

SwitchMed is an initiative that supports and connects stakeholders to scale up eco and social innovations.

## SwitchMed is an initiative that supports and scale-ups eco and social innovations

The SwitchMed Programme was launched in 2013 by the European The TEST implementation approach has to date successfully demon-Union to speed up the shift to sustainable consumption and production tion of circular economy approaches. The Programme aims at achieving productive, circular and sharing economies in the Mediterranean by changing the way goods and services are consumed and produced so that human development is decoupled from environmental degradation.

Its activities benefit 8 countries in the Southern Mediterranean: Algeria, Egypt, Israel, Jordan, Lebanon Morocco, Palestine and Tunisia. Through policy development, demonstration activities and networking opportunities, SwitchMed supports and connects stakeholders to scaleups eco and social and eco innovations The Programme supports policy makers, eco-innovative small and medium sized enterprises, industries, start-ups and entrepreneurs in the Southern Mediterranean countries, countries. MAP provides support to those countries in the implemenwhich have identified job creation and natural resource protection as priority issues that also contribute to their economic stability.

SwitchMed, which works with a wide range of stakeholders, is committed to catalyse the market of sustainable products and services in the The Regional Activity Centre for Sustainable Consumption and Produc-

- medium sized enterprises for resource efficiency improvements;
- Trainings for start-ups and entrepreneurs to build skills in design, business plan, marketing and financing of sustainable products and
- framework to boost the market for sustainable products and services; • Empowerment of citizens and civil society organisations to lead so-
- cially innovative solutions addressing environmental challenges;
- networks, exchange information and to scale-up current activities.

SwitchMed is implemented by the United Nations Industrial Development Organisation (UNIDO), the United Nations Environment Programme Mediterranean Action Plan (UN Environment/MAP). the Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC) and the UN Environment's Economy Division. Each of the to partner with the eight countries on activities that span policy development, capacity building, business support services, demonstration activities and networking.

The United Nations Industrial Development Organisation (UNIDO) supports the development of green industry and sustainable production in the southern Mediterranean. It does so through a comprehensive approach that both presents the business case of resource efficiency to industries, and helps service providers increase their capacity to deliver a specific role in implementing the policy activities at national and dissustainable production services matching the industry needs. In addition, UNIDO is cooperating with a number of national institutions addressing policies on sustainable production.

At the start of the project, the UNIDO designed TEST methodology is delivered to the service providers and local professionals. In collaboration with the UNIDO TEST expert team, the service providers SwitchMed Programme is funded by the European Union identify and select companies to take part in the TEST project, based on the companies potential for improvements and top management commitment. Crucially, the company staff also receive the TEST training, enabling them to implement the technical measures and management solutions identified by the service provider. Their active participation in the training and in the implementation of the project ensures the sustainability of all identified actions at company level.

strated the profitability and effectiveness of introducing best practices and integrated management systems in terms of cost reduction, productivity increase and environmental performance, extending the experience gained to other industries in the region. UNIDO, together with local partners, also promotes business partnerships between local businesses and EU Eco-Innovative companies, creating an area of shared prosperity on the principles of a sustainable and inclusive socioeconomic development.

United Nations Environment Programme Mediterranean Action Plan (UN Environment/MAP) is a Regional Seas Programme under UNEPs umbrella that brings together the 21 Mediterranean neighbouring tation of the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, the so-called Barcelona

tion (SCP/RAC) is one of the centres belonging to UN/MAP. It is appoint-• Capacity building in industry service providers targeting small and ed with the mandate from the Contracting Parties of the Convention to promote Sustainable Consumption and Production in the Mediterranean region. In order to accomplish that mission the center provides knowledge, training, advice and networking opportunities to businesses, entrepreneurs, financial agents, civil society organisations and gov-• Engagement with policy makers to establish a regulatory and policy ernments that work to provide Mediterranean's society with innovative services and products that are good for the people and for the planet.

The center provides technical assistance to the Contracting Parties to the Barcelona Convention to adopt SCP as integrated approach to de-• An Action Network of stakeholders to link with similar initiatives and couple development from pollution and environmental and implements pilot projects in four countries: Algeria, Lebanon, Morocco and Tunisia. Likewise SCP/RAC supports green entrepreneurs and change makers driving eco and social innovations in the Mediterranean by providing training, technical and financial advice, jointly with a network of strategic local partners and local trainers. Moreover, SCP/RAC works closely with financial agents to establish mechanism that enable entrepreneurs and small companies that provide SCP solutions access to funding, SCP/ implementing organisations brings its specialised experience and tools RAC also hosts the Networking Facility that contributes to the visibility.

> UN Environment's Economy Division supports the development of SCP National Action Plans and provides advisory services and follows up closely the implementation of the demonstration pilot projects of four countries: Egypt, Israel, Jordan and Palestine.

> UN Environment's Economy Division works closely with the National Focal Points (NFP), who are key actors in the SwitchMed and play seminating the results in their respective countries. Focal points have been appointed by the national governments. In most countries a duo of Focal points - one from Ministry of Environment and one from Minis-

#### Israel's facts and numbers

#### Population:

- Capital and largest city: Jerusalem.
- Life expectancy at birth: 82.05 years.
- Population growth: 2% (2016).
- Major Religions: 74.7% Jewish, 17.7% Muslim, 2.0% Christian, 1.6% Druze, 4.0% other.
- Form Of Government: Parliamentary Democracy.
- Population: 8.299.706.
- Area: 22,145 km2.
- Official Language: Hebrew, Arabic.
- Major River: Jordan.

#### Geography & Economy:

- Currency: Shekel.
- Terrestrial & marine protected areas: 9 designated, and 8 proposed marine protected areas (MPAs) in the Mediterranean Sea.
- Urban population growth: 92.2 % in 2016.
- CO<sub>2</sub> emissions: 7.9 (2014).
- · Land boundaries: Lebanon in the north, the Golan Heights and Syria in the northeast, the West Bank and Jordan in the east, the Gaza Strip and Egypt in the
- Coastline: Mediterranean Sea coast.
- The Tel Aviv metropolitan area, called Gush Dan, is the largest metro area in the country with 3.46 million people, or 42% of Israel's population.
- Tourism growth: 30% increase in 2018.
- Israel has the third highest rate of entrepreneurship – and the highest rate among women and among people over 55 in the world.

Sources: Economy and Demography in Israel, Wikipedia, United Nations, The World Bank, Ministerio de Asuntos Exteriores y Cooperación & Atlasinfo.fr



6

# Table of contents

123456

8 - 15

Support to policy-makers

16 - 27

Enabling a green growth for industries

28 - 47

Green Entrepreneurship

48 - 55

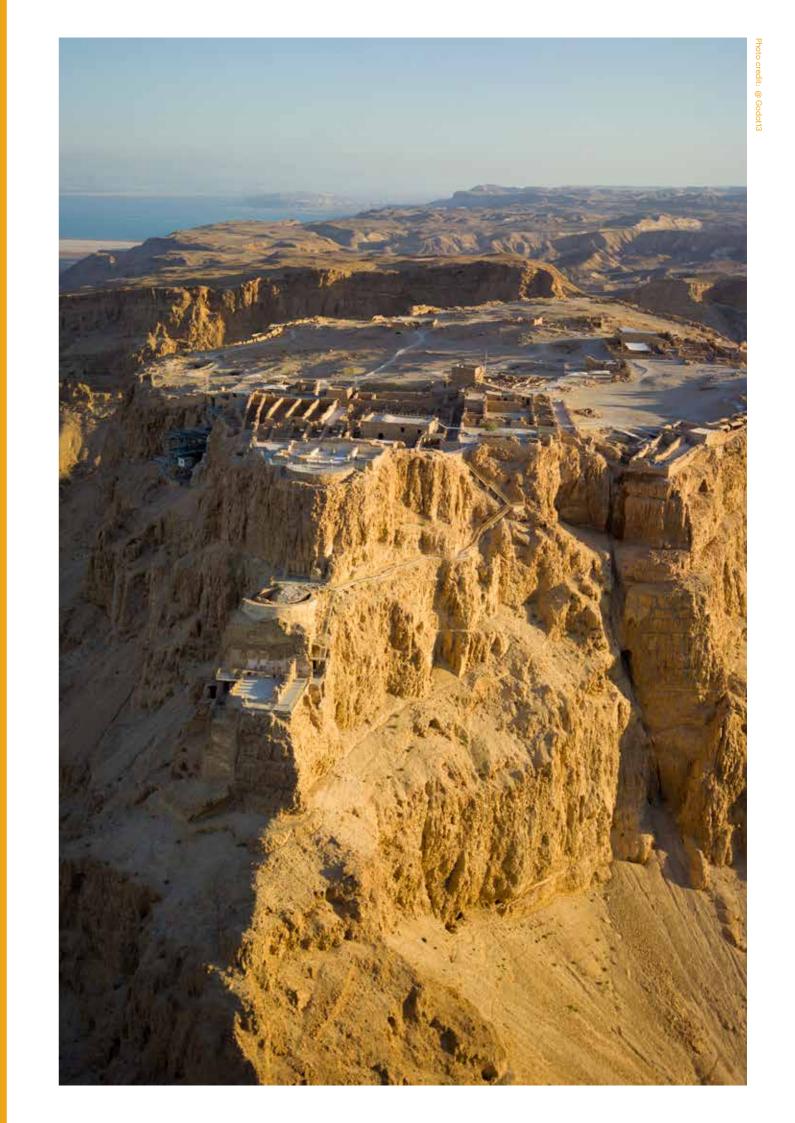
Civil Society Organisations empowerment 56 - 65

Enabling access to finance

66 - 71

Networking Facility

Engagement with policy makers to establish a regulatory and policy framework to boost the market for sustainable products and services.



.10 Chapter 1 Support to policy-makers .1

# Implementing circular economy measures in the Mediterranean

The Mediterranean policy-makers developed within the SwitchMed programme a Regional Sustainable Consumption and Production Action Plan, including a Roadmap towards circular economy for its implementation in the Mediterranean as well as eight Sustainable Consumption and Production National Action Plans (SCP-NAPs).

The SCP Regional Action Plan was adopted in February 2016 by the 22 Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (known as Barcelona Convention), during their 19th Ordinary Meeting of the Contracting Parties. The SCP Regional Action Plan is a substantive contribution to the implementation of the 2030 Agenda for Sustainable Development. It is a strategic document that gives clear guidelines on the actions that should be developed in the region to shift towards sustainable consumption and production patterns, long-term sustainability, circular economy and new paradigms in the use of resources. It is also responding constructively to the climate change challenges. The document is structured around 4 key areas which are essential for the socio-economic development and for the job market in the region but are at the same time highly contributing to the pollution loads and to the environmental degradation of the Mediterranean. Those 4 areas are: food, fisheries and agriculture sector, tourism, goods manufacturing and housing and construction sector.

At national level SwitchMed, under the coordination of UN Environment's Economy Division, provided advisory services to the governments of the eight programme countries in the Mediterranean on mainstreaming SCP into national development planning. Eight multi-stakeholder nationally owned and nationally driven policy processes were undertaken to best respond to the national priorities on SCP. Given the difficulty to implement the full range of SCP policies and instruments at once, project countries select a limited number of priority areas to be addressed in their SCP National Action Plans, which contribute to poverty alleviation, environmental sustainability and the development of a green economy.

The SCP-NAP processes were tailored to the needs and specific country situations and allowed the synergies and integration with national development plans and national sustainable development strategies. During these national processes a total of over 40 national workshops, roundtables and nationally-tailored training sessions were organised to reinforce national capacity on SCP. The processes were inclusive and saw the participation of a large and diverse group of national stakeholders, representing different relevant government institutions, private sector, civil society, academia and media representatives. In total, 1,500 national stakeholders actively participated. As a result, eight SCP National Action Plans were developed, which are a first step in a country's response to the 2015 adopted Sustainable Development Goals (SDGs) and in particular Goal 12: Sustainable Consumption and Production.

Moreover, there are national demonstration pilot projects implemented on the ground to promote implementation of policies and actions, which effectively change patterns of consumption and production and implement circular economy measures in the priority sectors previously selected by the target countries. In total, 20 pilot projects were implemented by the end of 2018: 2 in Algeria, 2 in Egypt, 3 in Israel, 2 in Jordan, 1 in Lebanon, 3 in Morocco, 2 in Palestine and 4 in Tunisia.

# Meet our focal points in Israel

The National Focal Points (NFP) are key actors in SwitchMed and play a specific role in implementing policy activities and disseminating results at national level in their respective countries. A national coordination mechanism has been established in each country, coordinated and guided by the focal points appointed by their respective national governments. In most of the participating countries, two focal points—one from the Ministry of the Environment and one from the Ministry of Industry—work in tandem to lead the implementation of SwitchMed at national level.



#### Ministry of Economy and Industry

Foreign Trade Administration

#### Ministry of Economy and Industry (MoEI)

It is one the operational government ministries responsible for providing tools and support mechanisms designed to advance the Israeli economy and encourage financial growth. The ministry provides services and information in development and investment, foreign trade, regulation and enforcement, domestic trade and standards.



#### Ministry of Environmental Protection (MoEP)

Established in 1988, the Ministry of Environmental Protection operates on three levels: national, regional and local. At the national level it is responsible for the formulation of a nationwide integrated, and inclusive policy for the protection of the environment. At the regional level, through its six districts, the ministry oversees the implementation of the national environmental policy, engages in local planning processes, assists municipalities with their environmental responsibilities and supervises them when formulating requirements for the acquisition of business licenses. At the local level the ministry lends support to 52 environmental units and towns associations that have been established in municipalities throughout the country, providing services to 85% of the country's population.

Chapter 1 Support to policy-makers

## A Sustainable Consumption and Production Roadmap for Israel is now in place

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 SwitchMed SCPprogramme 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 eight participating countries, began to formulate its own national SCP roadmap. This was done under the guidance of an advisory team from the Israeli Ministry of Environmental Protection (MoEP) and the 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 with over 300 participants from all sectors: government, civil society, academia and

The workshops took place from December 2013 to January 2015, and they covered the following subjects: National Strategies for SCP, Sustainable Development in Government Companies, Policy Tools for Circular Economy, Mainstreaming Life Cycle Thinking, Toward Sustainable infrastructure, Environmental Funds Management and Environmental RIA 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 national SCP roadmap.

#### Outline for an SCP Roadmap for Israel

Building on the past experience the focus of the SCP roadmap was put 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 complement each other. Therefore, the roadmap was divided into three main parts, according to consumption vs. production focus. Each chapter includes a series of SCP initiatives that are due to be launched and implemented by 2020:

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

#### 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 Promoting Green Investments to develop the index methodology and a need for emphasis on SMEs, the prospects of driving change through

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 are in the process of developing a number of

#### Sustainable Development Strategies in Government Companies

• The Government Companies Authority (GCA) together with the MoEP published a manual on sustainable development in government companies in 2013. 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

The MoEP plans to conduct a series of professional workshops on SCP, designed for the diverse array of government companies. 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 mak-

#### Promoting Best Practices for Small and Medium Enterprises (SMEs)

• 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.

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 ultimate aim is to encourage specific business sectors to adopt sustainable practices while increasing their visibility and branding capacity.

#### Changing the DNA of Businesses: Supporting Social Environmental

• Efforts are focusing on setting up a system of support to SEBs through the different stages of their development. The support programme will include regional training programmes, helping 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.

#### Resource Efficiency Knowledge Center

• The 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.

accomplish annual compiling and publication.



#### Sustainable Consumption

As part of the scoping process for developing an SCP roadmap for Israel, stakeholders identified topics, target groups and policy tools for addressing sustainable consumption. Key levers for change were identified including green public procurement, household behavior and behavioural economics.

#### Green Public Procurement

The following projects are 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;
- Preparation of a manual on reliable claims for green public
- And Green Public Procurement projects in the areas of Housing, Transport and Local Authorities.

• 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. 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; and finally Publishing a guide to reducing environmental impacts of households.

#### **Behavioural Economics**

• 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. Based on the results of randomized control trials, the knowledge gained will be disseminated to facilitate better policy making. The expected outputs will be the preparation of a market survey of household waste separation (HWS) trends; Reports on behavioural economics and social psychology instruments and mechanisms that may improve the outcomes of HWS policies; and Diffusion of the knowledge gained in order to improve policy making and

#### Connecting the Dots - Between Sustainable Production and Sustainable

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 labelling and greenwash prevention, and development of reliable footprint labels

#### Sustainable Materials Management Strategy (SMM)

• A review of SMM principles, methods, best practices, domains and success stories from selected countries will be conducted. This will include in-depth interviews with local key stakeholders and international experts; and round table events with key stakeholders to propose and prioritize policy instruments (government interventions).

#### Circular Economy: The Case of Household Food Waste (HFW)

• A review of principles, methods, best practices, domains and success stories from selected countries vis-à-vis HFW will be conducted. This will include household surveys coupled with in-depth interviews with local key stakeholders and international experts; Round table events with key stakeholders to propose and prioritize policy instruments (government interventions) to reduce HFW; and developing selected policy instruments (interventions) to reduce HFW, strategy execution and monitoring.

#### Sustainable Urbanism

• A review of Sustainable Urbanism principles, methods, best practices, domains and success stories from selected countries will be conducted. This will include

in-depth interviews with local key stakeholders; and Round table events with key stakeholders to propose and prioritize policy instruments (government interventions), as well as developing selected policy instruments (interventions), strategy execution and monitoring.

#### Environmental Standards and Labelling

• A mapping of relevant methods to measure environmental performance will be conducted,

Choosing a relevant business sector (i.e. textile plastics, electronics); Conducting a pilot that covers 5 product groups; Developing of a product/organisation benchmark and a publication of the pilots results.

#### Prevention of Greenwash and Promotion of Reliable Environmental

• Publication and updating of guidelines; Training and workshops for businesses; and Assimilation in academic and professional institutes.

.14 Chapter 1 Support to policy-makers .15

# Circular economy measures adopted in 3 pilot projects

By the end of 2018, 3 demonstration projects will be implemented on the ground. The national pilot project selection was based on the priorities expressed in their SCP National Action Plan that has been developed under the SwitchMed policy component.

#### Green public procurement

This pilot project aimed to promote a process whereby public authorities seek to procure goods, services and works with minimal environmental impact throughout their life cycle. The pilot activities included successful integration of environmental criteria into public procurement tendering in collaboration with selected local authorities. A guidance document was drawn up and four forum meetings for local procurement managers were held. Eight product sheets for green tenders provided criteria for product selection and a green public procurement web portal was set up.

#### Green technologies and innovation

The aim of this pilot project was to promote and encourage environmental innovation in the field of cleantech, as well as remove barriers to establishing cleantech start-ups and ventures. New policy tools were developed and launched, including a clean technology beta-site program to allow industrial-scale experiments with environmental technologies. The pilot activities included a policy package programme to remove regulatory barriers and provide financial aid for emerging clean technologies, a resource-efficiency consultancy programme and an expo event to increase visibility of green innovation and strengthen the local network of entrepreneurs.

#### Sustainable conduct best-practices

The aim of this pilot project was to facilitate a foundation showcase of success stories on implementing sustainable best practices in the catering sector. Energy, waste and material flow surveys were completed in 50 restaurants and on-site training was provided in over 30 of them. A practical guide was drawn up with environmental efficiency improvement guidelines in restaurants and dining establishments. A platform on 'Green label online for environmental streamlining in SMEs' supplemented the activities.



Photo credit: @Roxanne Desgagnés

Demonstrating the business case of a resource efficient and cleaner production (RECP) in Israel's industry.



Enabling a green growth for industries Chapter 2

## Working towards a resource efficient and greener production

southern Mediterranean that enables industries to increase their ability to produce with lower cost, while reducing their environmental footprint. We do so through the MED TEST II project, a comprehensive approach that demonstrates the business case of a resource efficient production in 125 industries in 5 key production sectors of the southern Mediterranean, by using capacities of local service providers. This approach promotes the business case of a resource efficient production to industries in the southern Mediterranean, while advancing the supply of national capacities on sustainable production services.

Transforming industries to meet the needs of changing market conditions and a rising resource scarcity calls for a change in knowledge, attitudes and practices that can lead to a production that requires less resources and reduces pollution. The MED TEST II project, presided by the United Nations Industrial Development Organisation (UNIDO), applies the methodology named the Transfer of Environmentally Sound Technologies (TEST), a concept that addresses the challenges and barriers industries are facing in becoming more resource saving, energy efficient, and less-polluting.

The TEST concept approaches all management levels of a business, involving people with different professional backgrounds and operational responsibilities, in order to enhance and sustain the efficient use of production inputs and environmental performance. Connecting the resource efficient and cleaner production (RECP) assessments with present-day standards in environmental and energy management systems, helps building cross-cutting understanding and capacities within various management areas of a company and enables a holistic understanding and support for RECP within the business. This encourages a business culture where eco-innovative business solutions can thrive and a systematic assessment of the production can be set-up to monitor resource use and support a continuous improvement on the business performance. Furthermore, this approach encourages the production of goods that are responsibly managed throughout their life cycle, and increases the ability of companies to access international markets with good quality products and to reach compliance with environmental standards.

At SwitchMed we support the adoption of sustainable production in the The MED TEST II project has displayed that the potential for improvements in resource savings within the production of the southern Mediterranean industry is significant. In the eight SwitchMed countries, the MED TEST II project identified 1,830 improvement measures within the 125 demonstration companies. The identified measures have stimulated a total investment of 87.6 million euros out of which 43% of the measures had a payback period below 6 months. A short payback period combined with an annual saving potential worth 41.7 million euros, has contributed to a high implementation rate of the identified measures (75 %), showing that investments in RECP is a feasible and a profitable business decision. Through the identified RECP measure in the MED TEST II project, industries in the Southern Mediterranean region now can annually save 3,512,660 m<sup>3</sup> of water, 707 GWh of energy, reducing the solid waste generation with 19,602 tons and CO2 emissions with 197,525 tons per year. In addition, 682 professionals from industries, service providers, government institutions and academia received training on the TEST methodology during the demonstration phase of MED TEST II in the SwitchMed target countries.

> Resource efficiency is key in switching towards circular economy models. The MED TEST II project has revealed how additional economic and environmental benefits can be gained from the RECP approach using an integrated methodology of TEST that gives businesses an opportunity to invest in their future while reducing their environmental

## Partners for green growth in industries

an effective way to ensure that a sustainable impact that goes beyond the duration of the project can be achieved and is therefore also one of the main objectives of the MED TEST II project. For this reason, UNI-DO is closely collaborating with government institutions and stakeholders from the industry and civil society to raise the significance of RECP to policy makers and knowledge networks, and to strengthen the national capacities in providing expertise on RECP.

Under the patronage of the Ministry of Environment protection (MoEP) and the Ministry of Economy (MoE), the MED TEST II project in Israel was realized by the Weitz Center, in partnership with two consulting firms, Green Target and Sher Consulting and Training. In collaboration with the Israeli manufacturer's association and other key national stakeholders, MED TEST II has brought together influential organisations and institutions through collaborative efforts for a sustained application and scaling-up of RECP in Israel.

Trainings, combined with onsite technical assistance, were provided by the local service providers with the support of international sector/thematic experts. The idea behind this approach was to demonstrate the business case of RECP in some of the most significant industry sectors of Israel, namely the chemical, mechanical, plastic, and food and beverage sectors. This approach also helped service providers to gain experience with the TEST methodology and to establish reference cases that would help to market the TEST concept to other interested industries throughout Israel.



#### The Weitz Center for Sustainable Development

Based in Rehovot, Israel, the Weitz Center for Sustainable Development has since 1963 been committed to sustainable development across a variety of sectors. Their work is dedicated to enhance the efforts of international agencies, governments, communities, civil society and private sector organisations to achieve positive social and economic change in Israel and worldwide. The Weitz Center offers high quality integrative training and consulting services to people from across a variety of sectors with the belief that all regions, regardless of their current status, have local and community assets that can spur development and growth.

A non-governmental, non-profit organisation, the Weitz Center is a pioneer in the field of Integrated Regional Development (IRD) and world-renowned for its holistic "Rehovot Approach" to regional development planning and local economic development. In this regard, the Center works on providing partners with the practical tools, cutting edge knowledge and hands-on experience to improve the performance of policies and programs in achieving sustainable development.

Strengthening national capacities and competencies related to RECP is On a national level, the Weitz Center aims to become an implementing arm of the Israeli government for sustainable development projects and carry out activities such as initiating the National Knowledge Center for Green Growth and Resource Efficiency. The Weitz Center is also a proud observer member of RECPnet, the joint UNIDO-UNEP initiative of 70+ RECP service providers actively working on promoting the widespread adoption of RECP activities across developing and transition countries.



#### **Green Target**

Since 1998, Green Target has been providing consulting services in the fields of environment, safety, occupational health and quality. Their consulting services are based on binding regulation, using the most advanced methods and techniques. Green Target specializes in establishing environmental, safety, occupational health and quality management systems and their implementation in various industrial sectors: chemical, petro-chemical, food, metal, plastics, electricity and electronics, medical equipment and hi-tech. These management systems are also established and implemented by Green Target at hospitals, medical clinics and government offices. For the MED TEST II project in Israel, Green Target demonstrated the business case of RECP in four Israeli industries, by applying the UNIDO TEST methodology.



#### Sher Consulting and Training Ltd.

Established in 2003, Sher Consulting specializes in providing expert consulting and innovative training solutions in several areas, including environmental care. Core areas of expertise include, Establishment of environmental management system in accordance with the requirements of ISO 14001, Life Cycle Assessment (LCA) of products, comprehensive management of hazardous materials, carbon footprint calculation and reduction, application of good housekeeping practises, and food waste management and reduction schemes. For the MED TEST II project. Sher Consulting undertook RECP demonstrations in three Israeli industries, using the UNIDO TEST methodology.

.20 Chapter 2 Enabling a green growth for industries .21

# Stepping up a resource efficient production in Israel's industry

As a relatively small, water-scarce, and dense populated country, Israel has in recent years had a steady pace of economic and population growth. However, this development has also contributed to an intensified pressure on the environment, including waste generation, and greenhouse gas emissions. As one of the world leading nations in developing water saving innovations and cleantech applications, Israel has with its entrepreneurial spirit developed a vibrant economy where innovation and economic growth has been able to thrive. This conducive environment has promoted the adoption of environmental technology in a wide variety of fields, but, in order to support a continued economic growth that can ensure the preservation of Israel's natural resources, Israel will require the contribution from all parts of the society - including the industry.

Israel's accession to the Organisation for Economic Development and Co-operation (OECD) has pushed for new laws aimed at environmental protection, which has raised the environmental compliance standards and therefore caused new regulatory framework for industries. Currently, of the 3 billion NIS invested annually by the Israeli manufacturing industry to comply with environmental regulations, 87% are spent on end of pipe solutions. This is a particularly high percentage when considering that the average for this statistic among OECD countries is 62%. In addition, rising prices for energy, raw materials, and water are having austere implications on the ability of Israeli industries to produce at a cost competitive level. Consequently, finding tools that can enable industries to become more resource efficient and less polluting, would not only contribute in reducing production costs and the economic situation of businesses, but also ensure a better environmental compliance of industries in Israel.

The MED TEST II project, implemented in Israel from 2015 to 2017, addressed the challenges and the barriers national industries are facing to become more resource and energy efficient, non-polluting and safe, produce products that are responsibly managed throughout their life cycle, while increasing productivity and maintain an access to international markets with good quality products, complying with international environmental standards. During the MED TEST II project seven companies from the food and beverage, plastics, metal, and chemical sectors took part in the demonstration of how the RECP concept work in Israel and what benefits could be yielded from this approach. The companies participating in the project ranged from SME's with 100 employees to large companies with 1,000 employees, also with multiple production sites in Israel and abroad.

The MED TEST II project enabled the seven industries to identify 129 RECP measures that will reduce their annual water consumption with 113,985 m³, their energy consumption with 15.1 GWh per year, and decrease their annual raw material consumption with 503 t. The 129 identified saving measures will require investments 4.4 million euros, with an average payback period of 2.1 years, and quantify annual

As a relatively small, water-scarce, and dense populated country, Israel has in recent years had a steady pace of economic and population growth. However, this development has also contributed to an intensified pressure on the environment, including waste generation, and greenhouse gas emissions. As one of the world leading nations in development has also contributed to an intensified pressure on the environment, including waste generation, and greenhouse gas emissions. As one of the world leading nations in development has also contributed to an intensified pressure on the environment, including waste generation, and greenhouse gas emissions. As one of the world leading nations in development has also contributed to an intensified pressure on the environment, including waste generation, and greenhouse gas emissions. As one of the world leading nations in development has also contributed to an intensified pressure on the environment, including waste generation, and greenhouse gas emissions.

The project was of particularly support in Israel as it demonstrated to the local industry and to the governmental authorities, how effective the RECP concept can be to achieve environmental compliance and resource efficiency at reduced costs. For instance, after having realized the significant economic implications of material and energy losses, one of the companies decided to upgrade the Enterprise Resource Planning system so that a new monitoring system, based on energy metres readings, could be integrated. This system will extract its data from the newly installed metres on key consumers on the production floor and will focus on raw material losses and reporting the data to management on a monthly basis. The company also launched a four-year investment and modernization programme with a budget of more than 4 million euro that will enable them to reduce 26% of the losses in cost-intensive raw materials by 2020. Moreover, the monitoring and verification of the level of implementation of the RECP measures identified during MED TEST II project one year after its completion indicated an increase from 51% to 64% of the implementation rate in the demonstration industries. The concrete results from the demonstrations of MED TEST II in Israel have convinced the Israeli ministries of Economy, Environment and Finance to jointly commit 20 million euro to upscale resource efficiency among Israel's industry. UNIDO, together with stakeholders form the civil society, government and the industry have developed a scaling-up roadmap on how to expand the RECP concept in Israel and what actions are needed to support the facilitation and reinforcement of national competencies around the topic of RECP.

To download the individual case studies from the MED TEST II project in Israel, follow this link here.



.22 Chapter 2 Enabling a green growth for industries .23

# Thinking outside the bin

Changing the way industries produce and consume resources require a change in knowledge, attitudes and practices related to resource consumption and production processes. The MED TEST II project has followed a combined approach that strives to strengthen local capacities in RECP services, while demonstrating the concept of RECP locally. Eran Doron was one of the local service providers that were trained during the MED TEST II project in Israel and reveals some of the insights he made during the demonstration phase of TEST in Israel.

#### <u>Tell me about yourself and what do you do?</u>

At Green Target, we specialize in environmental, health and safety management consulting. I have been working with Green Target for over 15 years now as a consultant to various types of industries in Israel such as the metal, polymer, chemical and electronics sectors, mainly in establishing and introducing environmental management. We started as a small company but today we are 18 people, managed by me and my partner.

#### How did you get involved in the MED TEST II project?

We were introduced to UNIDO by the Weitz Center for Sustainable Development, the national coordinator of the MED TEST II project.

#### What are the main reasons why companies come to you and seek your services?

When Israel became a member of the Organisation for Economic Co-operation and Development (OECD) in 2010, the government decided to raise our environmental requirements to the standards of other OECD governments. As a result, the regulation has become stricter and consequently raised the demand from companies for our help in meeting the environmental requirements. Over time, some organisations have realized that the way to handle the more stringent regulatory requirements is related to proper environmental management, and there are some companies that feel that they need to do it even better. Resource efficiency is better environmental management. Making wise decisions regarding the root cause of emissions, where in the plant they are generated and how we can prevent them in the first place, is good environmental management.

#### What were your impressions from the MED TEST II project?

The concept of MED TEST II, introducing the connection between energy efficiency, material efficiency and pollution reduction, is not necessarily new. But it offers a practical approach. That is what is special about this project. I feel that I look at things differently now, not only in the projects that I do for MED TEST II, but also with other customers. For example, while working with one of our clients in the chemical industry, one of our consultants was dealing with a point-source air emission issue. His first approach was to suggest a scrubber as an endof-pipe solution. But I challenged him to find a more resource-efficient process. As a result, the consultant managed to come up with an alternate technology, which reduced the company's use of the emitted substance.

#### Can you give an example of how you used the MFCA tool?

When consulting for one of the companies in the MED TEST II project, we tried to understand the production process and identify cost-saving measures out of a TEST perspective. We did a so-called Material Flow Cost Accounting to see where they lose their money. As we were doing an early walk-through of the factory. I noticed that a lot of the products lying under the machine on the floor eventually ended up as scrap, only used for recycling. My suggestion was to start measuring the quantity by putting everything that fell on the floor into big bins. A couple of weeks later I asked if they had the numbers from the bins. In fact, the bins were nearly empty because the production people had observed the quantity of the waste and had promptly fixed the production line, preventing products from falling on the floor.

#### What will be the main motive for industries in becoming more resource efficient and clean?

When you show the people the numbers—for example, to buy this raw material costs you a certain number of euros per ton, and you get one-tenth of that value back when you recycle it-then it clicks. The dollar value grabs the attention of top managers. If they exceed pollution limits in the wastewater because some raw materials end up going into the wastewater, it bothers them, since they may have to pay a fine, but it bothers them even more when they realize how much money they are wasting by losing that raw material they purchased. As consultants we help people to look differently at the problems they face with new tools of strategic thinking. That is better environmental management.

# Annual environmental impact savings identified in the 7 Israelian food industries

**62** 

professionals

professionals from business consultancies, government institutions and industries received training on the tools of TEST during the demonstration phase of MED TEST II in Israel.

113,985

m³ per year of annual water savings

385

Israeli households annual water consumption

8,689

tonnes of annual CO<sub>2</sub> savings

1,845

passenger vehicles driven for one year

**15.1** 

2,287

Israeli households annual energy consumption

7

companies

= 4.4 million

euros saved annually by 129 identified RECP measures

GWh per year of annual energy consumption savings

.26 Chapter 2 Enabling a green growth for industries .27

# Scaling up a resource efficient and cleaner production throughout the Israel's industry

The transition to circular economy is becoming a central issue in sustainable development strategies at international, regional and national level. To this end, the United Nations 2030 Agenda for Sustainable Development urges member countries to ensure sustainable consumption and production patterns for prompting resource and energy efficiency (SDG 12). By adhering to the goals of this agenda, Israel is committed to include the dimension of sustainable development in all of its public policies.

At the national level, Israel's commitment to sustainable development and the benefits of adopting the RECP concept, has been on the rise for a while. For example, the first Cleaner Production (CP) centre in Israel was established in 2001. Later, a comprehensive process of "Green Growth" round tables led to the development of the "National Green Growth Plan 2012-2020" which recognised the importance of RECP. This plan was not implemented due to lack of financial resources. Recent bilateral programmes between Israel and Germany have focused on Resource Efficiency and the 2016-2017 edition of the programme represented an important milestone for the uptake of RECP at the policy level, as clear objectives and tools were provided to the MoEP.

The achieved results from the MED TEST II project in Israel have convinced industries and the government on the relevance and effectiveness of the TEST methodology as an instrument for industries that wish to overcome challenges related to a sustainable consumption and production. The identified RECP measures from the project are cost effective, often combined with brief payback periods, and allow businesses to integrate RECP solutions in their current production without threatening the day-to-day business operations.

Making the transition from demonstration activities to a sector wide mainstreamed adoption of RECP in the industry of Israel, can become pivotal not only in reducing the exceedingly high resource consumption of industries, but also to reduce a growing pollution and assist Israel in its commitments as a member of the OECD.

Despite the many benefits a more resource efficient production would offer, the situation on the ground still impedes the uptake and generalization of sustainable production modes in Israel's industry, often limited to the implementation of pilot projects, such as MED TEST II, which justifies the need for a scaling up roadmap. In this regard, UNIDO together with the Government, the local partners from MED TEST II, and stakeholders from the industry and civil society, have developed a roadmap with propositions on how to guide a sector wide adoption of RECP in Israel and what actions are required to make this happen. The goal of this action plan, which is based on the concept of leverage points and experience gained from the MED TEST II project in Israel, is to eventually create a system change around the topic of RECP for industries in Israel that will encourage an adoption and change towards RECP.

A detailed activity plan with responsibilities is outlined in the final scaling-up roadmap and is available for <u>download here</u>.



Photo credit: @ Virpeen Sy

Building technical capacity and supporting green businesses in order to build a green entrepreneurship ecosystem in the Mediterranean.



Chapter 3 **Green Entrepreneurship** 

### Capacity building for green and circular economy business models

 $\underline{\text{the Mediterranean by supporting green entrepreneurs from southern}}$ Mediterranean countries. 10 local partners were selected to follow-up closely the programme on the ground. In parallel, an innovative training methodology was developed to support the creation of green business and adapted to the context of the Southern Mediterranean. The methodology - comprised of a handbook and workbook on green business model development and green business plan development & incubation- guides green entrepreneurs through the entire process of growing their green business idea into a full-fledged enterprise. The methodology also provides tools and test the green entrepreneur's business models, by explaining step by step how to validate the business model's hypothesis with targeted customers and stakeholders.

Many of these individuals have a sound business idea but may lack the knowledge needed to transform their idea into a viable business. For this reason, the Green Entrepreneurship programme also includes a comprehensive training and incubation programme for individuals on how to launch a green business, led by the Regional Activity Centre for programme – a five-day module delivered over three months in each of the SwitchMed beneficiary countries – requires green entrepreneurs to reflect on and articulate how their business idea will bring value to A national synergy workshop in each SwitchMed country was held to the economy, the environment and the community. Through the practical exercises, entrepreneurs must clearly identify the underlying problems and needs they are addressing, map their stakeholders, interview potential customers, document their mission and their environmental and social value proposition, evaluate the resources and energy needed to create their product or service and think about how they will generate revenue streams, amongst other activities. A key component of the training programme is the module dedicated to eco-design, which requires entrepreneurs to take an in-depth look at the entire life cycle of their products and services to evaluate and improve their environmental performance and to challenge them to incorporate innovative solutions in their business models. Circular economy principles form the

At SwitchMed we are building a green entrepreneurship ecosystem in cornerstone of this module, which gets entrepreneurs thinking about the many dimensions of environmental sustainability that can be incorporated in their product or services. Materials, for example, can be chosen to maximise recycled content, renewability and recyclability to preserve natural resources and give value to other waste streams in the community. The incubation programme includes 55 hours individual follow-up advisory service by a local mentor, a tailor-made external technical assistance and support to develop a crowdfunding campaign, if applied, as well as support to access to finance throughout a period of

In total, 123 local trainers were trained on-site, and finally, 84 were selected for the implementation of the training programme. Out of the 6,000 applicants who submitted an application to join the training programme, +2,300 green entrepreneurs were selected and trained. In the aftermath of the trainings, 166 entrepreneurs were selected and received a 10 hours individual coaching to improve their green business models. Out of the 157 entrepreneurs who submitted an application for the incubation phase, 49 were selected by an International High Level Sustainable Consumption and Production (SCP/RAC). The training Jury that operated pro bono and included a group of independent experts from business, technical, institutional and academic sectors.

> identify challenges and opportunities to promote green entrepreneurship and social eco-innovation initiatives, to identify specific measures and tools to strengthen the regulatory framework as well as to stimulate the market for sustainable products and services. In the end, a white paper was published, to highlight the strengths and weaknesses of the country green entrepreneurship ecosystem, in order to reveal the areas and axes where the needs for action are greatest and a whole collection

### Meet our local partners

Our local partner, as selected by SCP/RAC, is an organisation with extensive knowledge of the current situation in Algeria concerning civil society organisations, social movements and empowered communities aligned with sustainable consumption and production and ecological and social innovation as well as experience of organising/managing workshops. The main task is to assist SCP/RAC in identifying and selecting local trainers and potential grassroots initiatives to join our training programme.







#### Systemati

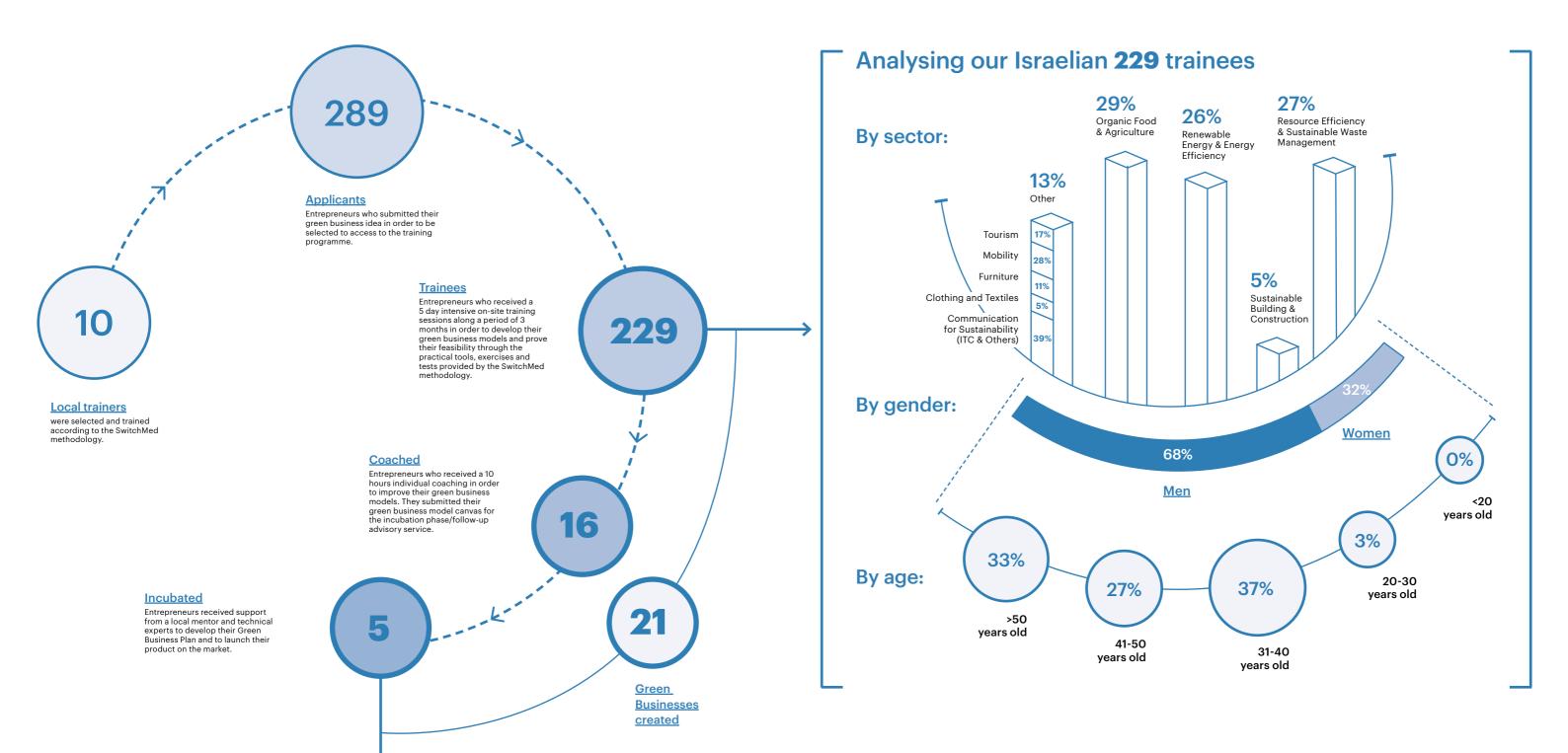
It supports small and mid-sized enterprises in Israel, in collaboration with the Ministry of Economy and Industry, to operate a number of tools for the implementation of the MAOF programme, addressed to green entrepreneurs. They offer a range of services such as information and guidance, expert business advice and assistance, preparation of business plans, assistance in obtaining financing and business advice.

sive experience in initiating, implementing and evaluating environmentally and socially innovative projects and also have a deep understanding and knowledge of training methodologies based on empowerment, collective learning and a participative approach. At SwitchMed, they are responsible for actively participating in the regional co-creation workshop, together with other local trainers from the participating countries. Local trainers also support their local partner organisation and SCP/RAC in identifying grassroots initiatives and guaranteeing the participation of at least 20 social eco-innovative actors/initiatives in the national workshop. This task also includes the provision of support in disseminating the workshop call through the available channels in order to attract potential actors and initiatives for the national workshop. The trainers are also in charge of facilitating a four-day national workshop with the support and guidance of SwitchMed's Civil Society Empowerment team.

The local trainers participate in the multi-stakeholder process to select the best two initiatives arising in the workshop to receive further technical support. They also provide 50 hours of individual coaching support over 6-12 months, aimed at the development of a support plan to identify technical needs for the proper development and implementation of the project.

.32 Chapter 3 Green Entrepreneurship .33

# How is the green entrepreneurship programme contributing to the environmental, social and economic impact?



.34 Chapter 3 Green Entrepreneurship .3

# Meet our Israeli incubated green entrepreneurs

### Lilac's Aromas Boutique Soya Products This Israeli company is making veganism more attractive

Israel has the largest number of vegans per capita in the world, with 5% of the population eating a vegan diet. The result is a plant-based product boom as more companies try to reach the vegan population. One of those companies is Lilac's Aromas Boutique Soya Products, which aims to make probiotic, natural, healthy vegan cheese. A tasty and easily digested alternative cheese product for lactose intolerant & vegan consumers.

#### Tell us about yourself and how the idea for your business was born

My name is Lilac Frenkel Ben Yakar and I've been a vegetarian most of my life. When I was younger, I ate mostly vegetables, grains and dairy products. Dairy was a crucial part of my diet, my main source of protein. But as I got older, I became lactose-intolerant; my digestive system could no longer cope with dairy foods. So, I started searching for dairy substitutes in the market. The products look like dairy but they don't contain protein and they taste like plastic. So, I decided to try to make dairy-like products out of soy milk and started to test ideas in my own kitchen.

I began learning about the difference between cow's milk and soy milk and the ways it changed when cooked and manipulated. Then I figured out how to coagulate soy milk and this step was key in my decision to start a business because now I could make any cheese out of soy. People who came to my home loved it and said, "wow, you need to start selling this!" and that's how the idea for my company came about.

#### What is the environmental and social impact of your project?

The cultivation of soy to produce soy products directly is dramatically more beneficial than producing cheese from animal milk and requires much less soy for the same amount of produce. Moreover, producing soy cheese does not generate any consequential effects, such as the production of methane and other hazardous materials that result from livestock farming. Lilac's Aromas is an environmentally friendly company that helps to decrease animal food production to reduce greenhouse gas emissions and animal abuse. Ruminants produce methane gas and pollute water and groundwater sources with their secretions. Conversely, agricultural crops absorb CO2. The SoMilk (soy bean extract) production process also results in a water usage saving of more than 50% compared to that of animal milk. Cows need at least 600 grams of dry food per litre of milk they produce. It takes between 0.26 and 0.31 kcal of fossil fuels to make 1 kcal of soybeans in contrast to the 10-14 kcal needed to make 1 kcal of dairy milk protein. The livestock industry accounts for over 70% of agricultural crop consumption. This means that by growing soybeans for direct human consumption, instead of growing it for feeding ruminants, we greatly decrease the amount of soybean agricultural land required. Apart from that, soybeans can be shipped anywhere in the world without the need for refrigeration and retain their nutritional quality for a long period of time, unlike animal milk.

Our company structure provides employment for workers who have not had access to education and do not require prior training, as well as being accessible for people with disabilities. The production process respects people and the environment, educating for harmony with nature.

#### How have you benefited from the SwitchMed programme?

The SwitchMed programme gave us a clear methodology to analyse and plan our work. We developed a business roadmap and built a green business plan based on an in-depth analysis of the market, the customers, and our products compared to the competition. It also helped us in building a clear financial analysis and plan. The external technical assistance combined with the support of a local mentor helped me with legal advice on how to start the company, obtaining my permit for

exceptional use from the Planning and Building Committee for the soya plant. I received support to develop the branding, packaging design and product labelling for each product so that each one transmits the quality and green values of Lilac's Aromas, according to the requirements of the Ministry of Health.

During the incubation phase, we took our production line from planning to execution. We developed the marketing strategies, establishing relationships with companies for the distribution and sale of products in health stores, delicatessens and supermarkets, and collecting feedback from consumers. At the end of the incubation programme, we were able to develop new products and better manage our raw materials. We were also able to employ more workers and start to expand from national to international markets.



Photo credit: @Bernat Mestres (White Horse)



Photo credit: @Bernat Mestres (White Horse)

### **EDEN - Wood Waste Recycling**Making use of discarded wood

Wood waste in Israel mostly ends up as landfill, without proper treatment or recycling. Every year, thousands of tonnes of wood are thrown away in the form of pallets, boxes and lumber beams. Eden Social Wood Recycling decided to capitalise on that waste, creating beauty and value out of trash, collecting wood waste from construction sites and using it to produce new recycled products for schools, municipalities, organisations and private sector balconies, rooftops and yards.

Tell us about yourself and how the idea for your business was born My name is Ben Yavnieli and I studied natural resources and environmental management for my master's degree at Haifa University. I spent five years working for a company that recycled computers but I really wanted to work in something 'green', something related to planters, green roofs, eco-design and something that involved people working together, as well as creating some kind of social impact. I really believe in the philosophy of getting back to working with your hands, recovering the skills seen in society 100 years ago, before it was all about high-tech and Silicon Valley. When I was younger, I worked in construction and saw the amount of wood that gets sent to landfills sites. So, I founded Eden Social Wood Recycling as a way to recover discarded wood and create a community of people who work with their hands. When I started out with Eden in 2014, I used to go to waste treatment plants and ask for the wood waste, but I realised that much of the wood was unsuitable for upcycling because it was mixed, chemically treated, or unusable. So, I began approaching construction companies directly, working out a deal to collect unused wood from their sites. Once in a while I find a big project that looks like it will be a good source of materials. My team and I turn that wood into beautiful, colourful outdoor furniture, reusing everything from planters, benches, fences, picnic tables and bulletin boards. It's not an easy process and it's time-consuming; we have to de-nail and plane the wood to clean it. It takes three days to create one cubic metre of upcycled products, which consists of 10 to 20 pieces of furniture.

I think everybody likes nature but that's not what motivates me specifically. What drives me is resource efficiency and the potential for using waste to make a change. It's a bridge that connects many sectors: construction companies, communities and carpenters. I am thrilled to be doing something that connects so many people.

#### What is the environmental and social impact of your project?

To date, Eden has collected and recycled more than 200 cubic metres of wood per year, which equates to around 30 tonnes of wood waste over the past three years, with 150 tonnes upcycled. Our goal is to reach 400 tonnes per year over the next three years, reducing the use of 120 tonnes of new wood. We have already turned waste wood into 2,000 pieces of furniture for 120 sites that are being renovated. We sell some of our furniture to local schools that use it to decorate their outdoor spaces, for kids to sit on and do their homework, or as planters to grow vegetables.

In terms of the amount of carbon sequestration (CO<sub>2</sub>) achieved through forest conservation, by Year 3 we have saved 105 tonnes as a result of tree preservation and 100 tonnes throughout the lifecycle of newly planted trees and plants. And finally, with regard to social and educational impact, we have created 15 local jobs, including the integration of five Palestinian employees and two students, organised 50 workshops on recycling and given talks to 1,500 pupils and community members, with a total of 50,000 pupils, teachers and community members in general benefiting from Eden's projects. My plan is to sell a large quantity of products and target the Palestinian market as well in order to supply furniture to schools and houses. Overall the aim is to help bring people together and I see the project as an opportunity to generate both economic and social benefits.

#### How have you benefited from the SwitchMed programme?

I took part in the training and incubation programmes and benefited from the support of technical experts and also participated in the elevator pitch and synergy workshop. SwitchMed helped me connect with investors, which was very useful for us because, although we have received most of our funding from sales and business loans, we don't have any big sponsors or mentors to support the project.

One of the most valuable ways in which SwitchMed has helped the business was the support we received from a product designer, who helped with the development of a new product line and worked on improving the existing one. This was a key opportunity for Eden because, going into the next stage, our aim is to make well designed, high-end pieces of furniture that can be sold at a higher price.



Photo credit: @Bernat Mestres (White Horse)



Photo credit: @Bernat Mestres (White Horse)

.36 Chapter 3 Green Entrepreneurship .37

### **Baby Koala**Even babies can cut down their environmental impact

Dganit Maka, the founder of eco-friendly diaper manufacturer Baby Koala, wants infants to stop generating one tonne of waste each in disposable plastic diapers.

#### Tell us about yourself and how the idea for your business was born

Baby Koala was conceived when our eldest daughter, Avigale, started kindergarten four years ago. My husband and I looked for a cloth diaper that would be reliable and capable of "doing the job" as well as being beautifully designed. We came across many options, but none of them suited our high standards. So we decided to make our own cloth diaper. We received great feedback and compliments about our test diapers, which added to the rewarding sensation of creating our own product. These positive experiences encouraged us to take the next step and create our own brand of cloth diapers, Baby Koala.

The diapers are handmade in Israel and make a fashion statement with cool and colourful patterns. Made from breathable fibres, they are comfortable, with Velcro closures and waterproof banding around the waist and legs. Most importantly, Baby Koala diapers are easy to use, clean and reusable, making them a healthy, affordable and environmental way to raise babies.

#### What is the environmental and social impact of your project?

Disposable diapers make up about 6% of the waste produced in Israel, rising to 10% in Jerusalem. On average, an infant goes through more than a tonne of disposable diapers in their lifetime, leaving behind a mountain of waste to be disposed of! Disposable products also contain substances that cause skin rashes, leading parents to protect their baby's skin from the diaper with greasy creams.

Baby Koala diapers are made from cloth rather than harmful plastic, eliminating the need to use protective creams. Our diapers drastically reduce the environmental footprint of babies: we generally recommend that every baby needs only 24 of our reusable cloth diapers. Baby Koala diapers can also be used for years and be handed down from child to child.

#### How have you benefited from the SwitchMed programme?

The SwitchMed training programme was very helpful to Baby Koala in assigning us a mentor, who helped us and guided the business. SwitchMed also assisted in building strong business and financial plans. This support has helped us reach the goals we set for ourselves, and we are very grateful for that.



Photo credit: @Bernat Mestres (White Horse)

### Hygimed The best solution for treating hospital waste

Hygimed is an innovative solution to treating biomedical waste on hospital sites. To dramatically reduce the risk of exposure to pathogens and toxic pollutants, Amit Sheleg strongly believes that biomedical waste must be appropriately treated at the same place it is created. Fifteen to twenty per cent of medical waste is considered hazardous material and may be infectious, toxic or radioactive for healthcare workers, waste handlers or even the public in general. Hygimed is a smart machine that converts biomedical waste into ordinary waste through a shredding process that simultaneously incorporates chemical disinfection. By using this technology, hospitals and healthcare centres can reduce the biomedical waste that would otherwise end up incinerated or in landfills by 80%. Hygimed's technology uses a cold process that is relatively odour-free and requires moderate maintenance. The sterilisation formula is biodegradable and its energy consumption is very low, leaving only a small carbon footprint. The machine is specifically designed for hospitals, can be installed in both developed and developing countries and has a payback period of less than one year.

#### **Toyswap**

This toy-swapping initiative is changing the rules of the game in a multi-billion-euro industry.

Toyswap is the first toy library in Israel. The project offers a wide variety of high-quality toys with unlimited swapping options. Nadav Leshem came up with this idea when he realised that kids quickly get tired of toys, and that high-quality toys are very expensive all over the world. This not only entails large sums of money and storage issues, it also creates an environmental problem due to the amount of unused or nearly-new toys that are just thrown away. People that don't invest in high-quality, expensive toys buy cheaper ones instead, 90% of which are made from non-recyclable plastic. Leshem immediately envisioned renting toys, allowing parents to purchase a subscription that would offer them access to a variety of toys rather than purchasing new ones. In Toyswap, toys can be used many times by different children. Kids can go to the library to play with the available toys and then choose up to two to take home and play with for as long as they would like. When they grow bored of the toys they have at home, they can simply return them to the library and swap them out for two new toys. This system makes high-quality toys accessible for children of all backgrounds, thereby reducing inequality from a very young age. Toyswap was founded in 2017 and has already opened two libraries: one in Kfar Saba and another in Tel Aviv. The company has brought in around 300 subscribers and makes hundreds of swaps possible each year.



Photo credit: @Bernat Mestres (White Horse)



Photo credit: @Bernat Mestres (White Horse)



Photo credit: @Bernat Mestres (White Horse)

Photo credit: @Bernat Mestres (White Horse)



"I think everybody likes nature, but that's not what motivates me specifically. What drives me is resource efficiency and the potential for using waste to make a change. It's a bridge that connects many sectors: construction companies, communities and carpenters. I am thrilled to be doing something that connects so many people."

Ben Yavnieli, EDEN Social Wood Recycling

"I began learning about the difference between cow's milk and soy milk and the ways it changed when cooked and manipulated. Then I figured out how to coagulate soy milk and this step was key in my decision to start a business because now I could make any cheese out of soy." Lilac Frenkel Ben Yakar, Lilac's Aromas

"Disposable diapers make up about 6% of the waste produced in Israel, rising to 10% in Jerusalem. On average, an infant goes through more than a tonne of disposable diapers in their lifetime, leaving behind a mountain of waste to be disposed of!" Dganit Maka, founder of Baby Koala .40 Chapter 3 Green Entrepreneurship

# The Switchers: Discover inspiring changemakers who are switching towards a cleaner Mediterranean

There are 340 Switchers showcased in the Switchers platform. They are all shining examples of how circular economy approaches can lead to business opportunities and also drive innovation that benefits people and the environment. In Israel, there are 32 Switchers at the moment in the platform.

The Switchers is a community of inspiring green entrepreneurs and changemakers in the Mediterranean region hosted by SwitchMed and SCP/RAC. Switchers are individuals, enterprises or civil society organisations implementing innovative ecological and social solutions that contribute to a switch to sustainable and fair consumption and production. They are active in a variety of fields, including organic farming, sustainable tourism, waste management, organic textile, recycling of electronic waste, sustainable building, organic cosmetics production, among others. Most importantly, the Switchers is a community with a voice and a meeting place for people in the region who are passionate about shaping their environment towards a more sustainable future.

For the Switchers, circular economy solutions are at the heart of their business models and also inspire them to seek ways to innovate and achieve even higher levels of environmental sustainability in the design of products and services they provide. Together, these important economic actors are making significant progress towards the goal of the SwitchMed programme and one of the region's key sustainable development objectives: to accelerate the shift to more sustainable modes of consumption and production. In doing so, they are setting a positive example of how economic growth can also lead to protection of the Mediterranean and its precious, limited natural resources.

To read more on the stories of change makers at our new online Switchers platform at www.theswitchers.eu

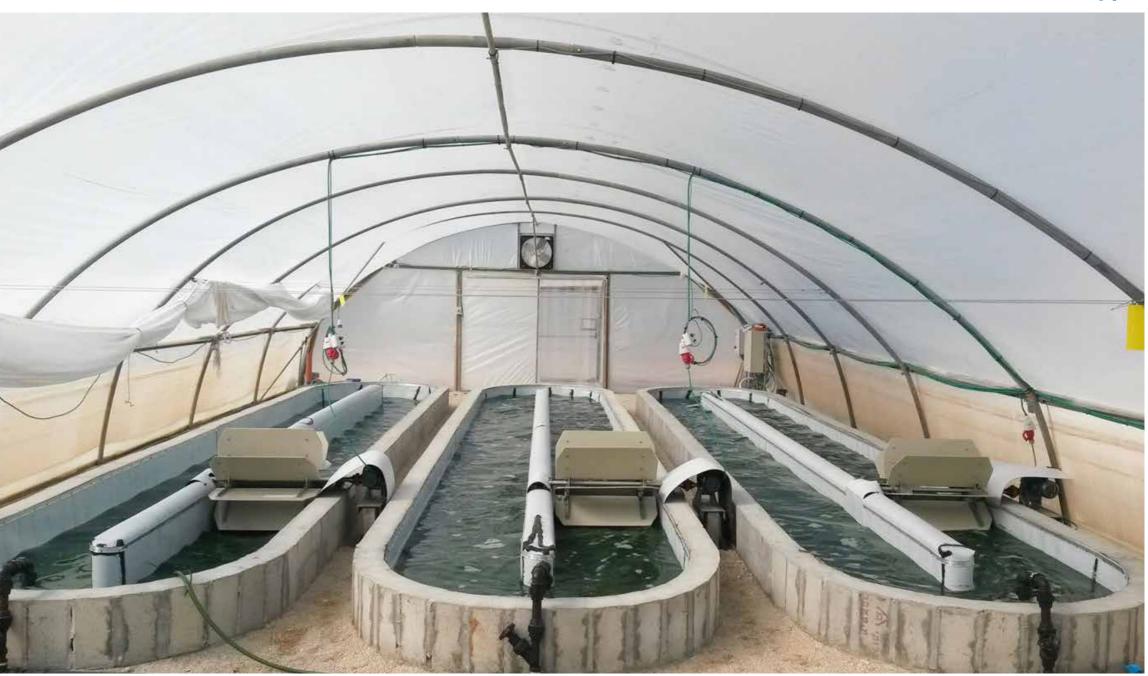


Photo credit: @AlgaeCor

Chapter 3 Green Entrepreneurship

### **Meet our Switchers** in Israel

#### Using big data to improve environmental performance and create circular

ECO-OS is the first cloud-based operating system to empower companies of all sizes to independently collect environmental data. Noam Gressel and his team have developed a piece of specific software for the collection and processing of environmental sustainability data.

ECO-OS helps businesses to obtain hard data on their environmental impact through the precise measurement of metrics, such as air pollution, energy consumption and use of hazardous materials. The operating system captures data in a number of ways, including direct network connections between a client's sensors and ECO-OS, and the ability to semi-automatically upload spreadsheets containing environmental data. The result is a single source which holds all the environmental data for an entire business operation, with a tool that presents it in a way that sustainability managers, regulators and auditors can use for

"We looked back at our Gantt Charts and figured out that 70% of our time was being wasted on very basic data collection and quality checking", Gressel explains. "Humans are not good at this, machines do it much better".

#### **Haptic Path**

#### Hemp fabric takes sustainable clothing to the next level

Haptic Path is a sustainable collection of modern and stylish clothing for women and men made of hemp fabric and designed by Nina Skibnevsky from her home in Israel. The fabric used is breathable and lightweight like linen, making it ideal for the hot and humid summers experienced in Tel Aviv. It also provides 90% UV protection which is really important for sunny places.

Haptic Path's current collection is inspired by traditional Japanese clothing, a culture Skibnevsky learned about from her grandmother, who was involved in scientific research projects related to Japan, China and Taiwan. Hemp is regarded as one of the world's most sustainable fabrics. It requires less water and

grows faster than conventional cotton, and also does away with the need for pesticides. The fabric itself is made by taking the fibrous outer parts of the plant and cleaning, matting and baling the fibres in a process similar to that used in linen production. While the designs are created in Israel, Haptic Path's clothing is produced in Russia, where Skibnevsky grew up. There, she works with a women's cooperative in Moscow, empowering single mothers like herself by giving them a source of income to support their families.

#### **Cardboard Technologies** Remember the entrepreneurs who made a cardboard bike?

Here's where they are now.

Cardboard Technologies are the creators of the cardboard bike inspired by the Japanese art of origami, cutting and folding the paper and developing a strong material that can withstand weight and resistance over time. Izhar Gafni chose cardboard in order to reduce waste and because of its prevalence around the world.

Cardboard Technologies have spent the five vears following the company's initial launch researching and developing a further bike prototype that includes plastic components made from recycled bottles and other waste. The chain is made from upcycled rubber. It will cost less than \$20 to produce in an automatic production line. Rather than producing the adult bike, the company is first focusing on mass-producing its balance bike, a tricycle-like cycle to help kids get the hang of riding. Bicycles are not the only product Cardboard Technologies have plans to produce. Its next production line will feature a cardboard wheelchair, a concept that has already been fully developed as a product. Gafni has even developed the initial prototype for a cardboard car.

#### **InnergHarvest**

#### A team of engineers turn car engine heat into electricity using organic solvents

InnergHarvest generates electricity from car engines by using vehicles' wasted energy to turn an organic solvent with a low boiling point into vapour. Heba Jaraysi's idea aims to reduce the volume of carbon dioxide emissions generated by the automotive industry, currently responsible for 30% of air pollution and 16% of manmade CO<sub>2</sub> emissions.

InnergHarvest is operated by a team of engineers, academics and scientists. Car engines are highly inefficient because they lose 60% of the fuel's energy as heat. The company is trying to take this heat and transform it into electricity, channelling that power into all the electricity-demanding systems in a car. The power generated can be used to charge batteries, maximising the efficiency of a car and adding 3,000 kilometres to its efficacy on an annual basis, thereby reducing the CO2 emissions generated by each car by half a tonne per year.

#### AlgaeCore

#### Spirulina, algae with multiple benefits

AlgaeCore is a start-up specialising in the production of spirulina, a microalgae known for its energising properties. Baruch Dach and Yoram Avidan have joined forces to develop a business model that has a positive impact on the environment, both ecologically and socially.

AlgaeCore has formulated a production model that minimises the operational ecological footprint and benefits small producers. Spirulina can be cultivated anywhere, so the idea is to encourage local production to minimise transport requirements and create a community of farmers. The company has also introduced a car pool with other producers to optimise transport. The blue microalgae spiral is now being tipped as the food of the future thanks to its high content of protein, iron, vitamins and essential fatty acids. Spirulina is highly nutritional and its cultivation is recommended by the Food and Agriculture Organisation (FAO) in the fight against malnutrition.

#### **LivinGreen**

#### When fish grow vegetables

LivinGreen converts fish waste into plant nutrients. It is a food production method based on water recycling thanks to the principle of aquaponics. Moti Cohen pioneered this technique, which is the result of combining aquaculture (fish farming in a closed environment) and hydroponics (soil-less cultivation).

LivinGreen is a sustainable and highly productive system that helps produce healthy, high-protein foods. It represents an 80% saving in the amount of water normally required for fish farming and market gardening. The company created the LivingBox, a modular production system that enables anyone to become a farmer. This domestic mini-farm is a sustainable solution for countries with low resources as it facilitates the production of food without the use of fertilisers or electricity, while providing practical solutions in the face of water shortages. In 2014, LivinGreen initiated an educational project in Ghana, with the construction of aquaponics systems in schools. The company also worked on a project led by FAO in Ethiopia.

#### **Eco-design solutions inspired by the Earth** Criaterra designs structural composites that

are both strong and environmentally friendly. Adital Ela's philosophy is to create eco-designs for furniture through which the earth returns to the earth, without leaving a trace.

Criaterra develops eco-innovative materials and technologies for the construction industry, a sector dominated by the use of cement and other greenhouse gas emitting materials. Criaterra's pieces are stylish, eco-friendly and robust, and are made entirely out of materials that had reached the end of their conventional lifespan. It took time for Ela to develop a solution from scratch that met all the necessary industry standards. Criaterra's sustainable construction materials were refined through three years of research and development. The resulting product is 100% recyclable and completely natural. Nearly three quarters of the materials used come from waste produced by the agricultural and construction sectors.

#### **Tamar Shalem**

#### Handmade shoes take sustainability to another level

Tamar Shalem is a slow fashion brand that produces high-quality handmade shoes. Tamai Shalem believes that the biggest challenge faced by the fashion industry is pricing, so her goal is to offer inexpensive fashionable alternatives.

Tamar Shalem produces small quantities and has no surplus materials that go to waste. Her shoes are made in compliance with stringent quality standards and she focuses on classic designs that will be used for a long time. The company works with traditional production methods, using only light machinery. Tamar Shalem uses the services of many small businesses, such as photographers, delivery services and raw material makers, which frequently means supporting local craftsmen that have been struggling to keep their businesses afloat. At the end of every season, they donate unwanted samples to charity.

#### Marrakesh

#### New e-commerce platform, Marrakesh, is the Etsy of sustainable shopping

Marrakesh is an online shopping platform where sustainable brands that produce clothing, accessories and home decor are able to market and sell their creations. Daniella Zakon's project has an algorithm that awards products an overall environmental impact score based on the brand's ethical and sustainable information, such as materials, supply chains and treatment of employees.

Marrakesh was launched in beta at the start of 2018, with 500 brands onboard. So far, most of its designers are American and Israeli, but the company is actively pursuing creative business propositions from around the Mediterranean and the world. Products already on Marrakesh include sunglasses made from wood and bamboo, colourful bow ties made by a women's cooperative in Kenya, and various bags and clutches crafted from all-natural merino wool. Marrakesh does not charge a joining fee and the platform makes money through a 5% sales commission, less than other e-commerce platforms. Eventually, Marrakesh plans to offer a subscription package of business-to-business services for its brands, including help with getting eco-certifications, storytelling and other areas.

#### **HomeBiogas**

#### The entrepreneur turning organic waste

HomeBiogas is an innovative system created by an Israeli start-up that enables the production of biogas from organic waste. Yair Teller and Oshik Efrati designed the system for home use to open up new possibilities in remote areas that face problems accessing electricity.

HomeBiogas offers an ecological, economic and sustainable alternative to fossil fuels with the development of technology for domestic production of biogas. Launched in 2012, the start-up develops biodigesters that convert organic waste into clean energy and fertilisers. These digesters are sold in kits that can easily be installed in gardens. Seven years of research went into the development of this ingenious system. HomeBiogas helps the environment by providing a tool that not only treats waste but also extracts and maximises waste's potential as a renewable resource.

- (1) The Jerusalem Urban Wildlife Initiative, tourism
- (2) Comet-ME, NGO (3) ECOncrete, housing & construction (4) Haptic Path, textiles & clothing



(5) Ecohar, tourism (6) EcoOcean, resource efficiency & sustainable waste management (7) Hava ve Adam eco-educational farm, organic food & agriculture (8) Desert Shade, tourism



The White Paper on "Promotion of Green Entrepreneurship and Grassroots Ecological and Social Innovations in Israel" is a publication that highlights the strengths and weaknesses of the Israelian green entrepreneurship ecosystem, in order to reveal the areas and axes where the needs for action are greatest. It summarises the opinions of some The white paper on "Promotion of Green Entrepreneurship and Grassroots thirty stakeholders interviewed individually (public institutions, financial institutions, support structures, project sponsors) as well as the results of the Synergies workshop held on 6th December 2018 in Tel-Aviv, which brought together over 125 key actors from over 80 different organisations.



Empowerment of civil society organisations and citizens to lead innovative solutions addressing environmental and social challenges.



Chapter 4 **Civil Society Organisations empowerment** 

# Supporting eco and social grassroots innovations

At SwitchMed we support community-based social eco-innovation initiatives to maximise their influence and impact, thereby contributing to the emergence of more sustainable models of consumption and production. A training methodology is developed to support eco and social innovations and grassroots initiatives on sustainable consumption and production which included a Handbook that provides basic knowledge and understanding on the fields of SCP and eco and social innovations. Furthermore, this Handbook presents challenges and opportunities for civil society organisations and grassroots initiatives aiming to work within these fields. It also helps to inspire and build a practical way of looking at collective projects or initiatives.

An intensive 4-day national workshop is organised in each of the SwitchMed target countries in coordination with our local partners. The attendees are gathered in an inspiring framework in order to develop different spheres of their projects, get inspired by other initiatives and help one another during the particularly participatory sessions. In total, 260 change agents and civil society organisations were mapped Specifically, the training aims to provide practical expertise in what concerns community initiatives while giving them the opportunity to take important steps in the development of their projects. A key component of the training is the module dedicated to analyse in depth the issues to tackle to start an initiative. Through the practical exercises, the leaders of the initiatives must prototype their projects, develop a canvas model particularly addressing the social eco-innovation within grassroots initiatives and develop a SWOT analysis. On average, 20 community initiatives were shortlisted in each country, making a total of 180 initiatives across the programme as a whole that received the training.

Afterwards, all the trainees have the opportunity to apply for the supporting phase of the programme to receive further coaching and technical support for the development and implementation of their initiatives. Two civil society ecological innovation initiatives are selected in each country. The assessment of the applications is done by a jury composed by the local partners, the local trainers, SCP/RAC and the external experts involved in the development of the training methodology.

The initiatives selected in each country for the support phase benefit from 50 hours of training that includes the development of a "support plan" for their initiative and regular coaching sessions for six months to support the implementation of the initiative. Also external technical or expert support based on the needs identified in the "support plan" is provided and when possible, support for the development of a crowdfunding campaign as well.

and, 16 local trainers selected and 8 local partners were selected and trained on-site for the implementation of the training programme. Out of the 570 candidates who submitted an application to take part in the national workshops to train civil society initiatives, 160 people were selected and trained belonging to 80 different initiatives. In the end, 14 initiatives received further support, as explained earlier. Civil society organisations also participated in the Synergy Workshops organised together with the Green Entrepreneurship programme.

### Meet our local partners

Our local partner, as selected by SCP/RAC, is an organisation with extensive knowledge of the current situation in Algeria concerning civil society organisations, social movements and empowered communities aligned with sustainable consumption and production and ecological and social innovation as well as experience of organising/managing workshops. The main task is to assist SCP/RAC in identifying and selecting local trainers and potential grassroots initiatives to join our training programme.



#### The Heschel Center for Sustainability

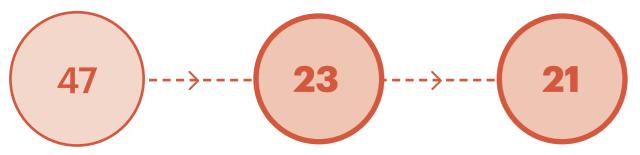
It is Israel's leading advocate for a sustainable future for Israeli society, environmentally, socially and economically, through education and reflective activism. Its strategies include leadership development, education, working with government and non-government organisations, and fostering activism and community-based projects across all sectors of

The center bridges theoretical knowledge and practical methods. It runs transformative educational programs, turn ideas into practice, and creatively spreads the message of sustainability, assisting change makers from every sector of society to promote significant change in Israel. Our local trainers, carefully selected by SCP/RAC as well, have extensive

experience in initiating, implementing and evaluating environmentally and socially innovative projects and also have a deep understanding and knowledge of training methodologies based on empowerment, collective learning and a participative approach. At SwitchMed, they are responsible for actively participating in the regional co-creation workshop, together with other local trainers from the participating countries. Local trainers also support their local partner organisation and SCP/RAC in identifying grassroots initiatives and guaranteeing the participation of at least 20 social eco-innovative actors/initiatives in the national workshop. This task also includes the provision of support in disseminating the workshop call through the available channels in order to attract potential actors and initiatives for the national workshop. The trainers are also in charge of facilitating a four-day national workshop with the support and guidance of SwitchMed's Civil Society Empowerment team.

The local trainers participate in the multi-stakeholder process to select the best two initiatives arising in the workshop to receive further technical support. They also provide 50 hours of individual coaching support over 6-12 months, aimed at the development of a support plan to identify technical needs for the proper development and implementation of the project.

# Civil society organisations are empowered to act as agents of change and to start community innovations



#### **Applicants**

Grassroots initiatives' representatives submitted an application to receive further coaching and technical support to develop and implement the proposed initiatives.

# 2

#### <u>Selected</u>

The grassroots initiatives selected were enrolled in a supporting phase. They received 50 hours of personalised coaching, external technical support tailored to their needs and support to develop a crowdfunding campaign.



#### (1) Kayamuta

Sustainable lifestyle

The mission is to promote urban organic farming and sustainable lifestyle.

The project aims to organise community events that will promote environmental education, sustainable waste management and other ecofriendly practices such as rooftop gardening and leftover food feasts.

#### (2) Community Bicycle Workshop

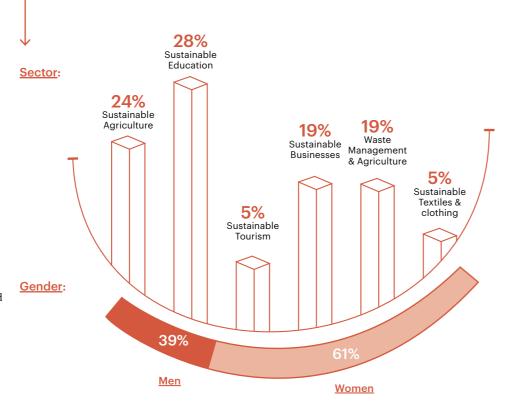
Sustainable transport

The mission is to promote sustainable and affordable transport in Tel Aviv.

The project aims to run a workshop and share tools and knowledge to make cycling accessible to all in Tel-Aviv.

#### **Trainees**

Grassroots initiatives received training at a national workshop. Some of the topics included how to develop an idea for social eco-innovation, obtaining strategy advice, finding out what the grassroots initiatives entail, how to overcome challenges, using the ideas of other participants to identify innovative solutions, identifying solutions for improving governance of the organisation, and exchanging views with other pioneers in social eco-innovation in highly participative discussion sessions.



Represented by these trainees

#### Rehovot Local Sustainability and Health Centre

Sustainable lifestyle

The mission is to promote sustainable lifestyles, urban sustainability and health in Rehovot.

The project aims to run workshops and courses for volunteers on sustainable consumption and production and collaborate with similar civil society organisations.

#### **Ramle Community Garden**

Sustainable agriculture and social inclusion

The mission is to promote sustainable agriculture and empower disadvantaged neonle

The project aims to teach the practical skills of organic farming, sustainable consumption and production patterns to disadvantaged people at the Enoch Centre.

#### **Shapira Forum for Agriculture**

Sustainable agriculture

The mission is to promote urban agriculture and increase community resilience in disadvantaged neighbourhoods.

The project aims to empower disadvantaged communities in Shapira by teaching them organic farming techniques and environmental education.

#### **Nahalal Switch Currency**

Sustainable economy

The mission is to create an alternative local currency to empower social capital in young people.

The project aims to encourage community bartering services and create a virtual currency at the youth village in Nahalal.

#### **Community Orchard**

Sustainable agriculture

The mission is to promote environmental education and sense of community.

The project aims to steward urban spaces, transfer organic farming know-how, and promote traditional handicrafts, recycling and responsible consumption and production in Yehud-Monosson.

#### **Cooperative Public Housing**

Sustainable housing

The mission is to promote community cooperative housing and a collective economy

The project aims to lower the environmental footprint of housing in Tel Aviv.

#### **Ein Dor Vegetable Growers Association**

Sustainable agriculture

The mission is to create a community-based cooperative that promotes sustainable agriculture.

The project aims to encourage and teach organic farming to promote green agriculture in Ein Dor.

#### **Community solar energy**

Sustainable energy

The mission is to build awareness of the benefits of renewable energy for the sustainable development of Tirat Ha-Carmel.

The project aims to link civil society organisations with the private sector to implement rooftop solar energy in Tirat Ha-Carmel.

#### **Edible Forest**

Sustainable agriculture

The mission is to promote environmental stewardship and sustainable agriculture in Jerusalem.

The project aims to encourage local-based food production and healthy nutrition habits for citizens of Jerusalem.

#### **Community garden**

Sustainable agriculture

The mission is to develop organic farming in urban public spaces in Tel Aviv.

The project aims to create a shared-space garden and grow organic food for the benefit of citizens of Yad-Eliyauh. It will also create job opportunities for locals and more bonds within the community.

#### Meitar grows its own organic food

Sustainable agriculture

The mission is to raise awareness about the importance of sustainable agriculture.

The project aims to supply Meitar inhabitants with healthy produce as well as the know-how to produce sustainable food and become a more resilient community.

#### Food justice for all

Sustainable agriculture

The mission is to promote the use of green farming practices and make local food produce accessible to urban dwellers.

The project aims to support local producers and food growers and incentivise sustainable and fairer practices in Galilee.

#### Repair, reuse and recycle

Sustainable lifestyle

The mission is to promote sustainable consumption by creating a community which encourages repairing and recycling.

The project aims to help locals in the community repair, reuse and recycle.

#### The first community-retrofitted eco-hotel

Sustainable construction

The mission is to promote sustainable construction by retrofitting and running an ecological hotel.

The project aims to boost job creation by retrofitting and running a community-owned hotel in Eilat, with the help of local artists, designers and artisans.

#### Social home food market

Sustainable economy

The mission is to promote organic food products, sourced and prepared locally, and create employment.

The project aims to create an internet platform to link organic, healthy food producers with consumers.

.54 Chapter 4 Civil Society Organisations empowerment

# Meet our Israelian civil society organisations supported

# Kayamuta, promoting sustainable urban lifestyles in Jerusalem



Photo credit: @Kayam



Photo credit @Wikimedia Commo

A grassroots organisation in Jerusalem called Kayamuta was established in 2014 to present an alternative to the loneliness and alienation of urban life and the urban consumer through the organisation of workshops, classes, community meetings and multi-disciplinary projects.

Kayamuta welcomes participants of any age or background with one common goal: to empower individuals by providing the skills and knowledge to transform the city into a better place to live. The core mission: to spark a 'green revolution' in Jerusalem by promoting a sustainable urban lifestyle. The initiative empowers individuals through workshops, festivals, courses and shared community spaces and resources. By way of example, for the past two years, the group has organised the 'Reuse and Repair Festival,' with the principal aim of providing workshops on reusing and repairing various objects, such as furniture, electronics and clothing. "Community swap markets to exchange various items that people want to give away or trips to gather food waste and scraps which are then used to cook a community dinner are other examples of the kind of activities we are involved in," explained the movement's founder, Latif Eliaz. This initiative includes a number of specific projects that address real challenges. For instance, the Plastic Lab collects plastic waste to be turned into new objects. Another initiative involves promoting food self-sufficiency while encouraging community participation by growing vegetables on rooftops. "The rooftop garden is located on the roof terrace of the Abraham Hostel in Jerusalem, fostering partnerships between the private sector and civil society organisations," said Latif, going on to add that, "SwitchMed has been a huge help in terms of reaching out to a wider audience. The support we have received to improve the way we communicate through social media has been marvellous. Our events are now being supported by Jerusalem Municipal Council, something that was not possible before our involvement with SwitchMed."

The local mentor appointed by SwitchMed, Heschel Fellows Programme Director at the Heschel Centre for Sustainability, Yoav Egozi, who helped to further define the initiative's direction and provide guidance throughout the process, explained, "the initiative, set up four years ago, has been taken to the next level. I worked with the Kayamuta team to better define the organisation's various roles, outlining the decision-making process and advising on how to solve conflicts and manage the organisation in an efficient manner." Latif Eliaz noted that "as a result, more people have joined Kayamuta and they are now more committed than ever."

The organisation also benefited from access to technical expertise, receiving help on branding from a communications agency, which came up with a new graphic design proposal. Another expert, digital media director Meytal Sheffer, who specialises in devising social and environmental campaigns for NGOs and community organisations, created Kayamuta's Facebook page and helped to develop a better organised mailing list.

"Our partnership with the Abraham Hostel in Jerusalem is working very well. Thanks to the greater visibility achieved during the incubation process, Kayamuta received a sum of 6,000 euros to improve the visibility of the green garden infrastructure and build the shades for the garden in the yard at the hostel," explained the founder. "We have planted an edible garden, reusing pallets and other recycled materials." Kayamuta also attended two training workshops: one about irrigation systems and another on vertical gardening given by Eyal Engelman from the Edible Garden consultancy. "We are working to engage local residents in garden-related activities and also directing our efforts towards communicating our planned activities," Latif Eliaz concluded.

Through the Jerusalem Fund, the highly committed initiative is now exploring collaborative opportunities with business enterprises interested in supporting these kinds of projects.



Photo credit: @Kayamuta

#### Leila bike workshop, empowering women and members of the LGBTQ+ community to use and repair bikes

According to Tel Aviv City Council statistics, around 15% of centrally based residents cycle to work or school. The city offers a breath-taking path along the seafront that connects miles of bike lanes from the northern part of town to the ancient Jaffa harbour in the south. Five years ago, a successful bike sharing system was launched in Tel Aviv, which led to a 54% rise in bicycle use among its residents, and today, the city boasts as many as 85 miles of bike lanes. Every October, Tel Aviv hosts a huge cycling event, blocking off the Ayalon highway and big boulevards to make way for 30,000 annual cyclists. New plans are underway to establish a huge network of more than 90 miles of bike paths in the greater Tel Aviv region, which will allow even more commuters to bike to work. Leila, a Tel Aviv-Jaffa-based start-up and community bike workshop, promotes the use of bicycles as a regular means of transport and provides bike repair classes. The workshop has a positive impact on the environment, as it helps reduce waste by reusing discarded bicycles. "We redirect these bikes to underserved communities where community members are taught to fix them and reintegrate them into the transportation grid," explained the initiative's founder, Dana Yair.

Founded in 2016 as a women-led grassroots initiative in Tel Aviv-Jaffa, Leila targets women, members of the LGBTQ+ community and refugees. "We have taught mechanic training courses to female prostitution survivors, set up mobile repair stations in the city and held workshops about bike maintenance and safety," Yair highlighted. "They are doing incredible work for marginalised groups in their area!" This is the opinion of one member of Bike Works, a cycling community based in Seattle, Washington that helped the initiative in its initial stages by providing general advice on how to get the project up and running.

"Since the initiative began, many people have contacted us wanting to get rid of their old bikes. So, when bikes are brought in, we repair and sell them at really low prices to people who cannot afford market costs," Ms Yair explained, going on to point out that "the mentor assigned to us by SwitchMed was excellent. Apart from her expertise, she was really well connected to different organisations, the municipality and so on, which was a great help. We have developed a robust business plan that will allow us to get a permanent site for our workshop, where we will be able to repair bicycles and organise courses."

To date, the initiative has already returned 300 bicycles to road readiness. It has also encouraged around 450 people to use eco-friendly means of transport and is currently working with community centres every month to put together bike repair classes as a way to target even more women. "Understanding our strengths has been crucial in further reinforcing these aspects," said Dana. "Thanks to this, we came

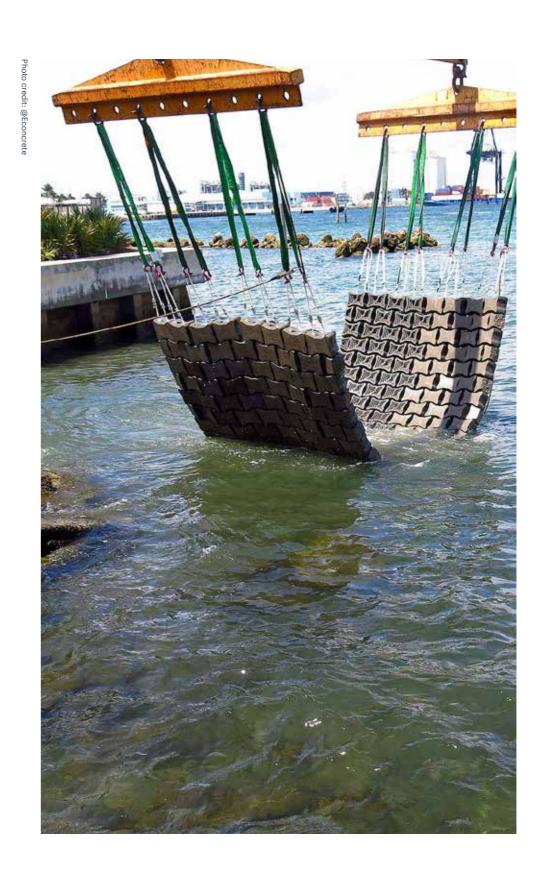
up with the idea of organising training workshops," she added. The initiative set up a one-month, five-session workshop in Tel Aviv for 17 women. "We received excellent feedback from all the workshop participants and were absolutely thrilled about it. Thanks to our SwitchMed mentor, we managed to hold the workshop at the Neve Shaanan Community Center, which is managed by Tel Aviv Municipal Council," Yair highlighted, adding that "in fact, we have received many inquiries about when the next workshop will be." A second workshop with 10 women was organised in collaboration with HER Academy, a non-profit organisation working to create a safe and accessible learning space for women leaving prostitution. "In this case, we adapted the training content to help these women gain confidence and believe in their ability to solve problems themselves, thereby assisting them in becoming more independent. Bikes can be a useful tool to do this," Yair concluded.

Bicycles really are a universal vehicle for change, and Leila's bike workshop is evidence of this.



Photo credit @Wikimedia Commons

Enabling access to finance for green start-ups and entrepreneurs by mobilising impact investment: The Switchers Fund



Chapter 5 **Enabling access to finance** 

### Financial instruments for innovative green businesses

At SwitchMed we are supporting the region's green entrepreneurs by enabling access to finance, providing direct finance to new and established green entrepreneurs and mobilising local investors and enterprise support programmes as well as European resources through the newly created SwitchersFund.

The Switchers Fund's mission is to support innovative green entrepreneurs in the development of their projects, first through grants to test new ideas and attract new funders, and as these projects grow by introducing adapted financial products such as concessional loans and ultimately through equity participations.

In the current situation where private and public financial institutions have difficulties to channel their investments to Medium and Small enterprises in our partner countries in Africa and the EU Neighbourhood region, the SwitchersFund core business lays at facilitating international capital flows from investors to entrepreneurs to facilitate, thus contributing to achieve the Sustainable Development Goals. As the first activity of the Switchers Fund, the Call for OSCE GEMS Award, granted a total of 90,000 euros in six South Mediterranean countries, 15,000 euros in each country to the best business idea. The OSCE GEMS Award An on-line financial toolkit for the green entrepreneurs, whether they and Cooperation in Europe (OSCE) and the SwitchersFund, and was established thanks to the support of the Italian Government.

In addition to this, the Business Support Services Facility complements the SwitchersFund's financial instruments by supporting innovative entrepreneurs via capacity building initiatives, and, in general, enhancement of their access to finance, which focuses on the following actions: These activities, carried out by SCP/RAC, are jointly done with the Eugreen business model and plan development, mentoring and technical expertise, crowdfunding campaign support a "Green Start-ups Meet Investors". The latter, that connects start-ups with the right investors

during matchmaking events, is a national event held in each beneficiary country. By covering the major issues that an experienced investor will look for (and expect) before they invest and getting to know the upcoming start-ups to the international investors' community, SwitchMed aims at mobilising investment capital to help with the growth of green business in the Southern Mediterranean. Prior to the pitch, the green entrepreneurs that are selected receive 30 hours of capacity building session to improve their communication skills and to prepare their business to be evaluated by the financial players. The stages of the investment process are also taught during that session. In the aftermath of the events, an individual feedback on the strengths and weaknesses of the project submitted with a monitoring of the contacts made with the investors during the meeting is offered to the green entrepreneurs with the aim of improving their capacity to meet the appropriate financial players. In total, 245 applicants submitted an application to join the Green Start-ups Meet Investor, 67 green entrepreneurs were selected and coached to give their pitch in front of investors. A total of 79 investors attended the events. A total 2,150,000 euros potential investment raised by the entrepreneurs is expected by the end of the programme.

was the result of the partnership between the Organisation for Security are in ideation phase or already fully operational companies, was also developed to help them to better access to finance in the MENA region. The practical tool allows discovering their finance opportunities and all the necessary instruments and knowledge to approach potential investors, and determining, in 4 easy steps, the right funding strategy for their green business.

> ropean Federation of Ethical and Alternative Banks (FEBEA) and the Union for the Secretariat of the Mediterranean (UfM).

### Meet our service providers

Our local service providers, carefully selected by the SCP/RAC, are organisations with extensive experience in supporting green entrepreneurs in business development and positive impact assessment, as well as providing them with the necessary support in access to finance. These organisations are selected on the basis of their capacity to empower the green entrepreneurs and their knowledge of financial opportunities in each country.

The main task of these organisations is to develop and implement capacity-building sessions on access to finance and improvement of the entrepreneurs' communications skills. Subsequent to training, the green entrepreneurs have the opportunity to pitch and showcase their innovative solutions to potential investors during a specific national event.

Local providers also supported SwitchMed in the development of the first green regional portfolio. The green portfolio lists the profiles of each entrepreneur and has been disseminated among potential investors.



#### **TheHive**

TheHive by Gvahim is the Israeli Accelerator that identifies the best green initiatives, encourage them and provide them with the necessary support to grow and achieve their goals.

Thanks to its wide national network and experience in access to finance, TheHive by Gvahim is able to reach out a large number of green entrepreneurs, potential investors and business support organisations and to provide services on benefit of the green economy sector in Israel.

.60 Chapter 5 Enabling access to finance

# Access to finance capacity building programme for green entrepreneurs



<u>Candidates</u> who applied to join the capacity-building programme.

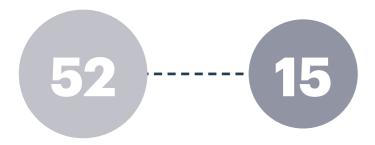
Green entrepreneurs who attended the capacity-building programme. Selected green entrepreneurs to pitch during 'Green startups meet investors' September 18<sup>th</sup> 2017.

30h

Capacity-building for green entrepreneurs, who are guided through the stages of the investment process, to prepare their businesses for evaluation by financial players and improve their communications skills for more effective promotion of their business idea.



Green entrepreneurs were approached by potential investors during and after the "Green startups meet investors" event.



Financial actors identified in Israel.

Representatives of banks, guarantee funds, business angels and venture capital attended the "Green startups meet investors" event as potential investors.

580,000€

Total amount raise funds thanks to the A2F activity.

1,400,00€

Potential investment raised by 3 Companies in VC due diligence.

## Discover our 9 green entrepreneurs who pitch during the "Green start-ups meet Investors" event

Name of the company Bu

**Business stage** 

.61

ECOncrete			
Climodo			
Algalife Ltd			
NOSTROMO			
RadGreen			
Innerg Harvest			
Criaterra Innovation		•	
Lilac's Aromas Boutique			
Hygimed	•		

Ideation Early stage Growth

Scale

.62 Chapter 5 Enabling access to finance .63

# ECOncrete: shifting from typical grey to blue-green infrastructure that brings concrete to life

Photo credit: @Econcrete



#### **Dr. Shimrit Perkol-Finkel:**

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Mauris euismod ornare neque ac tristique. In volutpat ut libero sed molestie. Aenean fermentum nisl non metus sagittis facilisis. Pellentesque sed ex massa. Pellentesque faucibus justo ac ligula hendrerit hendrerit.

With over half of the world's population concentrated along coastlines, accelerated coastal development which inflicts severe stress on natural ecosystems is inevitable. Combined with growing threats of sea level rise and increased storminess, coastal and urban environments worldwide require development, retrofitting and intensive maintenance. The chemical composition, plain design and low surface complexity of most such infrastructure is not a substitute for natural substrates, and "grey" infrastructure is therefore typically dominated by nuisance and invasive species.

ECOncrete offers a suite of highperformance, environmentallysensitive concrete solutions that reduce the ecological footprint of ports, marinas, coastal protection schemes and urban waterfront projects while adding to their structural integrity.

#### How did you hear about us?

I participated in the green pitch workshop in Israel last September, aimed at start-ups in the green & cleantech sectors. The workshop organisers, Ms Patricia Lahy Engel and Mr Yair Emgel, introduced me to the SwitchMed programme and to the Elevator Pitch.

Before the one-to-one interviews with investors, you were supposed to improve your communications skills and understand the stages of the investment process. What would you say were the most important things you learned in that training before your pitch?

The green pitch workshop and the one-to-one interviews helped me to understand the investors' perspective on impact investments, and to fine-tune our value proposition accordingly. In addition, the sessions helped us to perfect our story and our storytelling skills, including sharpening our pitch deck.

After the feedback from the investors, what are the key lessons you learned from them?

The investor feedback and overall feedback on our winning pitch was very meaningful for our transition from start-up to scale-up phase. The mentors gave helpful feedback on our business model, our strengths and potential barriers, and provided ideas for potential future growth. We've learned that having a brilliant technology is only the base. It is also important to strengthen our capacity to build a smart business model to accompany our premium science-based products.

#### How did the idea of ECOncrete come up?

My co-founder, Dr Ido Sella, and I are both marine biologists. We have worked together for nearly 20 years, focusing on reducing the ecological footprint of coastal and marine infrastructure. Over the years we have done a lot of work on power plant facilities, jetties and seawalls of working waterfronts. From diving in different places around the world, we have noticed that concrete structures develop very poor biological communities and that most infrastructure have a lot of concrete components. So we decided to find a way to change this, through targeted concrete R&D that combined material composition and design aspects. We started with a series of about 20 different concrete mix designs and tested them in the Mediterranean Sea, then we chose the top five mixtures that showed the best biological enhancement capacity for a global validation study, and the results were excellent. From there, we've advanced to develop a line of products that are now already installed in different countries.

The products you are developing are sustainable and include eco-design. Could you describe the creative process behind the concrete infrastructure design?

As ECOncrete is a science-based technology, biological considerations at both habitat and species levels are incorporated into our designs. For example, we identified a problem of coastal infrastructure destroying natural intertidal

in flora and fauna. Typical grey infrastructure are designed to drain water and have no water retaining features, so we have studied the properties of rock pools, and integrated those into a precast concrete unit that can be easily integrated in a modular way into coastal structures like breakwaters, seawalls, revetments and the like. I'm happy to say that our Tide Pool Armour has actually just won the Biomimicry Global Design Challenge. Another example is the integration of shelter for specific species, like adding holes of certain diameter and depth into seawall panels or armouring units to provide shelter for desirable fish species. And regardless of the 3D design, we always work on rough surfaces that break the laminar flow surrounding the structure, facilitating the eddies and microturbulence that enable marine life to develop on the structure.

"Our company offers a unique multidisciplinary blend of marine ecologists, biologists, geologists, concrete experts, engineers, and designers, working hand in hand to bring concrete to life."

Dr Shimrit Perkol-Finkel, founder and CEO of ECOncrete

How do you evaluate your science-based solutions in order to guarantee their continuous improvement?

Apart from the initial validation, which included large-scale and long-term biological monitoring, we make sure that all of our installations are conducted in a very scientific manner, with replicates and controls on the variables we are looking to validate. For example, regular Portland cement-based concrete vs. ECOncrete, and textured designs vs. flat, featureless units. We then monitor the biological results every six months or so (live cover, number of species, biodiversity, biomass and the like) and run statistical analyses showing the significance of the differences between ECOncrete and controls. In addition, we are constantly conducting additional R&D and testing new materials, to further reduce our product's carbon footprint, increase strengths and reduce costs.

What are the physical and chemical properties of ECOncrete products that enhance the biological capabilities of infrastructure to allow the growth of diverse organisms?

Our technology reduces the leaching of different adverse components from the concrete, which in standard grey concrete can have negative effects even years after casting. According to our bio-assays, adding our admix facilitates the settlement of diverse marine flora

habitats, particularly rock pools, which are rich in flora and fauna. Typical grey infrastructure are designed to drain water and have no water retaining features, so we have studied the properties of rock pools, and integrated those into a precast concrete unit that can be easily integrated in a modular way into coastal structures like breakwaters, seawalls, revetments and the like. I'm happy to say that our Tide Pool

Apart from the chemical properties, as mentioned above, we use rough surfaces with complex textures, ample edges and diverse biological niches, as well as science-based designs that are tailored to accommodate natural, rich, and productive biological assemblages. The combination of physical and chemical modifications increases the resemblance of the structure to that of natural coastal habitats, thus potentially also reducing the dominance of invasive species on the substrate, which currently generate significant environmental and operational impacts on grey infrastructure.

#### <u>Do you have any specific goals in terms of environmental impact?</u>

On a broad level, our vision is to help decrease the ecological footprint of coastal and marine infrastructure, and contribute to mitigating the impacts of climate change impacts like the carbon footprint problem. We strive to change the way our future coastlines look and function, shifting from grey to thriving structures that provide valuable ecosystem services while reinforcing their strength and stability, making them more resilient to processes like sea level rise and increased storminess.

On a more immediate level, we strive to study the needs of the local environments in which we operate to provide targeted solutions for red-flag species and endangered species. We encourage filter feeding species that can elevate water quality, as well as reduce the dominance of non-native species. For example, we can design structures to enhance oyster communities, in places that in the past used to have oyster reefs which protected the coastlines, thus adding both ecological value and risk reduction. A win-win solution.

What kind of business support do you think the SwitchMed programme and the Switchers Community can offer you to help your company grow?

I believe that the SwitchMed programme and the Switchers Community can provide us with a very strong network and a great platform to educate policy makers, decision makers, and other related stakeholders about ECOncrete's solutions. They can also help us to spread the word about the potential and the need for environmentally-sensitive technologies to mitigate some of the pressures associated with coastal development processes. Hopefully, the programme can also help us connect with partners and help assimilate the technology across the Mediterranean and beyond.

Enabling access to finance Chapter 5

### Solar living systems is the winner of the OSCE GEMS Award

Israeli Yakir Tadmor is working on a prototype for an innovative Solar Living System capable of supplying neighbourhood electricity, hot water and shade

#### How did you hear about the Switchers Fund OSCE GEMS Award?

We attended a course on sustainability, which was organised by a local organisation (MAOF) in collaboration with SwitchMed. The course was held in Israel in 2016. After the course, we heard about the OSCE GEMS competition via their newsletter.

#### As a winner of the Switchers Fund Award, you received a prize of 15,000 euros, how do you plan to spend it?

We are using the money to build and test a "proof of concept" of our idea, to demonstrate its intended function and measure its perforto attract private investment. The money will be used to buy materials and services to put the effort into marketing it.

#### What would you say was the added value that

We think the idea caught the imagination of the judges because it is a new approach which simultaneously provides a whole spectrum of benefits rather than concentrating on just one aspect, such as hot water or electricity. This gy, short-wavelength light. The canopy, which approach fits in well with the Switcher's "ho- is ventilated, can cover large areas, like the roof listic circular economy" philosophy. Thus, the concept is not just a solar water heater, it also generates useful amounts of electricity, creates a shady, well ventilated micro-environment on to be, even in the midday summer sun. a street scale, and generates local jobs. Because of its unique design features, it is designed to do all this at a cost which can truly compete with conventional energy systems.

#### What kind of business support do you think SwitchMed and the Switchers community can offer you?

We believe that SwitchMed, with its wide international audience, is a great vehicle for bringing together inventors, entrepreneurs, investors, government bodies, even nations, in a symbiosis that benefits all.

Can you explain how your solar system works? Please describe all the different phases, from collecting plastic bottles to the structure of the system itself.

It starts with collecting plastic soft drinks bottles, an activity which can be done by virtually anybody, with a minimum of investment. The bottles are processed into thin flexible plastic sheeting (about five bottles make one square metre), which has a special pattern on it. The pattern turns it into a lens able to concentrate sunlight onto a small area. Because so little plastic is required, the lens is much cheaper than conventional thick plastic lenses. The upper surface of the focal area, in the form of a mance. We hope to use the data and experience tube, is covered in photovoltaic cells. Because gained to take it up to the next level, which is this surface is 10 to 15 times more receptive to sunlight, the number of cells required is much lower than with conventional photovoltaic sysprototype together, apply for a patent and put tems, so there is another saving. On top of that, water is pumped through the tube and is heated in the process, then used for bathing and other domestic purposes, including space heating in the winter. The system is very light and can be supported by lightweight steel girders able to span 30 m, so the collectors are assembled into an array that acts as a canopy, letting in pleasant long-wavelength light but trapping high-enerof an apartment block, or span the street between two apartment blocks. The street therefore becomes a cool welcoming space for people

#### The product you are developing is sustainable and includes eco-design. Could you describe to us the creative process behind the design?

The design came about as a reaction to the slow progress made by conventional solar systems, which are still struggling to compete economically with fossil-fuelled energy. Not only that, the modern trend to cover large areas of landsometimes fertile farmland-with solar panels seemed to us wasteful and lacking in vision and aesthetics. So we looked for a method that would reduce the dollar-per-watt manufacturing cost without sacrificing valuable land, and at the same time benefit the local community by recycling and providing electricity, hot water, a pleasant living environment and jobs.

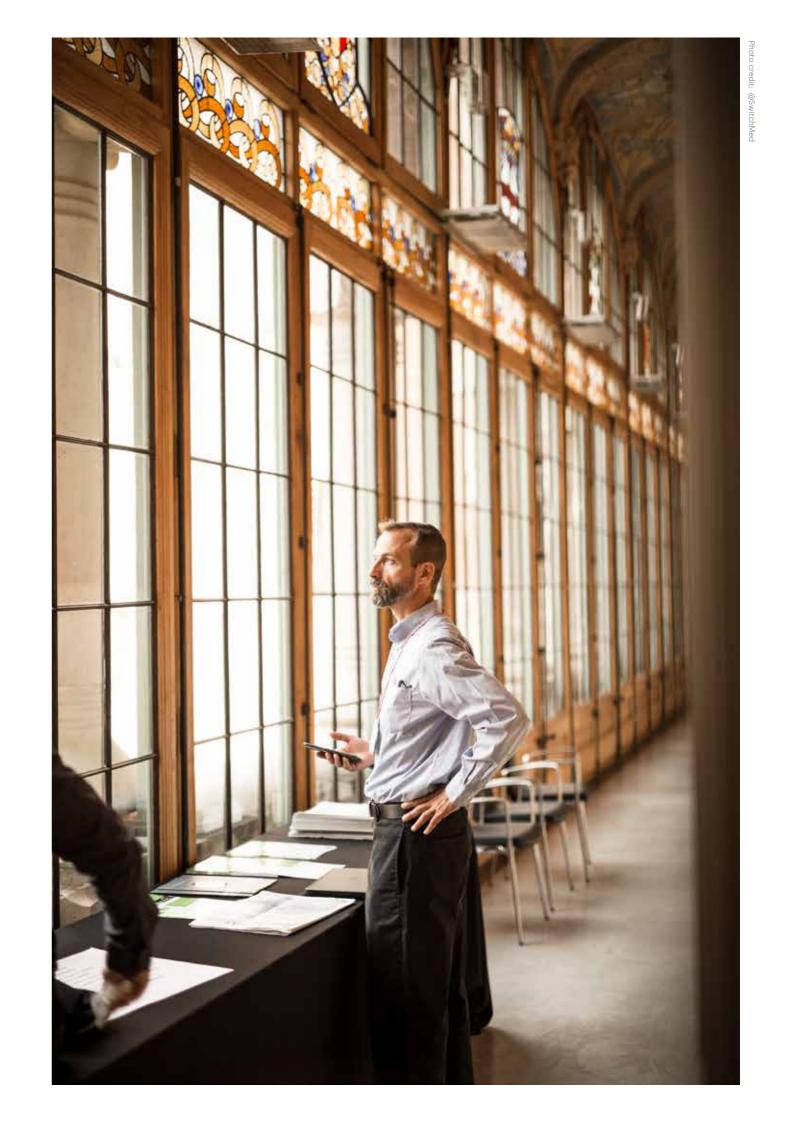
Do you have any specific environmental impact goals, such as quantity of bottles upcycled, energy savings, etc?

Our goal is to build systems that can serve large buildings like cowsheds, swimming pools, open air markets and whole streets. This approach can make use of a lot of bottles and generate plenty of electricity. A single cowshed fitted with our solar canopy as a roof, for example, would recycle around 6,000 plastic bottles. In Israel's climate, it would produce enough electricity to meet the electrical demand of 30 households, save around 100,000 NIS per year in electricity bills and provide enough hot water to service 900 households.

"In the Middle East and Southern Europe, the summer sun is something to escape from. We embrace the sun and turn a liability into an asset."

Support eco and social innovations of green entrepreneurs and Switchers through a mix of grants, loans and equity participations. Join now **The Switchers Fund** and contribute to the first MENA impact investing Fund.

Exchanging, synergising and engaging with business & investment networks to scale-up demo actions.



**Networking Facility** 

### Supporting the visibility, effectiveness, long-term sustainability and impact of the SwitchMed programme

The SwitchMed Networking Facility, led by SCP/RAC, aims to contribute to the visibility, effectiveness, long-term sustainability and impact of the different activities carried out under the SwitchMed programme. In order to deliver this, the Networking Facility focuses on three main areas of activity:

Firstly, we enable extensive communication and networking and facilitate the exchange of best practices and lessons learnt among SwitchMed partners, connecting them with key external stakeholders. We have been working closely with 32 strategic partners in order to achieve common goals. We have also developed the SwitchMed Action Network, an online platform with a mobile app, to exchange knowledge related to SCP initiatives taking place in the Mediterranean, provide inspiration through disruptive innovations integrating closed-loops and collaborative consumption business models, showcase stories and participate in facilitated in-country stakeholder dialogues. It also functions as a database of experts. Another major activity is the organisation of SwitchMed Connect, a gathering of Mediterranean stakeholders to build synergies, exchange knowledge and scale-up eco and social innovations. Leading start-ups and entrepreneurs, industry agents, initiatives, change agents, policy non, Tunisia and Morocco), as well as in Europe, and has organised semand financial institutions working on applications related to productive, inars with national and international investors to discuss the barriers circular and sharing economies in the Mediterranean come together in Barcelona every year. In total, three events have been held, bringing together more than 1,000 stakeholders from 16 different countries.

Our second area of activity involves encouraging the scaling-up of activities and impact, with a focus on harvesting lessons learnt in order to replicate demonstration pilot projects, thereby contributing to activities' long-term sustainability and increasing visibility with regard to the impacts effected during the programme. To that end, the Networking Facility has promoted the production of regional and national scaling-up roadmaps that aim to replicate and continue the green innovations and demo activities beyond the lifetime of the programme. The Networking Facility has designed a general theoretical framework for scaling-up analysis based on the identification of a specific strategy tailored to the SwitchMed programme. In order to gain traction with regard to

sustainable consumption and production and generate greater impact. the scaling-up of the SwitchMed programme has been defined as "expanding, adapting and sustaining demonstration actions in more locations and over time to reach beyond the original target groups, with the ultimate vision of sustainable consumption and production being mainstreamed into everyday economic life across Southern Mediterranean countries". For instance, the compelling outcomes and impact achieved by the SwitchMed Green Entrepreneurship programme indicate the growing demand for business support in Southern Mediterranean countries for the creation of circular economy business models, and clearly demonstrate the potential benefits of these business models. As the full potential equates to the creation of millions of jobs, effective strategies should be explored for scaling up the impact achieved.

The third line of action includes reinforcing the internationalisation of green start-ups and SMEs through closer cooperation between businesses and investment networks in Europe and Southern Mediterranean countries. As such, the Networking Facility has mapped the range of financial instruments available in four selected countries (Egypt, Lebathat restrict access to markets and sources of finance.

Despite the results for the relevant countries being collected at national level, it is important to process the results achieved across beneficiary countries and to provide a regional perspective; thus we collect data and facilitate information exchange across all SwitchMed activities, primarily at regional and thematic levels, communicating these to external stakeholders in line with the programme identity, as has been done since the start. Indeed, well-proven methodologies, tools and initiatives that avoid unnecessary efforts are used or carried out on a regular basis.

### Meet our strategic partners

We work in strategic partnership with international and national organisations that are very experienced an active in addressing the shift to sustainable consumption and production in the Mediterranean region. Our strategic partners are like-minded organisations to facilitate the exchange of ideas, build bridges and synergies and foster cooperation among diverse organisations in different countries with shared goals.

Our strategic partners represent a diverse range of organisations whom we trust to help us execute our mission. Their expertise enables us to do far more than we could alone, and their passion and talent inspire us.

Our strategic partners have long-term commitment in the Mediterranean region have deep technical expertise on sustainable consumption and production work on a broad range of topics such as eco and social innovation, collaborative economy, life cycle assessment, green entrepreneurship business models...involve the Mediterranean countries in project design and implementation share the same values and vision for the region

Our current strategic partners are:



































































.72

#### .73

#### **Credits**

#### Concept

SwitchMed

The SwitchMed Programme is implemented by the United Nations Industrial Development Organisation (UNIDO), UN Environment Mediterranean Action Plan (UN Environment/MAP), Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC) and UN Environment's Economy Division.

This publication has been produced with the assistance of the European Union.  $\,$ 

The content of this publication is the sole responsibility of SwitchMed and can in no way be taken to reflect the views of the European Union.

#### Supervision and coordination:

Roser Gasol (SCP/RAC)

#### **Authors:**

Ananda Alonso (SCP/RAC), Anna Ibañez de Arolas (SCP/RAC), Chang Yan (UN Environment), Claudia Pani (SCP/RAC), Fabiola Martínez (SCP/RAC), Michael Barla (UNIDO) and Roser Gasol (SCP/RAC)

Design: Florencia Cufré Meyer

#### Translation & Editing: T&S

#### Contacts:

- Magali Outters: moutters@scprac.org
- Luc Reuter: luc.Reuter@unep.org

For more information on the SwitchMed MED TEST II Programme please get in touch with us:

- Roberta de Palma
- r.de-palma@unido.org
- Carolina Gonzalez-Mueller c.gonzalez-mueller@unido.org

For more information on the SwitchMed Green Entrepreneurship and Civil Society Empowerment Programme please get in touch with us:

- Giorgio Mosangini
- gmosangini@scprac.org

For more information on the SwitchMed Networking Facility please get in touch with us:

• Burcu Tunçer

btuncer@scprac.org

Join us now at

switchmed.eu/en/community/jointhe-action-network

#### For further information visit us:

- www.switchmed.eu
- www.theswitchersfund.eu
- www.theswitchers.eu
- www.switchmedconnect.com

#### Follow us on our social media channels at:

- Twitter: @SwitchMed
- Facebook: Switchmed.eu













The SwitchMed Networking Facility, is hosted by the Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC).

Sant Pau Art Nouveau Site - Nostra Senyora de la Mercè Pavillion. Sant Antoni Maria Claret, 167. 08025 Barcelona (Catalonia) Spain.

Find us at:

• www.switchmed.eu

For further information:

- The Switchers: www.theswitchers.eu
- SwitchMed Connect:
- www.switchmedconnect.com
   Switchers Fund:
- $\underline{www.theswitchersfund.eu}$

Our social media channels:

- <u>Facebook</u>
- YouTube
- <u>Linkedin</u>
- <u>Twitter</u> <u>Flickr</u>