screens, video conferencing, printers and furnishings. Recently, the Procurement Administration has hired its own sustainability advisor to prepare and assist in the inclusion of environmental criteria in tenders.

Since the cycle for government tenders is relatively long, the steps taken today will only find full expression in the next few years. It is expected that the green procurement process which has been put in place will serve as a signal for change to suppliers and other stakeholders that will be required to comply with environmental criteria that will be mandatory in a growing number of public tenders in the coming years. Such criteria may include, among others, requirements for energy stars or compliance with the Restriction of Hazardous Substances Directive (RoHS Directive). While the process initially focuses on the Purchasing Administration, it is expected that it will impact on the private market as well.

To further advance green procurement, the following projects are currently in planning:

- Establishment of a government green procurement portal by the MoEP in cooperation with the Procurement Administration. The interactive website will include product sheets, surveys and other basic information that can be easily accessed by consumers when purchasing appliances, for example.

- Preparation of a manual on reliable claims for green public procurement.

1.1. Servicizing and Innovation in Procurement

In addition to the MoEP, Israel's Ministries of Finance and of Economy recognize that green procurement can serve as a lever for green innovation and green growth. Efforts are therefore being directed at matching Israel's innovation culture with public procurement priorities, and using Israel's leadership in cleantech innovation as a tool in the public procurement of green innovation.

One possibility is to allow suppliers the flexibility to come up with innovative solutions based on functional or performance specifications rather than obligatory technical specifications. Thus, suppliers would be free to propose solutions that address specific problems in ways that are more innovative and more effective.

Israel is reviewing possibilities for green innovative procurement and is grappling with such questions as: how to assess needs, how to create RFIs or initiate competitive dialogues with potential suppliers, how to run a procurement of innovation process, how to encourage industry to participate in the process, and more.

Another issue currently under review is servicizing. Israeli researchers have taken an active part in the European SPREE project (Servicizing Policy for Resource Efficient Economy) within the framework of the environment theme under the European Commission's Seventh Framework Programme. The aim of the project was to identify potential "Servicizing Policy Packages" to facilitate the transition from selling products to providing services. Servicizing is greatly dependent on innovation and efforts are currently focusing on studying the applicability of servicizing methods in specific tenders.

These areas will be promoted with the participation of all stakeholders (e.g., green procurement practitioners, suppliers, academics, governmental, industrial and business representatives) with the aim of initiating a dialogue about future green criteria.

1.2. Green Public Procurement: Housing

The Government Housing Administration is responsible for managing some 5600 buildings held or used by government ministries and their agencies in an area totaling more than 2 million square meters. As the agency responsible for planning, building, renovating and maintaining government housing (including rentals), it plays a key role in achieving the resource efficiency targets set by the government.

In 2012, the Government Housing Administration committed to incorporating green building requirements in all of its tenders, in accordance with Israel's Green Building Standard (Israel Standard 5281). To implement the decision, cooperation with the MoEP was strengthened and a work procedure was established to compare buildings in terms of the nine areas defined in IS 5281: energy, water, building materials, waste and recycling, transport, land, ecology, health and wealth, construction site management and innovation. The procedure distinguishes between new buildings or buildings which have undergone significant renovation (which are covered by the standard) and existing buildings or parts of buildings which are not covered in the standard and require the development of a new ranking.

To ensure that existing buildings or parts of building are covered in the green building requirement, a practical tool was developed to measure the environmental performance of existing buildings and assess their potential for environmental improvement. The ranking gives weight to all of the categories included in IS 5281 to allow existing buildings or parts of buildings to upgrade their environmental performance in order to comply with the requirements of government housing. Pilot projects are currently being conducted in several existing government office buildings to compile data and to check the feasibility of the new ranking. The results of the survey will provide data on the environmental performance of existing buildings, will provide a preliminary economic assessment of the cost of using different means to improve their environmental performance, and will enable this new methodology to be used for other existing buildings.

Additional initiatives include:

- Inclusion of the Housing Administration in an ongoing pilot project that compares some 28 new buildings, most of which are built according to green building standards and some of which are built using conventional construction. The project aims to collect and analyze data on building processes using the two methods in terms of costs, timetables, and other factors.
- Review of the energy labeling of buildings, based on existing models such as the EUI (energy use intensity), and formulation of recommendations for improving energy performance, including behavioral insights. The project will examine existing buildings according to the label model and according to Israel Standard 5282 on the energy rating of residential and office buildings and will examine new buildings according to IS 5281.

1.3. Green Public Procurement: Transport

The Government Vehicle Administration in the Ministry of Finance is responsible for providing vehicles and vehicle services to government ministries and agencies. The government vehicle fleet includes some 10,000 vehicles, with a 25% rate of changeover every year. As per the "Green Government" decision, the Government Vehicle Administration is required to incorporate environmental considerations in its tenders and to promote fuel-thrifty driving as follows:

- Tenders must include a maximum pollutant emission level for each category of vehicle, in collaboration with the MoEP.
- Tenders must award additional points to vehicles with low fuel consumption.
- Driver instructions must include tips on fuel-thrifty driving.

In addition, the Vehicle Administration has set requirements for the compliance of buses and trucks with EURO 6 standards as well as requirements on low pollution and low fuel consumption for additional types of transport such as motorcycles and police surveillance vehicles. Mandatory refresher courses for government drivers must also include instruction on fuel-thrifty driving.

The decision to promote the transition to green vehicles in the government vehicle fleet is expected to pave the way for the procurement of green vehicles by local authorities, government companies and other agencies.

1.4. Green Public Procurement in Local Authorities

Alongside continuing efforts to promote green public procurement at the central government level, the MoEP is promoting green public procurement at the local level, where the tender cycle is shorter and where there is a larger diversity of tenders. At present, only a small number of local authorities in Israel have made initial steps on green procurement, mostly in relation to tenders for printing paper and office supplies, and the field is still in its infancy. However, by promoting the integration of environmental criteria in the tendering procedure, public authorities can have a positive influence on market supply.

In March 2015, the MoEP launched a forum for procurement officials, which includes the representatives of environmental and purchasing departments in leading municipalities in Israel. As part of the process, heads of local authorities were interviewed to identify relevant stakeholders and anticipated tenders at the local level and to pinpoint obstacles along the way with a view to training procurement officials, accompanying local authorities in the process and publishing an online manual. In parallel, global experience in municipal green procurement will be reviewed including case studies of successful green procurement in local government. Round tables and discussions with all relevant stakeholders will be an integral part of the process.

One of the measures currently being examined for future development is a revolving fund to provide the preliminary capital to local authorities to implement certain projects, such as transition to energy efficient lighting, based on a business plan.

To boost municipal green procurement in Israel, plans call for the incorporation of environmental criteria into public procurement tenders in collaboration with at least 5 selected local authorities. A mechanism for sharing these "green tenders" among local authorities will be established and procurers will be trained accordingly.

Specific outputs of the project include:

- Preparing manuals in Hebrew for local authorities.
- Conducting forum meetings for procurement managers in local authorities.
- Preparing eight green product sheets that respond to the needs of local authorities.
- Preparing and conducting training workshops for procurement managers in local authorities.
- Establishing a green public procurement web portal.
- Publishing periodical green public procurement newsletters.

2. Lifestyle Labs

Sustainable consumption is closely connected to daily lifestyle patterns. Therefore, based on models and experiences in the EU and particularly in Germany, Israel is examining the possibility of a project that will help translate sustainability into daily lifestyle by analyzing household behavior and coming up with specific recommendations and tools for change.

Preliminary plans call for sampling a number of households that will be representative of different regions and sectors in Israel – urban, rural, religious, Arab and more. Consumption patterns in these households would then be tracked and mapped for a period of a year with information on what they buy, how they use energy, how they travel to work, what they eat and more. The accumulated information will be analyzed in terms of what impacts the consumption patterns of households and why, and the ecological footprint of these households will be calculated. Based on the results, concrete recommendations on more sustainable consumption patterns which are adapted to each specific household will be provided.

The envisioned stages of the project include:

- Analysis of consumer behavior and the typical household footprint;
- Recommendations for reducing ecological footprint;
- Review of the implementation of the recommendations and processes of change in household behavior;

- Publishing a guide to reducing environmental impacts of households.

3. Behavioral Economics

It is increasingly recognized that insights from the fields of behavioral economics, social psychology and experimental economics are under-utilized when designing SCP policies, although they play a critical role in compliance. These fields deal with the effects of psychological, social, cognitive and emotional biases on an individual's decision making and a wide body of literature that deals with these subjects along with examples is available. Randomized control trials that make use of these biases can play a significant role in the success of any SCP program by generating better, evidence-based, tailor-made, consumer-oriented policies in virtually any domain.

Therefore, Israel is beginning to focus attention on the architecture of the decision making space, based on the understanding that consumer biases often affect the decision making of individuals and households. Recognition is growing that policies are needed to help "nudge" individuals toward better decisions about their environment, their health and their general wellbeing, among others.

At the same time, it is recognized that the approach should be problem-driven and that new policies should be based on randomized control trials that are evidence-based. Therefore, a number of trials, based on focus groups and control groups, are in planning to monitor the impact of different biases on decision making on sustainability issues. They will check how small changes – personal appeals, letters, etc. – impact on individual and household behavior and will examine how monitoring the results and using the information gained can help design more effective policies.

At present, evidence-based trials are being initiated in a number of areas, including separation of waste at source, water and energy consumption and more. The trials are being designed to examine the effects of different forms of "nudging" on household behavior. For example, one survey aims to ascertain what ranks highest in people's decision making on the types of refrigerators they buy. Since money is a major consideration and since people are loss averse, means are being sought to have the energy

label reflect the net value of savings in order to encourage people to purchase energy efficient refrigerators and other environmentally-friendly products.

In 2011, the MoEP launched a heavily funded program aimed at promoting waste separation at source at the household level in localities throughout the country. Yet despite the existence of a wide variety of tools to promote household waste separation, including regulatory and financial tools and the free distribution of separate bins for organic and dry waste in households throughout the country, a significant number of households do not yet separate at source.

Prior to launching the program, policy interventions to increase the rate of household waste separation were not tested and, as a result, lessons were not drawn from behavioral economics or social psychology research. The SCP pilot project, therefore, aims at increasing household waste separation rates using insights from the fields of behavioral economics in three municipalities in Israel. Based on the results of randomized control trials, the knowledge gained will be disseminated among municipalities in Israel to facilitate better policy making, and the impacts of the project are expected to benefit over 200,000 citizens, both directly and indirectly.

Following are the major components of the project and the expected outputs:

- Preparation of a market survey of household waste separation (HWS) trends in 3 selected municipalities that take part in the separation of waste program initiated by the MoEP, including a survey of existing HWS policies, incentive structure and resident (consumer) behavior in these municipalities.
- Preparation of reports together with academics and other experts, including a literature review of behavioral economics and social psychology instruments and mechanisms that may improve the outcomes of HWS policies for all 3 municipalities, including recommendation of three behavioral economics/social psychology interventions in households in each municipality.
- Implementation of randomized control trials to test the efficacy of each behavior economics/social psychology instrument, including a statistical and economic analysis of the findings (including cost benefit analysis). The trials will use such

means as: use of messengers and different personal appeals, use of special superabsorbent polymers (SAP) and other organic materials to prevent organic waste stench and changes in the default placement of bins, use of HWS comparative data as a social acceptability lever to change consumer behavior, and running a lottery between households and neighborhoods in each municipality

- Diffusion of the knowledge gained in order to improve policy making and increase HWS in municipalities throughout the country through the publication of the trials, findings and policy prescriptions and the organization of conferences with the participation of all stakeholders.

Summary of Projects

Table 4: Sustainable Consumption Projects Summary

Project	Outputs	Responsibility	Partners	timeframe	Estimated Budget
Servicizing and Innovation in Procurement	Green Innovation Workshops	The government procurement administration	MOEP Ministry of Economy	2015-2016	20000 $
	Showroom - Israeli Green Technologies		MoEP	2015-2020	To be determined
Green Public Procurement: Housing	Mandatory use of green Building Standard	The government procurement administration	MoEP	Completed	No budgetary requirements
	Green ranking of buildings and structural parts			2015-2020	No budgetary requirements
Green Public Procurement: Transport	Defining maximum air pollution levels in tenders	The government procurement administration	MoEP	2015	No budgetary requirements
	Incentivizing low fuel consumption scores			2015	No budgetary requirements
	Training for drivers			2015-2016	20,000 $
Green Public Procurement in Local Authorities	Preparation of guidance documents	MoEP	Local Authorities; Local Government Economic Services Ltd; Federation of local authorities in Israel	Completed	7,000 $
	Local authorities procurement managers forum meetings			Completed	3,000 $
	Preparation of product sheets for green tenders			2015-2017	24,000$
	Periodical newsletters for of local authorities			2015-2016	1,300 $
	Establishment of GPP web portal			2015	1,300 $
	Instruction workshops for procurement managers			2015-2017	2,250 $

Project	Outputs	Responsibility	Partners	timeframe	Estimated Budget
Lifestyle Labs	Conducting lifestyles observation labs - Mapping and analysis of consumer behavior and the footprint of households	MoEP		2016-2017	45000 $
	Compiling recommendations to households			2018	15000 $
Behavioral Economics (Promoting evidence-based policies to increase household waste separation rates, using behavioral economics and experimental economics)	Market survey of household waste separation policies in selected municipalities	MoEP	Lapam Israeli Government Advertising Agency	2015	7,000 $
	Reports to asses applicability of BE in 3 municipalities		Selected municipalities	2015-2016	4,500 $
	Randomized control trials		Academic institutions	2016	40,000 $
	Publication of trials (writing, editing, design, print and translation of a summary)			2016	10,000 $
	Conference production			2016-2017	5,000 $

Connecting the Dots – Between Sustainable Production and Sustainable Consumption

In addition to projects and activities in the specific fields of sustainable production and sustainable consumption, Israel has identified a number of fields that fall between the two that are expected to contribute in a significant way to its SCP roadmap. These include sustainable materials management, sustainable urbanism, environmental standards, reliable environmental labeling and greenwash prevention, and development of reliable footprint labels.

1. Sustainable Materials Management Strategy

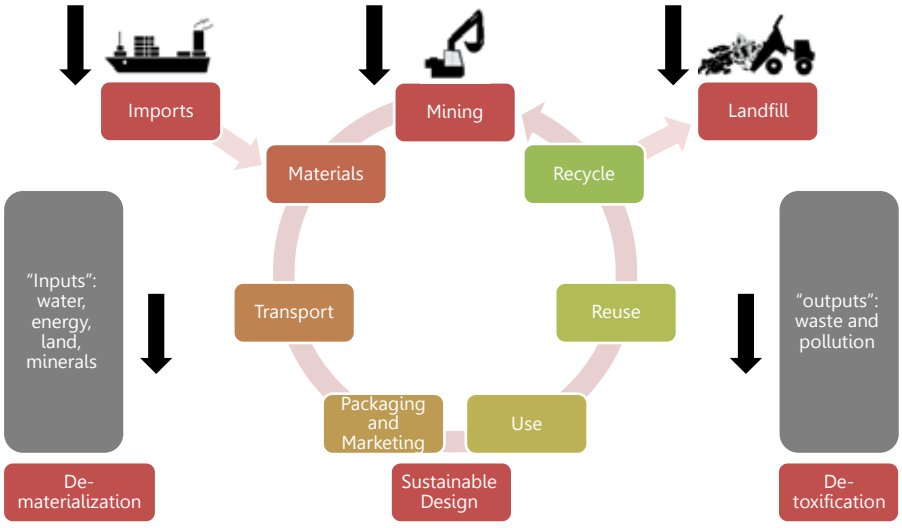
It is now generally accepted that neither natural resources nor the earth's carrying capacity are infinite. The linear economic model whereby products are manufactured from raw materials, sold, used and discarded as waste is no longer valid. Based on this understanding, Israel's SCP roadmap deals with steps aimed at promoting sustainable materials management and a circular economy. Means are being sought to reduce both inputs and outputs, without damaging economic growth, so as to decouple economic growth from natural resource exploitation and environmental degradation. This will largely be accomplished by feeding products and materials back into the value chains at appropriate points.

The MoEP is currently developing a cross-ministry, cross-sector program that aims to introduce a circular economy to Israel. The sustainable materials management strategy which is currently under development at the MoEP requires a better understanding of the existing stock of materials through their entire life cycle, while checking, at each stage, how negative environmental impacts may be prevented or minimized. Accordingly, a number of materials have been selected for initial study, with additional materials to be added over time.

Construction and mining materials were the first to be studied in recent years within the framework of a review of Israel's system of taxation and royalties with regard to the government's take from the commercial use of natural resources other than oil and gas by

private entities. As part of the review, a committee reviewed royalties on quarrying materials (aggregates) in Israel, and an interministerial team headed by the MoEP reviewed the externalities of quarrying operations in Israel. The interministerial team then proposed legislation on an environmental levy that would internalize the externalities of quarrying and incentivize reduction of external impacts while promoting the use of substitutes for quarrying material and recycling. In addition, the committee recommended imposing land usage fees to reflect the alternative value of the land and a royalty that would reflect the scarcity of quarrying materials (resource scarcity). As a result, information concerning the existing stocks of quarrying material has been compiled and policy instruments have been identified by a wide range of stakeholders including, for example, an aggregate levy and fund and green construction.

Figure 4: Sustainable Materials Management Strategy



Additional materials that have been targeted for review within the context of the MoEP's sustainable material management strategy include paper, tires (rubber), plastics and food. In all these cases, information will be compiled about the quantities (stocks) of these materials, the relevant sectors and the relevant stakeholders in order to design effective circular economy tools. For example, when reviewing the paper stream, information must

be gathered on the quantity of paper produced, its mode of transportation and distribution, and the identity of stakeholders along the various value chain stages. Stakeholders have already been identified and approached in order to compile the information and prepare the necessary assessments.

To advance the transition to a circular economy rather than end of life treatment, efforts will focus on identifying the role of different sectors in Israel's economy in promoting the strategy and getting everyone to join the bandwagon. For this purpose, the model will be introduced to a wide variety of stakeholders including government ministries, local authorities, industry and the general public by such means as round table discussions that will identify the levels in the value chain with the biggest ecological footprint and recommend policy instruments for these points. Similarly, successful case studies of sustainable material management will be presented to demonstrate that economic growth is possible alongside environmental improvements. The ultimate aim is to discover the most effective policy instruments for different streams of materials and different sectors and to implement them.

2. Circular Economy: The Case of Household Food Waste

Household food waste has been identified both globally and nationally as an important material stream that should be addressed within the framework of a circular economy. Throughout the world, food waste is known to occur throughout the food supply chain, from manufacturing and processing through transportation, sale, and cooking and serving in the home. In most cases, food waste reaches landfills, contributing to greenhouse gases and increasing landfill volume rather than being used productively in other ways. At the same time, a variety of means has been identified to reduce food waste including: composting, waste-to-energy production through anaerobic digestion, donation to food banks and to the needy, animal feed, donation of food near to or past its expiry date or its sale at reduced prices, dissemination of recipes for leftover foods, improvement of food storage methods in retail stores including ways to reduce egg breakage, laws to promote food donation such as the Good Samaritan Food Donation Act in the USA which aims to encourage the donation of food that would otherwise go to waste to nonprofits by minimizing liability, and much more.

As in the case of other materials, Israel plans to devise methodologies for intervening at different points of the supply chain with different target audiences to reduce food waste. The subject touches upon a number of ministries including Environmental Protection, Economy, Health and Agriculture. As part of the process, an interministerial team will be set up to examine policy tools around the world, to review current policy in Israel and identify gaps, to formulate an action plan and to promote public awareness.

3. Sustainable Urbanism

In 2014, the MoEP decided to develop a ministerial strategy to address the question of how to make cities more sustainable. Throughout the world, more and more people are either born in cities or move to cities so that the majority of people now live in urban areas. In Israel, the number of city dwellers is especially high – reaching some 92% of the total population. As pressures mount on human and ecosystem services – whether water, energy, transportation, parks, landscape values – ways must be found to make the urban experience more sustainable. The economy of scale in cities can help achieve this goal by decreasing pressures on land and resources while facilitating the provision of vital infrastructure and services. The concept of sustainable urbanism, first defined in 2007 by Doug Farr as "walkable and transit-served urbanism integrated with high performance buildings and high-performance infrastructure" is beginning to gain recognition in Israel as well.

Based on the high percentage of urban dwellers in Israel, the development of sustainable cities is an important element in Israel's SCP roadmap. This entails taking the different experience dimensions of the urban dweller and breaking them down into their specific components – urban transportation, housing, waste, energy production and efficiency, water use, rainfall catchment, poverty, food production and more. Based on these pillars, feasible and practical goals will be defined which will then be developed into projects.

A necessary first step in promoting different elements of sustainable urbanism, such as cycling, health improvement, air pollution reduction, etc., require the availability of a baseline. Such a baseline is still missing in Israel and therefore a project was launched in 2015 to develop and improve the baseline by compiling vital information. For example, when examining the development of walking lanes, information is being gathered on

costs, possibilities for funding, and more. Plans call for setting quantifiable goals in different cities – for bike lanes, mixed uses of housing, green construction, rain catchment, and more – and then for defining target projects to accomplish the goals.

Several initiatives have been launched in recent years such as municipal covenants for reducing air pollution and climate change which saw Israel's major cities prepare baseline emissions inventories and forecasts and develop master plans in four fields: transportation and fuels, energy efficiency and green building, waste treatment and recycling, and green spaces. At the same time, Israel's small and medium-sized local authorities have signed an "Environment Tag" covenant that uses a computerized model to compile and manage data on resource consumption in each municipality, forecast future expenditures in order to improve resource efficiency, and reduce resource consumption. An NGO, titled Movement for Israeli Urbanism, seeks to improve the quality of urban life in Israel and to promote the development of urban sustainability. As part of its activities, the NGO founded an Israeli Mayors' Institute on City Renewal, a program that brings together mayors from diverse cities in Israel to participate in workshops aimed at providing tools to implement urban planning measures that will foster economic development, sustainability and quality of life. The MoEP is a partner in the initiative.

The development of sustainable urbanism projects will also be based on the problem-driven approach, with the compilation of information from Israel and around the world and its dissemination as a necessary first step. Subjects on the agenda that have been targeted for further study and development include:

- Urban transportation and air pollution: encouraging cycling and walking, reducing congestion and managing transport congestion and reducing dependence on transport;
- Housing and urban construction: promoting mixed uses and local employment, and new and retrofit green construction;
- Municipal waste management: reducing the production and consumption of contaminants, and raising rates of waste separation at source;

- Energy: reducing energy consumption in households and businesses and raising the rate of renewable energy production;
- Water and sewage systems: reducing water losses, raising the rate of treatment and recovery, increasing water storage capacities and reducing urban floods;
- Open spaces and biodiversity: promoting the conservation and improvement of open spaces, encouraging environmentally safe pest control, maintaining the biodiversity, heritage sites and cultural assets of the city, and encouraging domestic and foreign tourism;
- Innovation and digital urbanism hubs: harnessing ICT and disruptive technologies (IoT, wearable tech, Big Data) to address environmental challenges in cities, setting up hubs in cities to advance the MoEP's smart cities agenda and to provide space and tools to support entrepreneurs and ventures and to facilitate technological education.

In many of these areas, activities and projects have already been launched, including the separation of waste at source revolution, urban initiatives to reduce greenhouse gases and pollution, green building projects and training of professionals. In other areas, initiatives are beginning to take place as in the case of digital urbanism which uses information and communication technologies to deliver services, optimize resource management and service delivery and improve urban life. Several municipalities in Israel, including Ra'anana, Herzliya and Tel Aviv, are already giving entrepreneurs the opportunity to attend to the challenges in their cities through the use of technology, transforming the city into innovation laboratory.

4. Environmental Standards and Labeling

As in other countries, incorporating environmental aspects in the standardization process is an important component of Israel's SCP roadmap. The Standards Institution of Israel (SII) is the national body charged with developing, preparing and implementing standards and with assuring the quality of products and services through laboratory testing and certification approvals. In addition, it represents Israel in international standards organizations such as the International Organization for Standardization (ISO). Israeli

policy calls for adopting the international standards used in developed countries as far as possible.

The preparation of Israeli standards is coordinated through technical committees, working groups and central committees with the participation of experts representing the relevant sectors of Israel's economy and society. Israeli standards are voluntary except in certain cases determined by the Minister of Economy in order to safeguard public health, safety, environmental protection, etc.

One of the certification programs operated by the SII is the Green Label marking scheme, a voluntary standard that is jointly awarded by the MoEP and the SII for products or services that meet defined environmental criteria. The label is granted when the environmental impact of one or more stages in the life of a product or service is reduced in comparison to a different product or service. One of the stated purposes of the Green Label is to direct manufacturers to review and account for the environmental impact of their products at each stage of the product's life cycle to ensure that consideration of environmental effects throughout a product's life is an integral part of the production process. In addition, encouraging producers to apply for a Green Label increases sustainable consumption.

The MoEP is actively involved in encouraging voluntary standards and incorporating environmental aspects in binding standards. It has taken the lead in promoting a number of green labels, including Israel's green building standard, Israel Standard 5281 for buildings with reduced environmental impact, which was published by the SII in 2005 and was upgraded to meet international standards in 2011. The standard relates to both new building and existing buildings that undergo renovation and can be applied to most types of buildings in Israel. The standard is now undergoing another revision aimed at further expanding it to industrial buildings, neighborhoods and more.

MoEP reviews are a vital part of the process to integrate environmental aspects in standards, and as such, the ministry has recently opposed the obligatory introduction of fire retardants into an Israel Standard on resistance to ignition of mattresses and mattress pads and has opposed revisions to an original Israel Standard on Installations for Liquefied Petroleum Gas (LPG), advocating more stringent safety and environmental

requirements and adoption of international standards. Similarly, the MoEP has called for the preparation of a standard for refuse derived fuel (RDF) as an alternative to conventional fuel.

Future steps include:

- Broadening the green label and increasing the number of manufacturers, products and services that are eligible for the Green Label.
- Producing a manual with comprehensive information on who can grant a Green Label, how to make it reliable, what are the costs, what is the process of checking whether an international standard exists, what are the procedures for third party declaration, and more.
- Promoting environmental labeling for pesticides and pest control services to assure green pesticide control by means of a multi-stakeholder process in order to integrate perspectives and needs.
- Promoting environmental labeling for flushables within the framework of the ISO initiative to develop a new flushability standard. Currently there are no standards governing when a product can be labeled and marketed as flushable and therefore technical specification on flushables should be developed. A mirror committee in Israel will review the subject both in its international and national aspects and submit a professional opinion.

5. Prevention of Greenwash and Promotion of Reliable Environmental Claims

The rise in environmental awareness among consumers, producers and marketers in Israel and worldwide has led to an increase in environmental claims on products. However, the lack of a clear framework of rules governing the use of environmental claims carries risks, especially an increase in claims which are not substantiated. The gap between claims that attribute a feature or benefit to a product and the product's actual performance is known as the greenwash phenomenon. To address the problem, the MoEP published a guide on the prevention of greenwash which includes clear and specific principles for

making specific environmental claims in the following categories: compostable; biodegradable; contains recycled material; waste reduced; reusable; and green building. While the guide primarily focuses on self-declarations by the producer or marketer of the product, it also relates to requirements when displaying an environmental label on a product granted by a third party.

Future plans call for the broadening of the greenwash guide, especially in relation to pest control products and services for the home and for increasing enforcement of unsubstantiated claims in accordance with administrative fines that were first introduced in 2015.

A reliable, credible and consistent measure of the environmental footprint of products is a fundamental step in raising awareness among producers and consumers and thereby reducing the footprint. An environmental footprint label does not exist in Israel, although several methodologies exist worldwide. Israel is currently mapping these methodologies in order to ascertain what is most appropriate for the country. In recognition of the importance of developing a reliable footprint label, Israel plans to develop an environmental performance assessment methodology designed to measure the environmental footprint of goods and services in a reliable and concise manner, based on the EUs "Product Environmental Footprint (PEF)" Initiative. A multi-stakeholder process will be initiated to integrate the perspective needs of both producers and consumers in the methodology which will then serve as a basis for a nationwide footprint label.

Following are the main components and outputs of the project:

- Mapping and identifying relevant methods to measure the environmental performance of selected products in order to determine the method most suited to Israel.
- Choosing a relevant business sector.
- Building a set of Footprint Category Rules, based on a public consultation process.
- Conducting a pilot project for 5 product groups in the sector that was chosen through a multi-stakeholder process.

- Developing a "product benchmark" for a given product group or an "organization benchmark" for a given sector through a multi-stakeholder process.
- Preparing and disseminating a publication that communicates the results of the pilot projects to encourage more businesses to join or conduct similar processes.

Summary of Projects

Table 5: 'Connecting the Dots' Projects Summary

Project	Outputs	Responsibility	Partners	timeframe	Estimated Budget
Sustainable Materials Management Strategy	Review of SMM principles, methods, best practices, domains and success stories from selected countries	MoEP	Ministry of Economy	2015-2016	No budgetary requirements
	Conducting in-depth interviews with local key stakeholders and international experts		Ministry of Energy and Water Resources	2015-2016	No budgetary requirements
	Round table events with key stakeholders to propose and prioritize policy instruments (government interventions)		Ministry of Agriculture	2015-2017	To be determined
	Developing selected policy instruments (interventions), strategy execution and monitoring		Manufacturers Association of Israel	2016-2018	To be determined
Circular Economy: The Case of Household Food Waste	Review of principles, methods, best practices, domains and success stories from selected countries vis-à-vis HFW	MoEP	Ministry of Economy	2015-2016	To be determined
	Conducting HHs survey coupled with in-depth interviews with local key stakeholders and international experts		Ministry of Agriculture	2015-2016	To be determined
	Round table events with key stakeholders to propose and prioritize policy instruments (government interventions) to reduce HFW		Manufacturers Association of Israel	2015-2016	To be determined
	Developing selected policy instruments (interventions) to reduce HFW, strategy execution and monitoring		Civil society organizations	2015-2018	To be determined

Project	Outputs	Responsibility	Partners	timeframe	Estimated Budget
Sustainable Urbanism Strategy	Review of Sustainable Urbanism principles, methods, best practices, domains and success stories from selected countries	MoEP	Prime Minister's Office	Completed	No budgetary requirements
	Conducting in-depth interviews with local key stakeholders	MoEP	National Economic Counsil	Completed	No budgetary requirements
	Round table events with key stakeholders to propose and prioritize policy instruments (government interventions)	MoEP	20 municipalities	In process	To be determined
	Developing selected policy instruments (interventions), strategy execution and monitoring	MoEP	Civil society organizations	2015-2018	To be determined
Environmental Standards and Labeling	Mapping relevant methods to measure environmental performance	Ministry of Environmental Protection	5 companies from the chosen business sector	2015	8,500 $
	Choosing a relevant business sector (i.e. textile plastics, electronics)			2015	No budgetary requirements
	Building a set of Footprint Category Rules includes public consultation process			2015-2016	8,450 $
	Conducting a pilot that covers 5 product groups			2016-2017	To be determined
	Developing of a "product/organization benchmark			2016-2017	24,500 $
	A Publication of results of the pilots			2018	10,500 $
Prevention of Greenwash and Promotion of Reliable Environmental Claims	Publication of guidelines	Trade and Consumerism at the Ministry of Economy and MoEP	MoEP	2014-2018	12,000 $
	Training and workshops for businesses	MoEP	Trade and Consumerism at the Ministry of Economy	2014-2018	12,000 $
	Enforcement against businesses	Trade and Consumerism at the Ministry of Economy	MoEP	2015-2018	To be determined
	Assimilation in academic and professional institutes	MoEP	Trade and Consumerism at the Ministry of Economy	2015-2020	To be determined
	Updating the guidelines	Trade and Consumerism at the Ministry of Economy and MoEP	MoEP	2018-2020	12,000 $

Appendix: Summary table

Project	Outputs	Responsibility	Partners	timeframe	Estimated Budget
Sustainable Production					
Sustainable Development Strategies in Government Companies	Publication of guidelines	Government Companies Authority	Government Companies, MoEP	Completed	No budgetary requirements
	Mandatory reporting implemented			2015-2017	No budgetary requirements
	Professional training			2014-2018	50,000 $
	Monitoring progress			2015-2018	40,000 $
Promoting Best Practices for Small and Medium Enterprises (SMEs)	Conducting energy, waste and material flow surveys in the selected businesses	MoEP	Ministry of Economy, Local Authorities	2015-2017	21,000 $
	Implementation course	MoEP	Ministry of Economy, Local Authorities	2016-2017	12,000 $
	Publication of practical guide books	MoEP	Ministry of Economy	2016-2018	10,000 $
	Creation of Specific Green Labels	The Standards Institution of Israel	MoEP	2016-2020	No budgetary requirements
Supporting Social Environmental Businesses	Social entrepreneurs training program	MoEP	JAI	2015-2020	450,000 $
	Financing support	JAI	MoEP	2016-2020	To be determined
	Round table dialogue group	MoEP	Social entrepreneurs, Ministry of Economy, Local Authorities, Ministry of Finance	2016-2020	To be determined
Resource Efficiency Knowledge Center	Establishing the center	MoEP and Ministry of Economy	Industry	2016	250,000 $
	On-going operation	Resource Efficiency Knowledge Center	MoEP, Ministry of Economy and Industry	2016-2020	5 million $
Promoting Green Investments (Environmental Performance Index)	Developing the index methodology	MoEP		2015	
	Annual compiling and publication			2015-2020	500000 $

Project	Outputs	Responsibility	Partners	timeframe	Estimated Budget
Sustainable Consumption					
Servicizing and Innovation in Procurement	Green Innovation Workshops	The government procurement administration	MOEP Ministry of Economy	2015-2016	20000 $
	Showroom - Israeli Green Technologies		MoEP	2015-2020	To be determined
Green Public Procurement: Housing	Mandatory use of green Building Standard	The government procurement administration	MoEP	Completed	No budgetary requirements
	Green ranking of buildings and structural parts			2015-2020	No budgetary requirements
Green Public Procurement: Transport	Defining maximum air pollution levels in tenders	The government procurement administration	MoEP	2015	No budgetary requirements
	Incentivizing low fuel consumption scores			2015	No budgetary requirements
	Training for drivers			2015-2016	20,000 $
Green Public Procurement in Local Authorities	Preparation of guidance documents	MoEP	Local Authorities; Local Government Economic Services Ltd; Federation of local authorities in Israel	Completed	7,000 $
	Local authorities procurement managers forum meetings			Completed	3,000 $
	Preparation of product sheets for green tenders			2015-2017	24,000$
	Periodical newsletters for of local authorities			2015-2016	1,300 $
	Establishment of GPP web portal			2015	1,300 $
	Instruction workshops for procurement managers			2015-2017	2,250 $
Lifestyle Labs	Conducting lifestyles observation labs - Mapping and analysis of consumer behavior and the footprint of households	MoEP		2016-2017	45000 $
	Compiling recommendations to households			2018	15000 $
Behavioral Economics (Promoting evidence-based policies to increase household waste separation rates, using behavioral economics and experimental economics)	Market survey of household waste separation policies in selected municipalities	MoEP	Lapam Israeli Government Advertising Agency	2015	7,000 $
	Reports to asses applicability of BE in 3 municipalities		Selected municipalities	2015-2016	4,500 $
	Randomized control trials		Academic institutions	2016	40,000 $
	Publication of trials (writing, editing, design, print and translation of a summary)			2016	10,000 $
	Conference production			2016-2017	5,000 $

Project	Outputs	Responsibility	Partners	timeframe	Estimated Budget
Connecting the Dots					
Sustainable Materials Management Strategy	Review of SMM principles, methods, best practices, domains and success stories from selected countries	MoEP	Ministry of Economy	2015-2016	No budgetary requirements
	Conducting in-depth interviews with local key stakeholders and international experts		Ministry of Energy and Water Resources	2015-2016	No budgetary requirements
	Round table events with key stakeholders to propose and prioritize policy instruments		Ministry of Agriculture	2015-2017	To be determined
	Developing selected policy instruments (interventions), strategy execution and monitoring		Manufacturers Association of Israel	2016-2018	To be determined
Circular Economy: The Case of Household Food Waste	Review of principles, methods, best practices, domains and success stories from selected countries vis-à-vis HFW	MoEP	Ministry of Economy	2015-2016	To be determined
	Conducting HHs survey coupled with in-depth interviews with local key stakeholders and international experts		Ministry of Agriculture	2015-2016	To be determined
	Round table events with key stakeholders to propose and prioritize policy instruments to reduce HFW		Manufacturers Association of Israel	2015-2016	To be determined
	Developing selected policy instruments (interventions) to reduce HFW, strategy execution and monitoring		Civil society organizations	2015-2018	To be determined
Sustainable Urbanism Strategy	Review of Sustainable Urbanism principles, methods, best practices, domains and success stories from selected countries	MoEP	Prime Minister's Office	Completed	No budgetary requirements
	Conducting in-depth interviews with local key stakeholders	MoEP	National Economic Council	Completed	No budgetary requirements
	Round table events with key stakeholders to propose and prioritize policy instruments	MoEP	20 municipalities	In process	To be determined
	Developing selected policy instruments (interventions), strategy execution and monitoring	MoEP	Civil society organizations	2015-2018	To be determined

Project	Outputs	Responsibility	Partners	timeframe	Estimated Budget
Environmental Standards and Labeling	Mapping relevant methods to measure environmental performance	Ministry of Environmental Protection	5 companies from the chosen business sector	2015	8,500 $
	Choosing a relevant business sector (i.e. textile plastics, electronics)			2015	No budgetary requirements
	Building a set of Footprint Category Rules includes public consultation process			2015-2016	8,450 $
	Conducting a pilot that covers 5 product groups			2016-2017	To be determined
	Developing of a "product/organization benchmark			2016-2017	24,500 $
	A Publication of results of the pilots			2018	10,500 $
Prevention of Greenwash and Promotion of Reliable Environmental Claims	Publication of guidelines	Trade and Consumerism at the Ministry of Economy and MoEP	MoEP	2014-2018	12,000 $
	Training and workshops for businesses	MoEP	Trade and Consumerism at the Ministry of Economy	2014-2018	12,000 $
	Enforcement against businesses	Trade and Consumerism at the Ministry of Economy	MoEP	2015-2018	To be determined
	Assimilation in academic and professional institutes	MoEP	Trade and Consumerism at the Ministry of Economy	2015-2020	To be determined
	Updating the guidelines	Trade and Consumerism at the Ministry of Economy and MoEP	MoEP	2018-2020	12,000 $

The SwitchMed sustainable consumption and production programme aims to promote a switch of the Mediterranean economies towards sustainable consumption and production patterns and green economy. As part of the SwitchMed Programme Israel, as one of the nine participating countries, began to formulate its own national SCP roadmap. This was done under the guidance of an advisory team from the Israeli Ministries of Environmental Protection and Economy and based on a year-long scoping review process which included over 300 participants from all sectors.

The Roadmap was divided into three chapters, according to their relative Consumption vs. Production emphasis:

- **Sustainable Production oriented initiatives**
- **Sustainable Consumption oriented initiatives**
- **Connecting the Dots: initiatives that are in between Sustainable Production and Sustainable Consumption.**

Developing national Sustainable Production and Consumption (SCP) National Action Plans (NAP) contributes to poverty alleviation, environmental sustainability and the development of a green economy. National SCP-NAPs are a first step in a country's response to the 2015 adopted Sustainable Development Goals (SDGs) and in particular Goal 12: Responsible consumption and production.

UNEP-DTIE, Coordinator of the national SCP policy component of the EU-funded SwitchMed program, provided advisory services and technical assistance to the national process in Israel.

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