

SwitchMed

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Fall 2018

Switching to the circular economy in the Mediterranean



SwitchMed programme is
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switchmed

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.

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SwitchMed Connect 2018

SwitchMed is an initiative that supports and connects stakeholders to scale-up Sustainable Consumption and Production (SCP) in the Southern Mediterranean Region through eco and social innovations. It 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. It supports industry, emerging green entrepreneurs, civil society and policy makers through policy development, demonstration activities and networking.



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

The SwitchMed Programme was launched in 2013 by the European Union to speed up the shift to sustainable consumption and production patterns in the Southern Mediterranean, notably through the promotion 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 scale-ups 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, which 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 Mediterranean via:

- Capacity building in industry service providers targeting small and 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 services;
- Engagement with policy makers to establish a regulatory and policy framework to boost the market for sustainable products and services;
- Empowerment of citizens and civil society organisations to lead socially innovative solutions addressing environmental challenges;
- An Action Network of stakeholders to link with similar initiatives and 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 implementing organisations brings its specialised experience and tools 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 sustainable 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 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.

The TEST implementation approach has to date successfully demonstrated 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 countries. MAP provides support to those countries in the implementation of the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, the so-called Barcelona Convention.

The Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC) is one of the centres belonging to UN/MAP. It is appointed 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 organizations and governments

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 decouple 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/RAC also hosts the Networking Facility that contributes to the visibility, effectiveness and scaling up of the SwitchMed activities.

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 a specific role in implementing the policy activities at national and disseminating 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 Ministry of Industry.

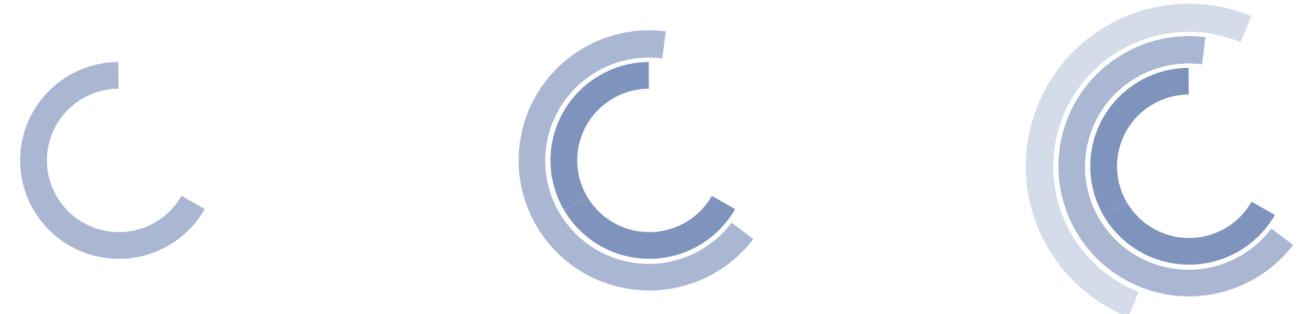
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Component

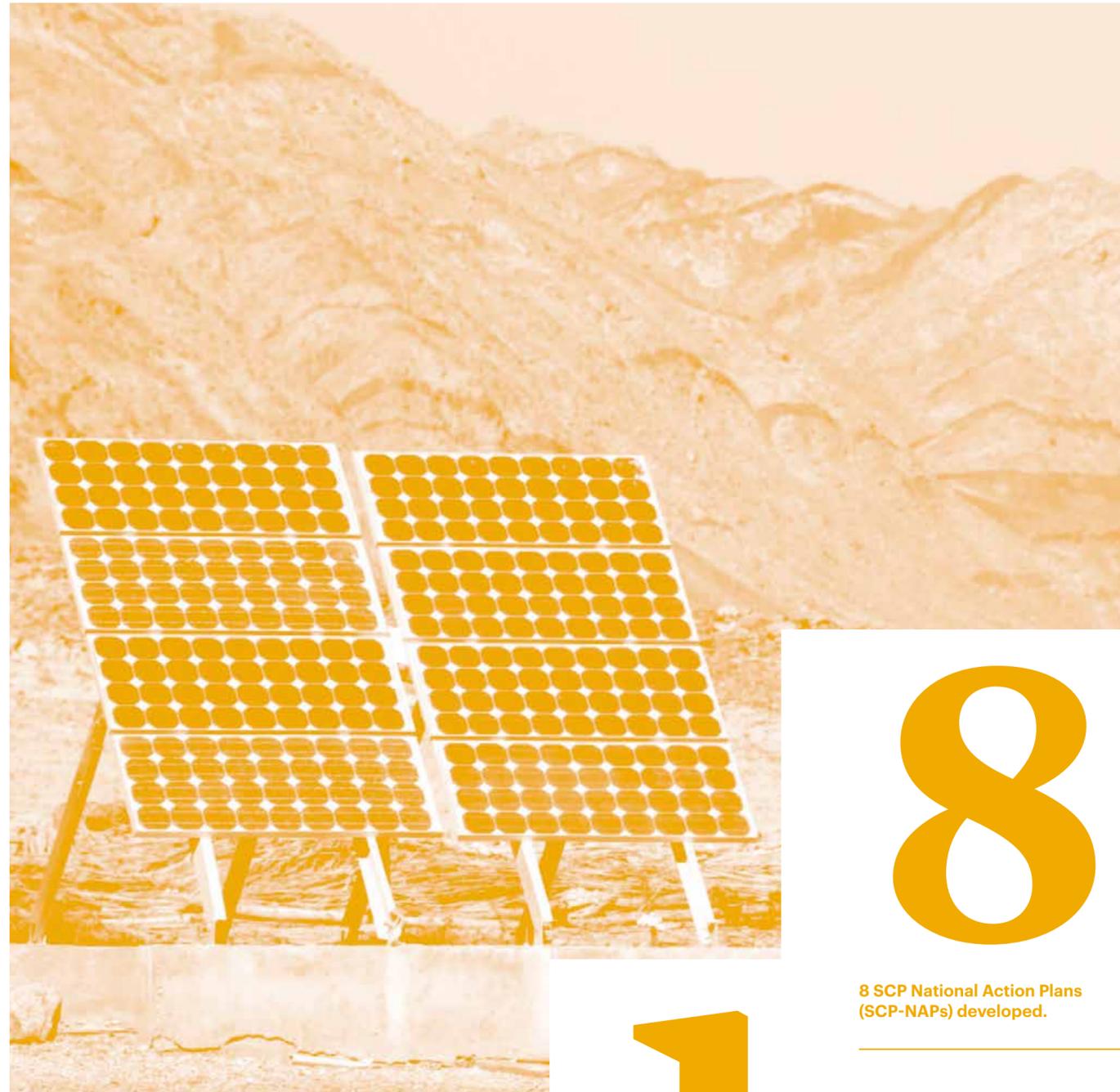
Component Description

Key Stakeholders



The Mediterranean

Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine and Tunisia.



25

25 policy measures in which the Contracting Parties must report with the new Barcelona Convention Reporting System to learn about the activities done in order to implement the SCP Regional Action Plan.

40

Over 40 national workshops, roundtables and nationally-tailored training sessions were organised to reinforce national capacity on SCP.

1

1 Regional SCP National Action Plan and 1 Roadmap towards circular economy for its implementation in the Mediterranean developed while engaging with the Mediterranean policy-makers.

25

25 set of SCP selected, quantitative and qualitative, comprehensively aligned with the Sustainable Development Goals (SDGs), and to other existing SCP indicators already used in international reporting systems.

8

8 SCP National Action Plans (SCP-NAPs) developed.



8

8 SCP assessments undertaken at country level.

1

1 SCP Toolkit.

1,500

Over 1,500 national stakeholders from government, private sector, civil society, industry, academia and media trained.

20

20 demonstration pilot projects 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.

8

8 multi-stakeholder nationally owned and nationally driven policy processes undertaken to best respond to the national priorities on SCP.



There is an urgent need for systemic change

Sustainable Consumption and Production (SCP) actions are powerful levers to accelerate the transition to an eco-efficient economy and to turn environmental and social challenges into business and employment opportunities. In the Mediterranean region, Contracting Parties to the Barcelona Convention have demonstrated their commitment to support SCP actions by adopting the “Sustainable Consumption and Production Regional Action Plan for the Mediterranean” and its Roadmap. The SCP Regional Action Plan is built around the following

vision: “By 2027 a prosperous Mediterranean region is established, with non-pollutant, circular, socially inclusive economies based on sustainable consumption and production patterns, preserving natural resources and energy, ensuring the well-being of societies and contributing to clean environment and healthy ecosystems that provide goods and services for present and future generations.”

With populations in the Mediterranean coastal region alone expected to increase to 174 million by 2025 and current consumption patterns far exceeding the capacities of ecosystems, a fundamental change is needed to ensure that human populations in the region can fulfil their needs, now and in the future, and within the limits of the Mediterranean's unique but delicate ecosystems. Actions are therefore required both to avoid the enormous economic costs of environmental degradation and resource depletion, and to reorient production and consumption patterns towards sustainable development while meeting the needs of all and improving the quality of life.

In order to assist governments in dealing with such challenges, SwitchMed has been actively promoting and implementing policies and initiatives on SCP and resource efficiency for years. The adoption of a SCP Regional Action Plan 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 (COP19) in February 2016, represents one of our important efforts and great achievements. Adopted in 1976, the Barcelona Convention constitutes one of the most advanced regional policy framework for sustainable development. It is the first even international treaty that has identified the shift to sustainable patterns of consumption and production as a necessary objective to decouple human development from the degradation of marine and coastal environment.

Two years of development and a large consultation process with governments and regional organisations in the Mediterranean was needed to obtain a first draft, a process that was led by the Coordination Unit of the UN Environment Mediterranean Action Plan and the Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC). The process was also supported by a Mediterranean SCP Expert Groups formed by independent experts representing different sectors and geographical areas. Before its launch, the Contracting Parties expressed the need for “a consultation process to ensure that the experience and input of key Mediterranean SCP stakeholders, particularly the business sector, economic leaders and other relevant bodies active on sustainability field in the Mediterranean, are reflected in the final document”. Furthermore, they mentioned to be “aware of the fact that a broad participatory process, with active involvement of all key SCP stakeholders and partners, is central to the development

of an SCP Regional Action Plan adapted to the reality of the Mediterranean region”.

The SCP Regional Action Plan is a substantive contribution to the implementation of the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals. It is a strategic document that gives clear guidelines on the actions that should be developed in the Mediterranean 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. According to Gaetano Leone, coordinator of the UN Environment Mediterranean Action Plan, “the SCP Regional Action Plan for the Mediterranean was adopted as a forward-looking framework, to complement and work in full synergy with existing national and regional policy frameworks, and to support the implementation of the Barcelona Convention and its Protocols”. In the final text of the Decision on the SCP Regional Action Plan, the Contracting Parties were strongly encouraged to mainstream sustainable consumption and production in national and local development policies, according to national laws in order to implement the SCP Regional Action Plan at the national and local levels, ensuring enabling conditions, policy coherence and promotion of synergies among national stakeholders and understanding the need to support member countries in the implementation through capacity building and technology transfer. “For this, it is absolutely crucial to foster multi-stakeholders involvement. This switch will not be achieved without the development of new business models by companies, the introduction of SCP within Universities’ curricula, the provision of sustainable alternatives for consumers, the development of market incentives to favour sustainable products, to mention a few examples” highlighted Magali Outters, team leader policy area at SCP/RAC.

The SCP Regional Action Plan covers four consumption and production priority areas that are main upstream drivers of pollution generation and environmental pressures on the ecosystems in the Mediterranean: food including fisheries and agriculture, tourism, goods manufacturing as well as housing and construction. These four areas are also major socio-economic contributors in the Mediterranean region, namely in terms of employment and wealth generation. For instance, with regard to employment opportunities, agriculture is one of the largest sources of jobs, and tourism is contributing an overall 13% of total employment in the Mediterranean economies.

Regarding Mediterranean economies, while the manufacturing sector accounts for 20 to 33% GDP, the construction, renovation and maintenance of buildings sector contributes 10 to 40% global GDP. The promotion of sustainable consumption and production patterns within the different priority areas entails a number of benefits for the populations of the region, improving social wellbeing and quality of life in terms of health, employment, respect to local culture and traditions, valorisation of traditional practices, new jobs creation, etc. For instance, making tourism businesses more sustainable benefits local communities and can create stronger linkages with the local economy, increasing local development potential.

“The SCP Regional Action Plan for the Mediterranean was adopted as a forward-looking framework, to complement and work in full synergy with existing national and regional policy frameworks, and to support the implementation of the Barcelona Convention and its Protocols.”
Gaetano Leone, coordinator of the UN Environment Mediterranean Action Plan

For each of the 4 sectors, the SCP Action Plan identifies 3 categories of operational objectives: the first one is focusing on the establishment of strong knowledge base, research and development, and on the use of innovative technologies, eco-design and best practices to implement circular economy. The second one aims at promoting good governance, policy and institutional framework to support practices. It includes the development of

sustainable procurement procedures for public purchases which often represent one third of the GDP but also the design of economic development to support sustainable products markets. Last but not the least, the third category of objectives focuses on sensitization and raising awareness of all stakeholders, including consumers. It also aims at building capacities to support marketing processes and market development tools aimed at promoting sustainable consumption and livelihood models. Furthermore, it also includes actions for the better visibility of eco-labelled products and services on the market.

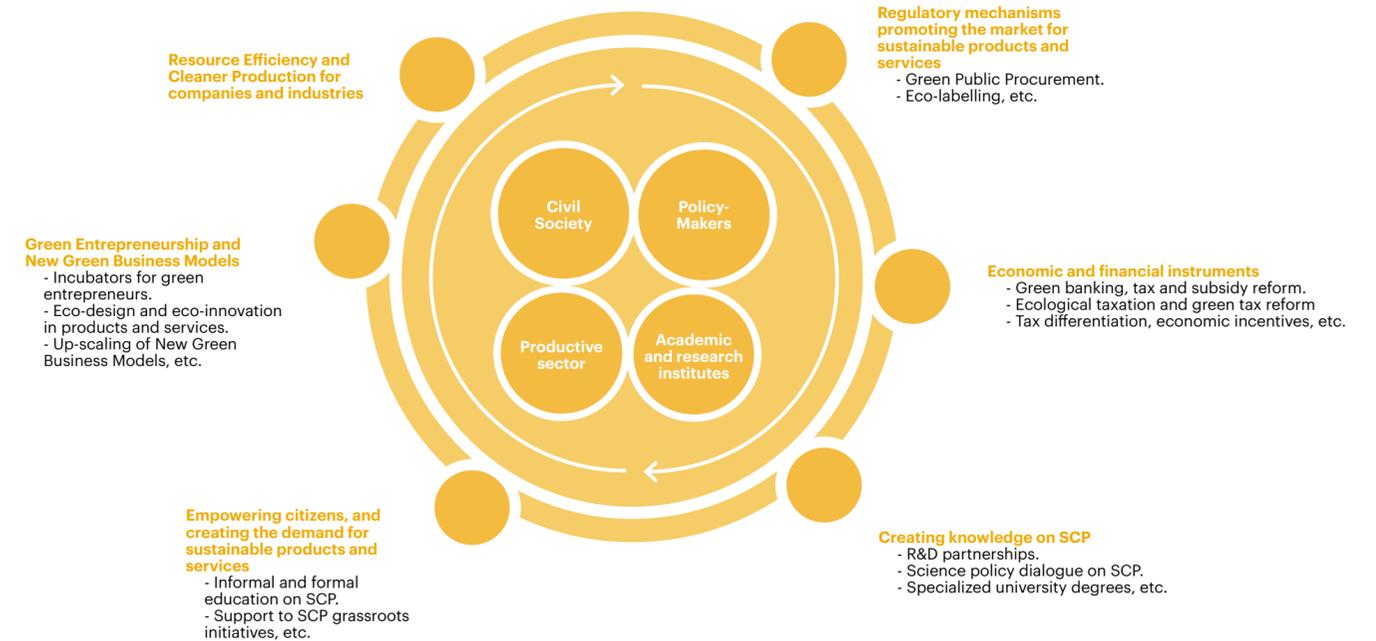
The implementation of the SCP Regional Action Plan started on January 2016 and it will last until the end of December 2027. Accordingly, the Action Plan will be subject to a mid-term evaluation and a review, coinciding with the end of the corresponding Mediterranean Action Plan (MAP) 6-year Mid Term Strategies for the periods 2016-2021 and 2022-2027, respectively. Likewise, the SCP activities of the MAP biennial Programme of Work will be in full integration and synergy with the Regional SCP Action Plan.

In this light, SCP/RAC elaborated a SCP Indicator Framework for the Mediterranean countries to measure progress on SCP in the different countries and to make data comparable. In total, 25 were the indicators selected, quantitative and qualitative, comprehensively aligned with the Sustainable Development Goals (SDGs), and also to other existing SCP indicators already used in international reporting systems. The selection of those indicators was done in close coordination with the development of the Mediterranean Sustainability Dashboard for the follow-up of the Mediterranean Strategy for Sustainable Development 2016-2025 (MSSD), a framework strategy which purpose is to adapt international commitments to the Mediterranean regional conditions to guide sustainable development strategies and initiate dynamic partnerships between countries.

The set of 25 SCP indicators were adopted by the Contracting Parties during their 20th Conference of Parties (COP21) that took place in December 2017, in Albania, together with a new simplified reporting format for all the Barcelona Convention Protocols. As the SCP Regional Action Plan is under the so-called LBS Protocol concerning Pollution from Land-Based Sources and Activities, a specific reporting template for the SCP Action Plan was developed and adopted too. Therefore, the Parties must submit reports every two years on the progress made for implementing that plan.

What do we mean by SCP

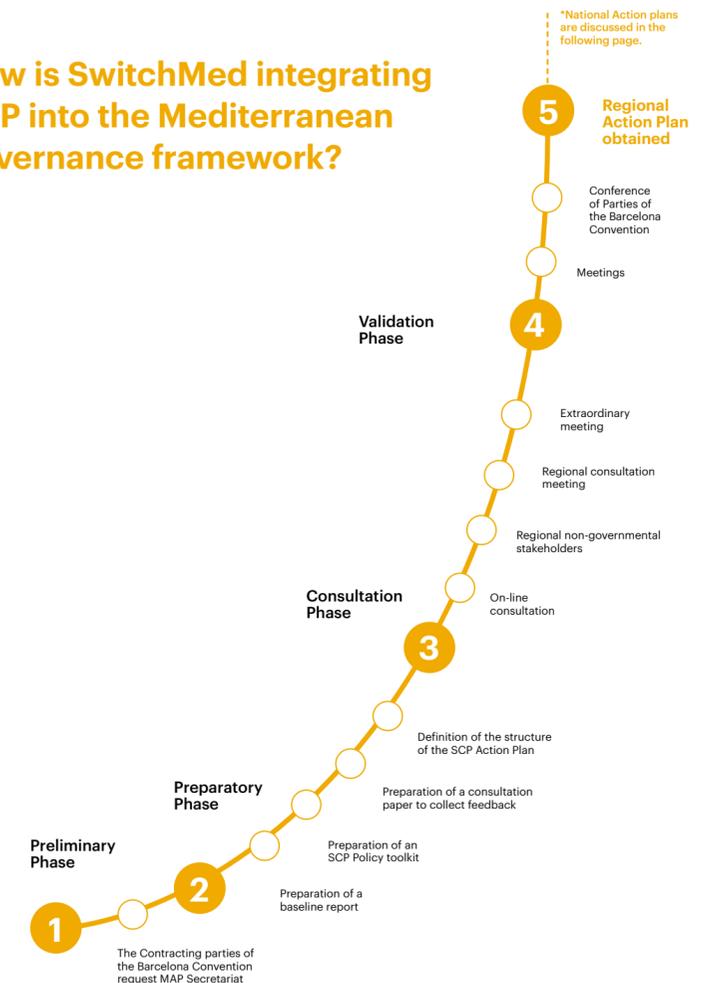
Main SCP measures and stakeholders



How is SwitchMed integrating SCP into the Mediterranean governance framework?

The recognition of SCP as key priority for the sustainable development of the Mediterranean region is undoubtedly an essential step and a great milestone. But it is the first step for the translation into numerous and diverse local actions that will really create the expected impact. The main challenge is now in the development of mechanisms to move from global and regional commitments to national engagements and finally local results.

Positive outcomes include national sector-specific plans related to organic farming, industrial innovation, green growth, water efficiency plans, sustainable tourism, organic waste, sustainable public procurement, eco-labels for hotels. As an example, Tunisia started greening its tourism sector, based on its SCP National Action Plan (NAP), which has also helped to generate new employment opportunities. All SwitchMed beneficiary countries now have SCP NAPs and there are a number of demonstration pilot projects - based on the Sustainable Consumption and Production Action Plans - currently being implemented on the ground to adopt circular economy measures. Building a collective biogas plant in Morocco, valorisation of co-products and waste streams in the oil industry sector Tunisia, recycling unwanted fabrics in Algeria and developing composting process of organic material from the wine industry in Lebanon are some of them.



Let's move the circular economy to the mainstream

One of the overall objectives of SwitchMed is to assist eight Southern Mediterranean countries in moving towards a green economy by facilitating the implementation of action plans at national level so sustainable consumption and production (SCP) can be mainstreamed as a priority or a target in national policies. To that end, eight sustainable consumption

and production national action plans (SCP-NAPs) were developed through nationally owned and nationally driven multi-stakeholder processes. These are cross sectoral, and they emphasise resource efficiency and enhance coherence and inter-ministerial cooperation, while engaging the private sector and consumers.

Plans and strategies are crucial to the successful implementation of the SCP Regional Action Plan and its inclusion and mainstreaming within national policies. To that end, a roadmap adopted in 2016 at the COP 19 of the Barcelona Convention and its protocols were designed to provide policymakers with a clear set of actions to be implemented in order to move towards mainstreaming SCP. The roadmap seeks to promote initiatives and activities that foster a stronger foundation for mainstreaming SCP through multi-stakeholder partnerships, the establishment of sustainable consumption and production national action plans, and the promotion of SCP indicators as a sound scientific knowledge base for policy interventions. This, together with technical and financial support from SwitchMed over a period of two years in eight countries, namely Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine and Tunisia, helped to develop a SCP national action plan (SCP-NAP) for each one.

As noted in the 2030 Agenda, each country needs to take into account its national realities and circumstances, as no one size fits all countries in regard to the mainstreaming process. Prior to the adoption of the SCP Regional Action Plan, governments had existing policy objectives and commitments that are articulated in a variety of national and sectoral strategies and plans, as well as in commitments to international agreements.

Mobilising financial and technical support to help SwitchMed beneficiary countries kick-start mainstreaming processes was the first step implemented under the leadership of the UN Environment as part of the SwitchMed framework. A national coordination mechanism was established at country level under the coordination and guidance of the national focal points (NFP), who were appointed by the national governments. In most countries two focal points – one from the Ministry of Environment and one from the Ministry of Industry led the implementation of SwitchMed at national level. The SCP-NAP processes were developed in a sustained programmatic approach tailored to the needs and specific country situations and facilitated synergies and integration with national development plans and/or national sustainable development strategies. The national process was 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. Given the difficulty of implementing 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 promote the alleviation of poverty, environmental sustainability and the development of a green economy. As SwitchMed National Policy Coordinator of the UN Environment Economy Division, Luc Reuter pointed out, "SCP-NAPs are a first step in a country's response to the Sustainable Development Goals (SDGs) adopted in 2015 and, in particular, Goal 12: Sustainable Consumption and Production". In some countries, the SCP-NAP was complemented by national sector-specific plans related to organic farming, industrial innovation, green growth, water efficiency plans, sustainable tourism, organic waste, sustainable public procurement, eco-labels for hotels, etc. These sectors were selected based on the SCP assessment that was developed as part of SwitchMed in 2015.

"SCP-NAPs are a first step in a country's response to the Sustainable Development Goals (SDGs) adopted in 2015 and, in particular, Goal 12: Sustainable Consumption and Production."
Luc Reuter, SwitchMed National Policy Coordinator of the UN Environment Economy Division

During these national processes a total of over 50 national workshops, roundtables and nationally-tailored training sessions were organised to reinforce national capacity with regard to SCP, with active participation from over 2,000 national stakeholders from government, private sector, civil society, industry, academia and media. All national action plans were validated by the respective governments and can be considered as nationally endorsed documents. Also, in each case, a high level political event was held to validate and officially launch the SCP national action plans and/or revised strategies. In Palestine, for example, the SCP National Action Plan, which outlines a roadmap for

SCP mainstreaming within three relevant sectors, tourism, housing and construction and agriculture and food, was officially launched by H.E. the Prime Minister, Dr Rami Hamdallah, in October 2016 in Ramallah. H.E. the Minister of Agriculture, Dr. Sufian Sultan, and the Chairperson of the Environment Quality Authority, Adalah Atteereh, also attended the launch. In his keynote speech the Prime Minister called upon all national ministries and entities, as well as the international community to make the implementation of the Plan one of their priorities. The timeframe set for this NAP is six years (2017-2022), coinciding with the sectoral and cross sectoral strategies which are currently being developed in Palestine.

Another example is the Egyptian SCP National Action Plan that was developed by using a multi-stakeholder approach, including 92 experts from relevant ministries, private sectors, and non-governmental organisations. The National Action Plan is translated into six different programmes to implement 28 projects, presented by 13 different government institutions and specialised research centres. The Plan aims to support Egypt's overall developmental goals, reduce socio-economic hurdles and maximise environmental improvements. It addresses four priority sectors: water, agriculture, municipal solid waste, and energy. It also, promotes the replication and scaling up of SCP policies, resource efficiency programmes and green initiatives at a national level.

The SCP roadmap for Israel features achievable, innovative and high impact projects to be implemented by 2020. In this case, the development process was realised under the guidance of an advisory team from the Israeli Ministries of Environmental Protection and Economy and based on a year-long scoping review process which included over 300 participants from all sectors in eight different workshops.

In Morocco, a cross-analysis of production and consumption patterns was carried out and seven strategic orientations were developed that provide a reference framework and actions to promote SCP. The Moroccan National Action Plan was supplemented with two sectoral plans, which were developed a year later. The "Sectorial Plan on Agriculture and Sustainable Food" aimed to strengthen Moroccan agricultural policy, set up instruments and mechanisms for the development of sustainable agriculture as well as increase consumer awareness with regard to sustainable food options. Promotion of the circular economy to optimise the flow of material and energy in production and consumption chains, development of certification instruments, organic labelling and eco-labelling and

strengthening skills and improving green employability and entrepreneurship across the food system are three of the six strategic points that were formulated in the sectorial plan. Sustainable building was another major concern for the Moroccan governments, and so a "Sectorial Plan on Eco-construction and Sustainable Building" was developed with the goal of promoting a global eco-design approach to building in Morocco.

Based on the conclusion that Lebanon has significant potential for adopting SCP principles in the industrial sector given the export potentiality and the challenges facing the sector in optimising its production processes, both the Ministry of Environment and the Ministry of Industry agreed to embark on the development of an Action Plan which addresses that particular sector. The Plan includes three operational objectives: to adopt best available techniques to promote SCP in the industrial sector, to introduce SCP approaches related to the industrial sector in the policy and institutional frameworks and to educate and raise awareness among consumers with regard to SCP in the industrial sector.

For Algeria, governance of sustainable consumption and production patterns, transition and energy efficiency and wastewater and solid waste management are the three priority areas made up of 42 impact actions. The identified priorities also presented cross-sectoral leverage in the context of the implementation of SDG Goal 12. That Plan is now a national tool that is part of the National Strategy for the Environment, and is a component of the National Plan for Environment and Sustainable Development by 2035, amongst others. It is not only an institutional action plan, but also includes civil initiatives related to the economic sector and consumers.

Nationally, there are demonstration pilot projects – based on the SCP Action Plans – currently being implemented on the ground for the adoption of circular economy measures. As an example, Tunisia has begun making its tourism sector more environmentally friendly, based on its Sustainable Consumption and Production National Action Plan, which has also helped to generate new employment opportunities. Some of the initiatives include the construction of a collective biogas plant in Morocco, the valorisation of oil industry coproducts and waste streams in Tunisia, the recycling of unwanted fabrics in Algeria and the development of composting processes for wine industry organic material in Lebanon. The project has also successfully produced and shared training material on SCP tools.

National priorities as expressed in the SCP National Action Plans

Algeria

- SCP governance framework
- Energy transition and energy efficiency
- Waste and emission management

Egypt

- Policy instruments for its SCP programme
- Integrated community development
- Sustainable agriculture
- Sustainable water management
- Sustainable and renewable energy applications
- Solid waste management

Israel

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

Jordan

- Agriculture and food industry
- Transport sector
- Waste management sector

Lebanon

- Adopt best available techniques to promote SCP in the industrial sector
- Introduce SCP approaches related to the industrial sector in the policy and institutional frameworks
- Educate and raise awareness among consumers with regard to SCP in the industrial sector

Morocco

- Agriculture and agri-foods
- Eco-construction and sustainable buildings

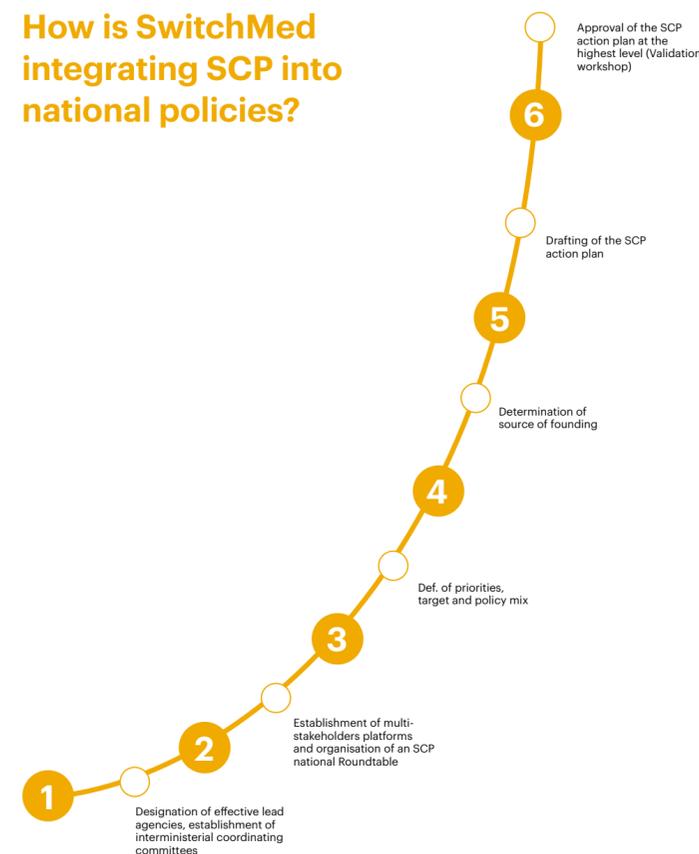
Palestine

- Sustainable tourism
- Agriculture and food (including food manufacturing)
- Housing and construction

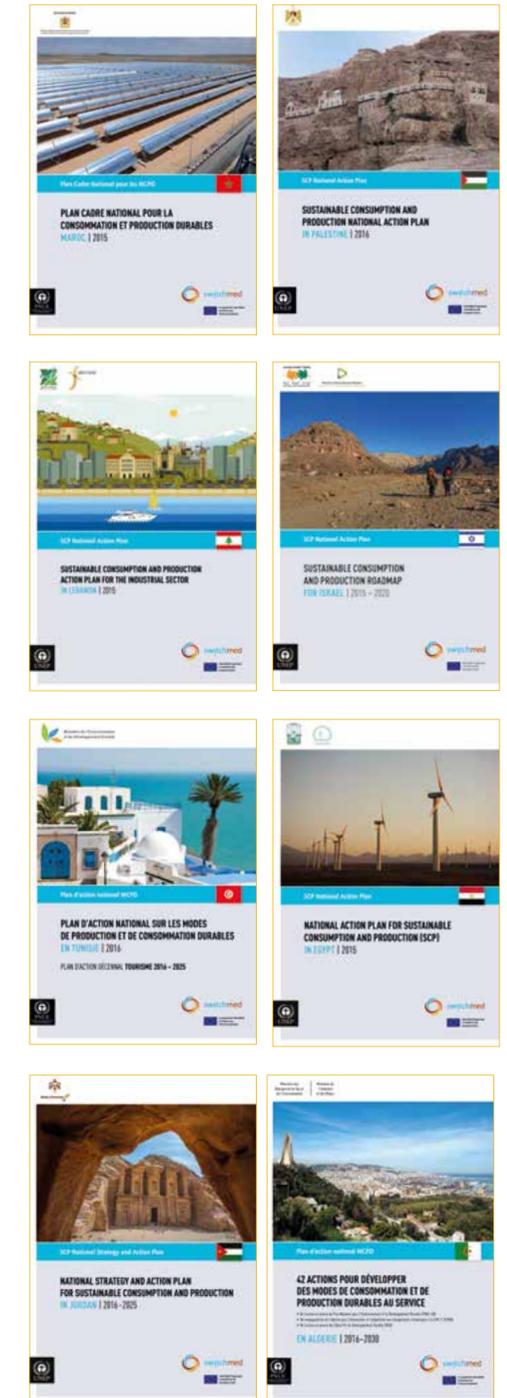
Tunisia

- 10-year framework action plan for the agri-food sector
- 10-year framework action plan for the tourism sector
- Coordination mechanism for SCP-NAP implementation

How is SwitchMed integrating SCP into national policies?



National Action Plans in 8 MENA countries



Circular economy measures adopted in 20 pilot projects

By the end of 2018, 20 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.



Algeria

Recovering unwanted dates

Rima Dates created value from downgraded Algerian common dates and the coproducts of date production by turning them into new byproducts: confectionery syrup, vinegar, paste and oil for cosmetics.

Dates were stuffed with almonds and coated with high-quality Belgian chocolate, thereby creating a product capable of competing with traditional chocolate bars. Rima Dates also extracts oil from date pits and uses it to make organic cosmetics, and processes dry waste to produce fuel for local usage.

A total budget of 90,000 euros was injected into the pilot project. As a result of three training sessions on handmade vinegar and chocolate production, 14 tons of downgraded dates are now recovered, supposing a 100% increase from the initial seven tons and an increase of 400% in vinegar production. Two jobs were created too, besides providing income to farmers and other women involved in the process.

Upcycling textile leftovers

The pilot project aimed to support the textile company Atelier le Printemps to upcycle discarded fabrics from factories, businesses and homes by making garments and other accessories with fully customised fabric patterns, while respecting the environment.

Activities included strengthening Atelier le Printemps' business plan to cover improvements in the use and management of textile leftovers from commercial activities and in the quality of the raw materials used in the workshop. They also enhanced their product design by mastering the art of natural dyes using natural organic inks and silk-screen printing and learned to adapt their products to market trends.

Lebanon

Composting winery waste

This pilot project aimed to carry out a feasibility study for developing a composting process for organic waste produced by the wine industry in the Bekaa Valley region. Through this study, the project hoped to demonstrate the technical, economic and environmental viability of composting recovered organic waste. Composting included stalk and wastewater sludge.

Château Kefraya, a 300-hectare winery, was chosen to host the composting facility site for the six-month trial. Sensors and equipment were installed, technical personnel were trained in composting methods and its benefits, and assistance was provided to ensure the quality of the resulting fertiliser that was to be returned to the vineyards. Many key stakeholders, such as wineries, national and local public authorities, entrepreneurs, field experts and circular economy advocates, were engaged throughout the process.

A manual was produced that included an overview and assessment of existing legislation and financial instruments related to waste management and the wine sector. It also included a procedural approach to constructing and integrating the composting process at different scales, along with key findings and best practices, in an effort to create a ripple effect among wineries and lay the foundations for replication in other Mediterranean countries.

Tunisia

Sustainable practices in ecotourism

The pilot project 'Circular economy adapted to the needs and characteristics of a Tunisian eco-tourism lodge' at Dar Zaghouan aimed to provide advice on potential implementation measures related to energy, water and waste and mentoring on the eco-labelling application process and fundraising opportunities for small and medium-sized tourist sites in the Southern Mediterranean region.

Reinforcing the ecotourism business model

The pilot project 'Consolidation of the commercial model and development of the capacities of an ecotourism operator in Tunisia' aimed to reinforce the green and social business model of Tunisia Ecotourism, a company that is improving their services while preserving traditional knowledge. A study assessed its possibilities of obtaining international certification in ecotourism, and their becoming a certifying body themselves. An online platform was developed to promote fair-trade products to support socially and environmentally responsible local producers.

Recovering olive oil byproducts and waste

The aim of the pilot project with Sabra Olive Oil was to complete an eco-audit of olive oil production, from tree to bottle, in order to explore the recovery of its coproducts and waste streams. The study also assessed the possibilities of eco-labelling according to international standards. The second step involved designing a financial strategy and providing the company with support in their marketing and communication efforts to reach new customers and improve sales of organic olive oil and byproducts.

Replacing lead in industrial paint

The pilot project tackled the substitution of lead in industrial anti-corrosive paint in Tunisia in order to minimise the adverse effects of chemicals by raising awareness and disseminating technical guidelines.

Morocco

Building a biogas plant

The aim of pilot project 'Biodôme du Maroc' was to build a collective biogas plant for the benefit of the agricultural cooperative Ouled Abdoun in the region of Khouribga. The biogas plant allowed the members of the cooperative to develop a new model of circular economy, as they are now producing biogas and organic compost from agricultural waste. The biogas is being used as an energy source and the compost is used internally and sold to external users.

Marine litter projects

The aim of the pilot project 'Alternatives to single-use plastic bags', was to support Morocco in transitioning from single-use plastic bags to more responsible options. The actions were implemented through the association Zero Zbel and which focused on communicating the benefits of alternative bags, and the association Docteur Fatima, which produced and tested different durable carrier bags, reusing such materials as flour bags and advertising canvas, among others.

The aim of the pilot project 'Collection and recycling of beverage containers' was to explore the feasibility of plastic bottle and aluminium can collection and recycling circuits. It was based on a refund system for beverage containers using reverse vending machines in selected supermarkets.

The two pilot projects aimed to prevent and minimise the use of plastics that end up as marine litter in such a way that they could be replicated and promoted in the MENA region.

Substitution of harmful chemicals for medical devices

The aim of the pilot project to substitute additives in polyvinyl chloride (PVC) for medical devices was to eliminate harmful chemicals used in the health sector, specifically those containing phthalates (DEHP), plasticisers with proven toxic and carcinogenic effects in animals.

20 demonstration pilot projects in 8 MENA countries



Egypt

Reducing plastic bag consumption

This pilot project aimed to raise awareness of the environmental harm caused by plastic bags, and ultimately change behaviour through lobbying for a levy on single-use plastic bags charged by retailers at the point of sale. The pilot activities included the organisation of consultation sessions to identify stakeholders and the production of a baseline study to identify alternative bags, which was successfully concluded in collaboration with the Plastic Technology Centre of the Ministry of Trade and Industry. An awareness-raising campaign was prepared for dissemination through different media channels and launched on the World Environmental Day on 5 June 2017. Alternative bags were distributed to 72 branches of seven supermarkets within Cairo, and biodegradable bags were distributed through a private-public partnership between the Ministry of Environment and seven supermarket chains in Cairo and Alexandria. The initiative was highlighted in a number of international conferences, such as the 5th SCP Roundtable for the Arab World in December 2017 and the League of Arab States / ESCWA HLPF preparation forum in April 2018.

Sustainable public procurement assessment

The aim of this pilot project was to implement a demonstration of sustainable public procurement by assessing the existing institutional system for purchasing within the governmental body. The pilot activities included establishing policies for mainstream sustainable public procurement and guidelines for practitioners. The recommendations that set clear roles and mandates were also developed. In September 2017 the Second Sustainable Public Procurement Roundtable and a training session on SPP with the participation of more than 100 government officials were organised.

Israel

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.

Jordan

Improving solid waste management

This pilot project aimed to institutionalise solid waste management concepts and practices in five and four-star hotels in the city of Aqaba. The goal was to reduce the amount of waste generated by the Aqaba hotel industry by adopting sustainable solid waste management practices and developing institutional 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.

Training in solid waste management

The aim of this pilot project was to facilitate the maturation of the solid waste sector by developing skills in the workforce, from technicians to high-level decision-makers. The goal was to provide public and private sector players with the tools to work together towards solid waste management, concepts and opportunities. Pilot activities included two advanced 'Energy from waste' training programmes, with high attendance rates from the public and private sectors, a monitoring and evaluation plan with key indicators and follow-up mechanisms, and a training workshop for women on reusing recycled products. The main achievements were a bylaw on plastic bag use already put in place by the government, a draft law on waste management that is currently before the Parliament, and the initiative launched by the Minister for Environment during the World Science Forum 2017, 'One dead sea is enough', which aimed to save the seas and oceans from pollution and man-made waste.

Palestine

Sustainable consumption and production dissemination

The aim of this pilot project was to raise awareness about sustainable consumption and production (SCP) by disseminating different activities. The pilot activities included the translation of several relevant documents into Arabic, the development of additional project profiles, a collection of a portfolio of 15 Palestinian switchers, a documentary on SCP in Palestine, and the organisation of an exchange forum between the different SwitchMed components and a SCP exhibition in three of the country's cities.

Promoting eco-trails

This pilot project aimed to develop a methodology for eco-trails and sites, establishing guidelines to restore and promote five pilot trails. The activities included the selection, assessment and creation of a shortlist among existing trails and sites and the coordination of meetings in conjunction with the Ministry of Tourism. In addition, two consultation workshops on eco-trails with around 40 specialists from all relevant stakeholders were organised, which aimed to establish the selection criteria for the eco-trails.

Promoting sustainable agriculture

This pilot project aimed to develop agricultural modules to promote sustainable practices. Activities included the development of guidelines for biological pest control and assessment of post-harvesting techniques and handling to highlight and define the causes of post-harvesting losses. Consultation workshops in Ramallah, Nablus and Hebron were organised and the best practices manual 'Guidelines for introducing agricultural best practices to preserve organic matter and moisture content in soils' was prepared and discussed. Three sustainable consumption and production expos with media coverage were also organised in Jenin, Hebron and Gaza and included over 30 initiatives ranging from recycling of used tyres to organic agriculture and upcycled fashion.

30,673

30,673 direct impacted jobs.

12 28

12 industries from the textile sector.

28 industries from the chemical sector.

1,830

identified RECP measures which will save:

707 GWh of energy.

3,512,660 m³ of water.

33,623 tonnes of raw material.

and will avoid:

197,525 tonnes of CO₂ emissions.

19,612 tonnes of solid waste.

41.7 1,830

Saving 41.7 million for the 125 industries in annual production costs.

1,830 RECP measures were identified generating 87.6 million euros in RECP investments in the food, chemical, textile, leather and mechanical sectors

125 71

Demonstrating RECP in 125 industries.

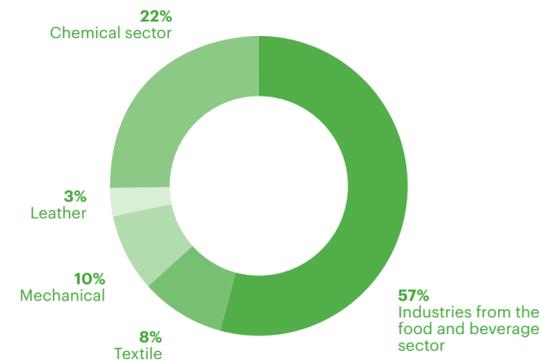
71 industries from the food and beverage sector.

10 4

10 industries from the mechanical sector.

4 industries from the leather sector.

Industries sectors

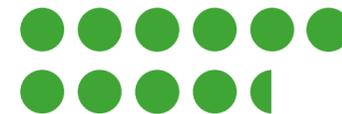


Capacity building

Service providers qualified on TEST:

- The MED TEST II project has **enabled 44 service providers** with hands on experience on the TEST methodology.
- **Professionals from academia, business associations, government institutions, consultancy and industries** received training on the TEST tools (**682 in total**).

65% Men



35% Women



Turning challenges into opportunities for industries in the Southern Mediterranean

Moving industries to become more resource efficient and clean in their production will have long lasting effects, not only for the businesses but also for the Southern Mediterranean region. SwitchMed's MED TEST II project

The development of a Circular Economy in Southern Mediterranean region, which can make use of a closed loop production and keep resources in play for as long as possible, will require the contribution on all levels of the supply chain - including the industry. To effectively transform industries in switching to a production that uses less resources, reduces pollution, and to support businesses in managing the transition of becoming more competitive, is at the core of the UNIDO MED TEST II component - a unique and innovative part of the SwitchMed Program. In this context, adopting a Resource Efficient and Cleaner Production (RECP) is to many the first step towards circular economy for productive industries.

The Transfer of Environmentally Sound Technology (TEST) methodology of UNIDO addresses rising energy and raw material costs by demonstrating how best practices in Resource Efficient and Cleaner Production (RECP), with an attractive return on investment, can be integrated into ongoing business operations of industries in the Southern Mediterranean. But to assist industries in turning challenges into opportunities, calls for a change in knowledge, attitudes and practices related to resource consumption in the production.

Consequently, the MED TEST II project has followed a combined approach that has aimed to strengthen the national capacities of offering RECP services and develop the local market for sustainable production services to local industries, in combination with 125 RECP industry demonstrations. This approach has showcased that there is indeed a potential for RECP in the Southern Mediterranean industries, and has also enabled 44 service providers with a hands on experience on RECP. The combination of an extensive on-the-job training and an evidence base best-practice methodology and technical assistance program have been effective to bring the industry in this region closer to innovative knowledge networks and to comprehend the vast potential in adapting to a more resource efficient production.

The business case for RECP in the region has in the last decade become substantial for productive industries. Rising prices of imported raw materials and especially energy, which in the period of 2008-2018 increased from a minimum of 20% in Algeria to almost 80% in Egypt, has contributed to an increased awareness from businesses to look into the issue of how to lower production costs related to the resource inputs. For instance, in 2008 the MED TEST I project showed average energy savings in the industry by 20%, while in 2016 during the implementation of the MED TEST II project the same aggregate went up to 28%. Another example is water, a still heavily subsidized resource and industries in the Southern Mediterranean region do not pay the real costs for its extraction, distribution and final treatment. Yet, average water savings from industries in the MED TEST II project reached to 20%, highlighting that even projects related to water efficiency have a good potential for local industries.

The remarkable figures from the MED TEST II project also bring a message to industries in the Southern Mediterranean, namely that protecting the environment while maintaining a competitive edge on the global market is no longer a contradiction - it is an opportunity for industries to develop better and more profitable business models and can ensure continuity for an economic development that brings both profit to the business and the environment. In many cases the average investment needed

The MED TEST II project been able to demonstrate that the RECP concept has a substantial potential to improve industrial performance in the resource-scarce Southern Mediterranean region and while there still is a long road ahead before the loop for circular production models can be closed, the first brilliant examples of circular approaches from this project show the way forward in what a more resource efficient production could give the region.

Keeping track on the details

Skaff Dairy Farm is a Lebanese small sized enterprise, which annually produces around 840 t of dairy products for the local market. The company decided to join the MED TEST II project in order to improve quality, reduce defects, and to continuously improve cost efficiency. The main problems the company was facing were related to high energy costs losses from finished product returns. Through the MED TEST II project a new marketing policy based on strict returned product rules was recommended and has reduced costs related to product returns by around 9,000 euro/year and the organic solid waste quantity by up to 17%. All in all, Skaff Dairy Farm was able to reduce the annual energy cost by 44%, reduce the water consumption with 15% per year, and cut raw material consumption with 2.8%. This will help the business to save 39,000 euros per year in production costs. The installation of a resource monitoring system and the adoption of a resource efficiency and cleaner production policy as part of the MED TEST II project will facilitate the company's future integration of environmental and energy management systems.

"I know every morning my use in electricity, diesel and water..."

Camilo Skaff, Owner, Skaff Dairy Farm

Savings for the company and the community

The Al-Hijaz Chocolate Company is a Palestine family business, producing chocolate and confectionaries, and decided to join the MED TEST II project to see how to reduce energy losses and to improve production efficiency. Already before the MED TEST II project, the company had developed a company culture where improvement suggestions from staff that could lead to resource savings were

actively encouraged. During the MED TEST II project all employees were involved in the application of RECP and a total annual savings of 92,370 euros on energy (-27%), water (-45%), and raw materials (-3%) could be identified. For an SME like the Al-Hijaz Chocolate Company these savings are crucial, but even more important is the contribution that these savings have for the local community.

"The MED TEST II project helped us a lot. It supported us to use tools to better monitor and calculate our consumption energy and raw materials, which enables us to reach a better utilization of our resources."

Mohamed Gamal, COO BariQ Egypt

"By saving energy and water, we contribute to our community to use this energy and water in other fields."

Tareq R. Yaqoub Production Manager, Al-Hijaz Chocolate Company

Recycling at a lower cost

BariQ, the biggest bottle-to-bottle recycler in the MENA region, joined the MED TEST II project to improve the level of water consumption and to see if the recycling process could be improved to more efficient standards. In operation since 2012, BariQ reprocesses postconsumer plastic PET bottles into food grade compliant rPET pellets and incorporates state-of-the-art cutting-edge green technology from major European suppliers with a total annual capacity of 15,000 tons. Exporting to major international bottle and food container manufacturers and major fiber producers throughout Europe and North America, BariQ is aware on the importance of operating at a low cost and environmentally sound.

The MED TEST II project identified measures bringing total annual savings of 981,962 euros in energy, water and raw materials with an estimated investment of 358,000 euros. Materials consumption will be reduced by 10% (1,180 t of raw materials), energy consumption by approximately 11% (1,530 MWh), and water by 88% (57,000 m³ of water). Following the MED TEST II project implementation, the company's TEST team has continued to use the TEST methodology independently. Applying the knowledge gained during the TEST training, the BariQ engineers successfully identified two energy measures that would deliver significant results, improve product quality and further increase on the project gains.

Visit the innovation bazaar at SwitchMed Connect or visit switchmed.eu to take part in some of the impact stories from the industries in the MED TEST II project.

Photos credits: UNIDO



Scaling up the impacts of resource efficient and cleaner production to the Southern Mediterranean region

Adopting the concept of resource efficiency and cleaner production would not only be a profitable step to the industries of the Southern Mediterranean, it would also help the region to become more competitive while improving climate change resilience, raw material security and green job creation.

The ability of economies to adapt, become low carbon and resource-efficient while remaining competitive, depends on the upscaling of eco-innovative production models that can be carried out over the whole industrial supply chain. The MED TEST II project has demonstrated that the concept of RECP paired with the UNIDO TEST methodology, is a viable tool to reduce resource use and environmental impacts while increase the competitiveness of industries in the Southern Mediterranean. Moreover, the transition to circular economy is becoming a central issue in sustainable development strategies at international, regional and national level and engaging industries in becoming more resource efficient is fundamental to achieve such ambitions. 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.

By the end of the MED TEST II project, the 125 participating companies reported total annual savings of 3.5 million m³ of water, 707 GWh of energy, 33,623 t of raw material and avoidance of 197,525 tons of CO₂ emissions. In this sense,

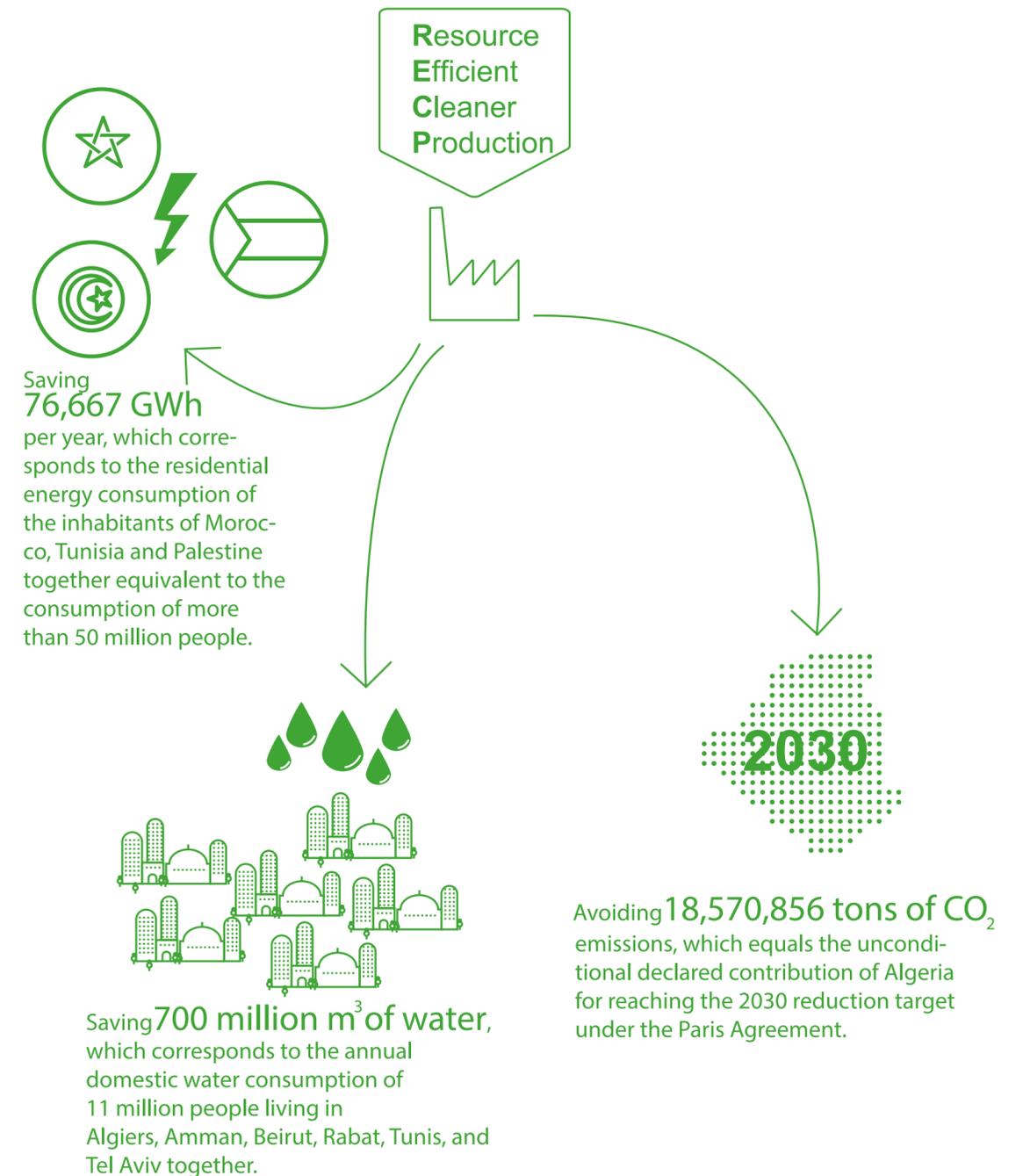
"The achieved results from the MED TEST II project are conclusive as they confirm the relevance and effectiveness of the TEST methodology as an instrument for industries that wish to overcome challenges related to a sustainable consumption and production."

The average reduction achieved by the demonstration companies in water consumption was by 20%, while energy use by 24% and the raw material inputs by 5% per unit of product manufactured. Extrapolating and projecting these figures on the resource consumption of the whole manufacturing sector of the region would result in 76,667 GWh of energy saved per year and 700 Million m³ of water conserved, which are impressive figures. Moreover, if RECP would be adopted by most of the industries in the region, the expected reduction in greenhouse gas emissions would correspond to 18.5 million tons of CO₂ per year. This again, underlines the potential of RECP, not only as a tool to improve the productivity, but also as a mean for local governments to fulfil national commitments and achieve greenhouse gas emission targets set by the 2030 agenda.

The 41.7 million euro of economic savings achieved by the 125 demonstration companies in MED TEST II are equivalent to the salaries of approximately 10,500 workers, considering the different average salary scales of employees in the manufacturing sector of the eight countries. This highlight that by adopting RECP and becoming more competitive and productive, companies are in a better position not only to expand their activities and retain existing labour force, but also create new job opportunities.

Managing the transition from demonstration activities to a sector-wide mainstreamed adoption of RECP in the industry of the Southern Mediterranean will require country specific actions that can take into consideration local constraints, regulatory frameworks and development aspects into the required scaling up actions of RECP. In this regard, UNIDO together with the Governments, local partners, and stakeholders from the industry and civil society, have during the MED TEST II project developed eight national roadmaps with propositions on how to guide a sector-wide adoption of RECP within the national industries and what actions are required to do so.

Projecting the average resource savings achieved in the MED TEST II project on energy (24%), water (20%), and CO₂ (24%) to the overall industrial manufacturing sector in the Southern Mediterranean region:





48 **29** **+2000**

Incubated Green Entrepreneurs.

International experts involved in the selection process of the incubated green entrepreneurs through an International High Level Jury.

SwitchMed contributed to the creation of +2000 green companies.

6,000 **8** **125** **4**

Applicants.

White Papers for the promotion of green entrepreneurship developed as a result of national stakeholders consultation processes.

Workshops.

Unique methodologies and toolkits to support Green Business Development developed and tested: 1) Green Business Model Development Toolkit, 2) Green Business Plan Development Toolkit, 3) Access to Finance Guide and 4) Crowdfunding Guide.

+2,300

Trainees.

+1,000 **123** **10**

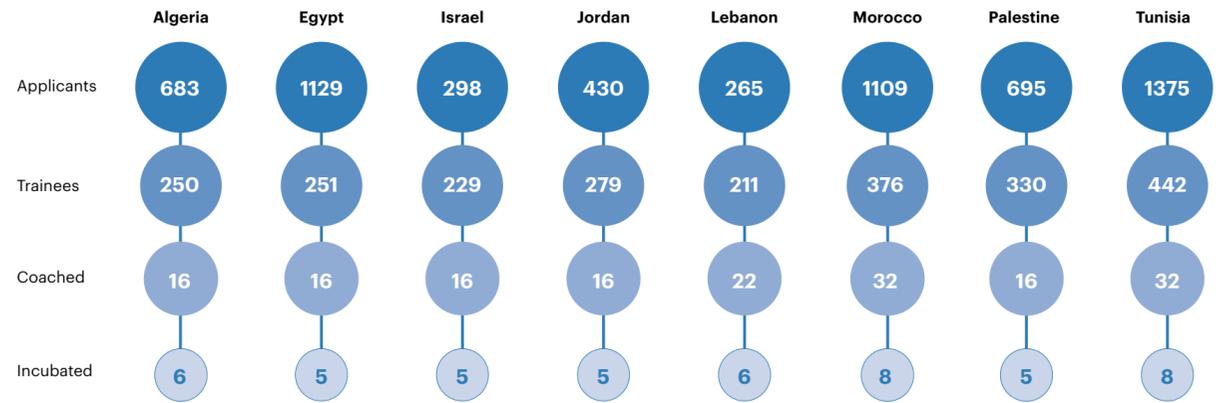
SwitchMed contributed to the creation of +1,000 jobs.

Local trainers trained.

Local partners.



Number of applicants, trainees, coached and incubated per country



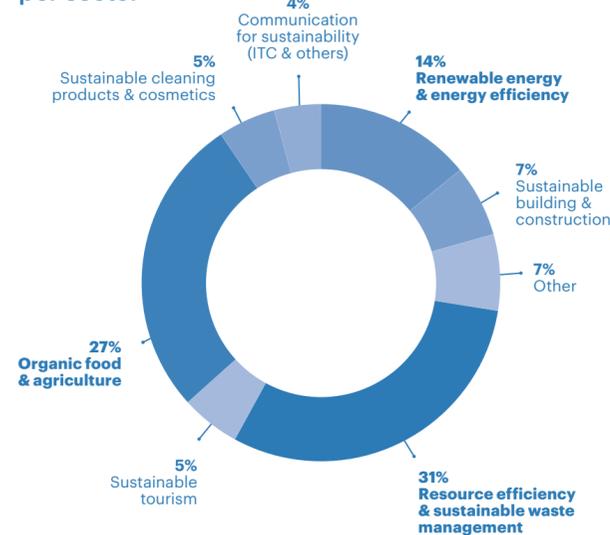
Applicants: Entrepreneurs who submitted their green business idea in order to be selected to access to the training programme.

Trainees: Entrepreneurs who received a 5 day intensive on-site training sessions along a period of 3 months in order to develop their green business models and prove their feasibility through the practical tools, exercises and tests provided by the SwitchMed methodology.

Coached: Entrepreneurs who received a 10 hours individual coaching in order to improve their green business models. They submitted their green business model canvas for the incubation phase/ follow-up advisory service.

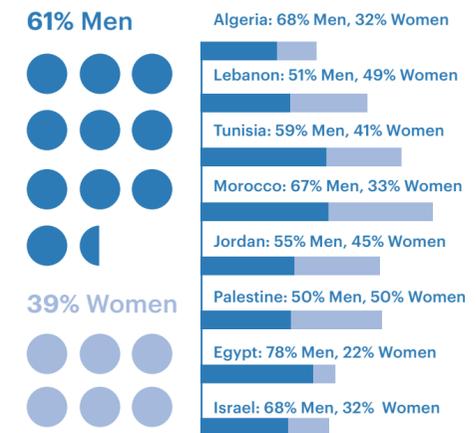
Incubated: Entrepreneurs received support from a local mentor and technical experts to develop their Green Business Plan and to launch their product on the market.

Trainees per sector



Other sectors breakdown: Sustainable clothing & textiles; sustainable electrical & electronic equipments; sustainable furniture; sustainable mobility and sustainable transport.

Trainees gender balance

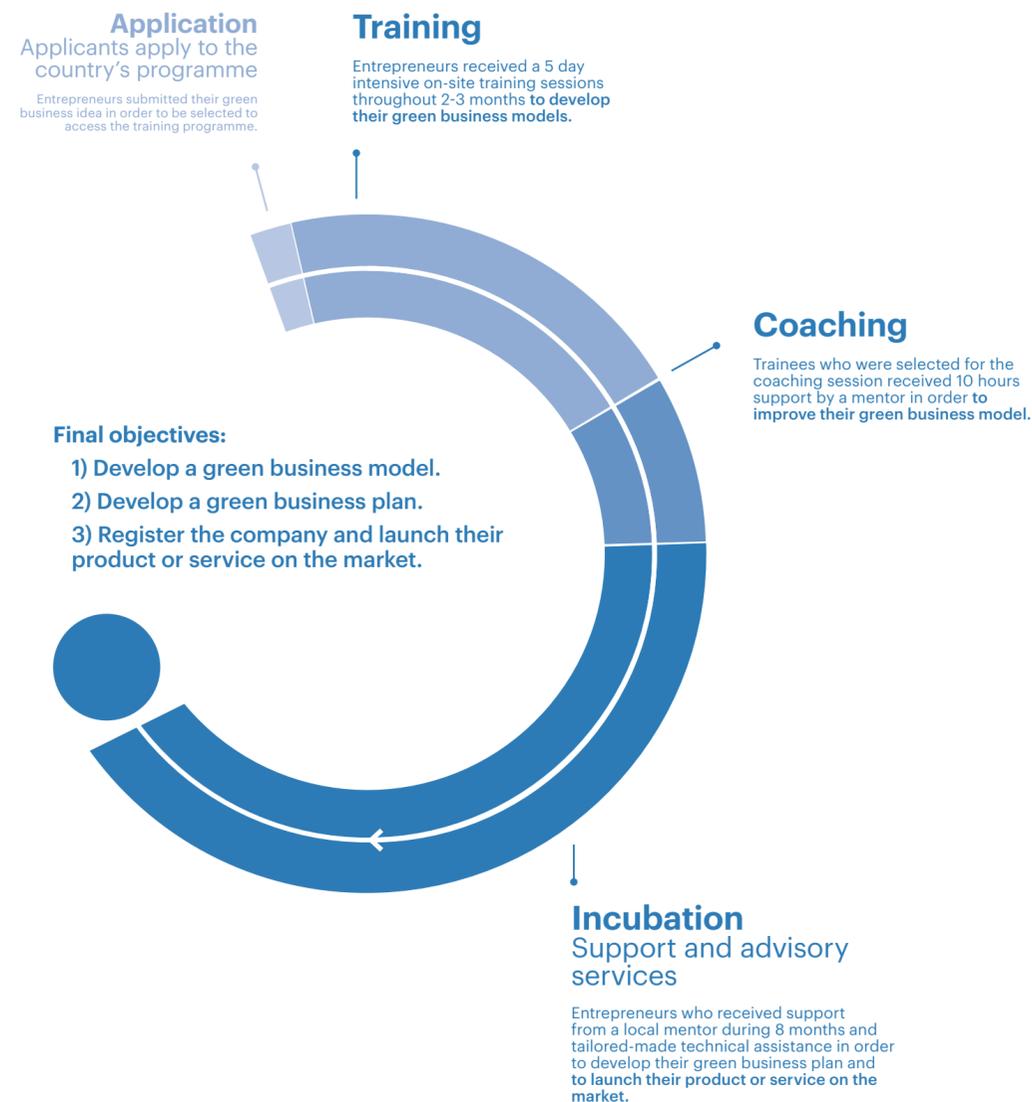


Incubated gender balance



Training and incubation programme for green entrepreneurs

Launch your green business!



29% of the **trainees*** have **started their business; 154 green business** have been **launched; 66%** of the **trainees said** that the training had a **high or very high impact in the launch of the company; 82%** of the **trainees** feel that the training programme **met their expectations** and **83%** of the **trainees think** that the **training programme was good** or very good; **95%** of the **trainees who have not launched their business believe the training provided** them **useful skills; 98%** of the **trainees which have not launched their company are still willing to get support** to create their green business.

* A survey was conducted among the trainees who attended the training workshops held during the first phase of the Green Entrepreneurship Training Programme. The survey was sent to 1,356 trainees and 540 answered the questionnaire (40% of the total).

SwitchMed contributed to the creation of 200 new green businesses and more than 1,000 jobs

Developing green business models that allow for new ways of doing business is essential to foster and scale more sustainable projects. Circular economy principles are increasingly reflected in the business ideas of young people and entrepreneurs in the region, who are seeking to address a market need while also generating benefits for the environment and local communities.

The SwitchMed Green Entrepreneurship Programme received 6,000 applications and by the end of 2018 more than 2,300 green entrepreneurs will have been trained in order to develop and test their green business models, which is contributing to the creation of more than 200 green businesses and more than 1,000 jobs. "To leverage further impact, 123 local trainers were capacitated. Furthermore, 166 entrepreneurs were selected and received mentoring and coaching and nearly 50 green entrepreneurs were nominated to join the incubation phase with support and advisory services over a period of 8 months" explained Giorgio Mosangini, team leader of the Green Entrepreneurship Programme at SCP/RAC.

Starting a business has never been easy, and a starting a sustainable one is even more of a challenge. Slowly but surely, the quest for sustainability is already starting to transform the competitive landscape, which will force companies to change the way they think about products, technologies, processes, and business models. Setting up and stimulating a Mediterranean-wide eco and social entrepreneurship ecosystem network that enables and contributes to the economic prosperity in the region through job-creation and supporting innovative, economically viable and scalable green and social enterprises is crucial for the region. In order to achieve this, the SwitchMed Green Entrepreneurship Programme supports the implementation of circular business models in companies through green business models and development plans, mentoring, technical assistance and access to finance.

By the end of 2018, the SwitchMed Green Entrepreneurship Programme will have trained more than 2,300 entrepreneurs and contributed to the creation of more than 200 new green businesses and hundreds of jobs. Nearly 50 green and social entrepreneurs were incubated to launch their green businesses and successfully register their company.

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The foundation of these green SwitchMed entrepreneurship activities is the innovative green entrepreneurship methodology designed by SCP/RAC on how to launch a green business and adapt it to the context of the Southern Mediterranean. "The methodology used during the training is very unique because it is tailor-made to green entrepreneurs. It is also new for the whole region", said Mohamed Mazen, project coordinator at the Egypt National Cleaner Production Centre. The methodology also provides tools to validate and test the green entrepreneurs' business models, by explaining step by step how to validate the business model's hypothesis with targeted customers and stakeholders. During the training, the trainees presented many innovative ideas and strategies to embark on the sustainability journey, from recycling to sourcing local products and promoting energy efficiency, to transforming perceived waste into valuable input for other economic activities, to putting the circular economy into full practice. Despite the fact that a business can be started in any sector, it is true that some are growing faster than others. The majority of trainees reported that they intend to launch a green business in one of three sectors: resource efficiency and waste management (27%), organic food and agriculture (25%) and renewable energy and energy efficiency (18%), summarised Mosangini. Women were well represented in the trainings, accounting for 36% of those receiving training, he noted. As a matter of fact, Sally Bahgat, founder of the Oasis Community Centre and one of the beneficiaries said "the Green Entrepreneurship Programme is an excellent opportunity for women in Middle Eastern and North African countries".

During the programme, nearly 50 entrepreneurs were nominated to join the incubation phase, meaning they have had the opportunity to receive close support from a local mentor for a period of eight months. Mosangini also added how "tailored, external, technical assistance was given to the entrepreneurs according to their needs assessment and support plan which aimed to register their companies and launch their green products or services in the market".

SwitchMed's capacity for building activities has resulted in a strong uptake of circular economy principles among the region's community of entrepreneurs. For example, Lina Al-Kuri founded Lina Energy (LE) in 2017 and attempted to increase building efficiency by improving external wall thermal insulation and restore green spaces in Jordan by installing green roofs. LE's sophisticated green roof technology addresses two main challenges in Jordan: energy demand and environmental sustainability.

"There is a greater need for finding solutions to save energy, and green roofs are certainly part of that solution", explained Lina. Amongst many other benefits, the green roof system vegetation layer acts as a filter to the surrounding microclimate

At SwitchMed, we have trained more than 2,300 entrepreneurs to develop projects that are more socially, environmentally and economically viable. A total of 48 incubated SwitchMed entrepreneurs are examples that will inspire potential community-makers, investors and developers alike.

and mitigates the urban heat island, which is now a major challenge in cities. "My journey as a green entrepreneur started with SwitchMed. I always wanted to start my own business but I didn't have a clue. That programme helped me to acquire the knowledge deemed necessary for turning my green business idea into an up-and-running company". Moreover, the 15,000 euros granted by OSCE GEMS, as part of the SwitchersFund, were of great help. Enabling access to funding for entrepreneurs like me is crucial for making the business grow". Lina Energy has a positive environmental impact as it enhances the local microclimate, cools and filters the air, restores a more natural green environment and helps to mitigate greenhouse gas emissions. Green roofs also play a positive role in improving air quality because they resist air pollution, and this is another twist that Lina will be exploring. Her company does not only require engineers but also agricultural experts, thus creating green jobs for different sectors. "We have employed five members of staff and we aim to double that number by 2020", she remarked.

While working as an energy expert in Morocco, Khaoula Remmal decided to start a business after realising how much organic waste was lost in farms. She created ENRD² Engrais Bio, a start-up that aims to recover organic waste from farms by transforming it into green energy, thereby obtaining electricity and heat through a cogeneration system of energies. It is a sustainable idea that has a strong impact on the environment, as it reduces waste while creating a cleaner source of electricity and heat. "Our goal is to [positively] impact the environment by using innovative technology and implementing resource efficiency measures", she said. At the heart of her business, Remmal works on enhancing the connection between the rural and the industrial sector by acting as a bridge between the two. She targets small to medium sized farms, sets up an infrastructure that allows for collecting the organic waste that awaits its transformation into biogas. Besides this, she makes compost and her business helps to raise healthier cattle, as the animals' living conditions are higher and they get less infections. "ENRD² Engrais Bio currently collects 32 tonnes of organic waste per cow each month, which means 3,400 tonnes per year saved". By 2020, we will have avoided 38 million tonnes of CO₂, so we will be contributing to reduce CO₂ emissions, while boosting the development of the renewable energy sector. The enterprise also has a social impact through the creation of 24 full time positions for a period of 10 years". Another green entrepreneur in Morocco saw a business opportunity in finding a way to sustainably reuse discarded car tyres. Elomari Naoual launched VDMpneu to reverse an alarming trend she noticed in her country: more than 256,000 tonnes of waste tyres are discarded in nature or burned every year. Through a careful study of the local markets, she determined that recycled tyres could serve as an input to many of the country's public works and civil engineering projects. She is currently working to raise awareness about this opportunity and to promote the collection, processing and reuse of discarded tyres for a variety of applications including athletics tracks, shock-absorbing ground surfaces, roads, sound-absorbing walls, and synthetic turf. The

environmental benefits of VDMpneu are evident: air quality is preserved by preventing the incineration of tyres and discarded tyres are removed from nature, where they contaminate soils and pollute the landscape. At the same time, Elomari also cites the great potential for the creation of local jobs as another important benefit of her green business.

"By 2020, we will have avoided 38 million tonnes of CO₂ so we will be contributing to reduce CO₂ emissions, while boosting the development of the renewable energy sector."
Kaoula Remmal, ENRD² Engrais Bio

Another example is Ahmed Al Masry, the Egyptian founder of Hand 2 Hand, which aims to transform the city of Zagazig into a model of sustainability by implementing a household waste sorting programme that separates organic waste so it can be used as input for compost production, thereby enabling farmers to reclaim desert lands for agriculture. In addition to the environmental benefits, the initiative also foresees education and employment opportunities for young children that have been traditionally involved in the city's garbage scavenging activities. By recognising the inherent value in Zagazig's household waste streams, this entrepreneur is creating a new value chain that will have important benefits for both the community and the environment. Also in Egypt, Ahmed Abdallah was troubled with the fact that about a third of the food produced today never reaches the table. Understanding that food waste might be a valuable resource for the future, he designed and manufactured a prototype for a food dehydrator to preserve crops and minimise its weight and volume for transportation. Although the technique is not new, it is based on a new technology and an eco-design approach which allows uniform drying. "After finishing the SwitchMed training and incubation programme I was able to register my company legally: Eco Food Dehydrator".

Ahmed, who has already manufactured three different scale models – family, small and medium commercial –, estimates to sell up to 3,500 units, each one could create jobs for up to five people. "If we manage to do so, my company can contribute positively to environmental health by reducing greenhouse emissions. In fact, we have estimated a 3.5-million m³ reduction of greenhouse emissions and up to a 45,000-tonnes CO₂ reduction by year 2021". This is certainly an ambitious plan that requires great capital, and this is why he is seeking investors with the help of SwitchMed.

Another beneficiary of the programme, Yassine Ben Menadi, biotechnology engineer, entered the SwitchMed programme in a conscious effort

Photo credit: Gabby Canonizado



to acquire the tools to produce a radical shift in today's agricultural model through his Tunisia-based company. He aims to replace current harmful farming products with eco-friendly alternatives. He launched Biointra Technologies to produce products derived completely from organic waste in biological compost form: organic soil amendments, biofertilizers, biostimulants, and biopesticides. He benefited from two technical experts during the incubation phase. "One helped me to carry out an environmental impact and technical feasibility study for my project. The other one, an architect, helped me to develop a plan to design a production facility that is up to national safety standards in which I will start the production. He also facilitated getting building permits. What I like most about SwitchMed is the sense of community and also the continuous support I had during such a long time. The SwitchMed team really understood the challenges I was facing and found the right solutions for everything", explained Yassine Ben Menadi.

When it comes to tackling major industrial wastewater pollution for the benefit of the whole community, three Palestinian environmental engineers found a solution for something that is currently a headache for both stone and leather tanning industries. The three researchers, Nareman, Nadia and Heba, pulled up their sleeves and designed an eco-friendly, efficient, integrated wastewater treatment unit that removes chromium tannery wastewater by adsorption on stone cutting solid waste particles, thus eliminating pollution from both industries. Laboratory results proved that this treatment system's efficiency is at 99%. Moreover, chromium is removed through a process reaction lasting only 30 minutes rather than the long hours conventional methods would take. In addition, this sustainable wastewater treatment solution costs three times less than the current

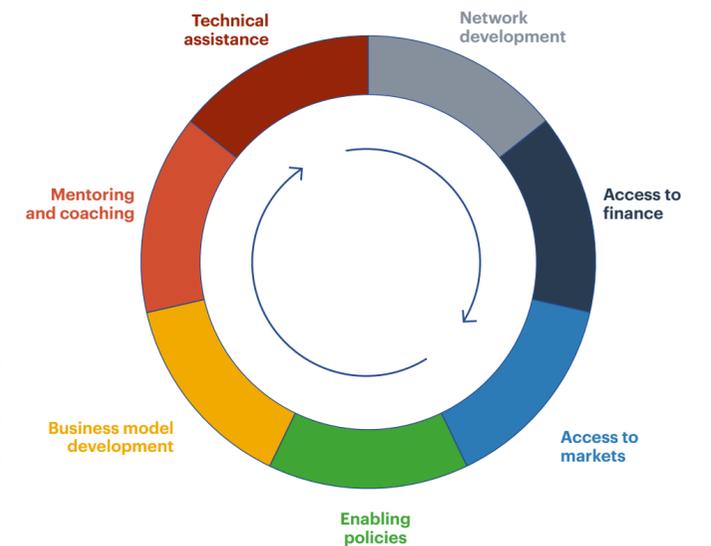
solution and saves 50% of treated wastewater for the industry, estimated to 6 m³ daily. Reusing the treated wastewater minimizes the running cost of the leather tanning factories and makes them more competitive.

In Lebanon, NK by Nour Kays puts the circular economy into practice by upcycling discarded plastic bags into fashionable waterproof, colourful, durable, eco-friendly stylish handbags and other accessories. Nour is one of the initiatives that have recognised the need to address plastic pollution with specific actions in the Mediterranean region. In just a few months' time she diverted more than 4,000 single use plastic bags from nature. At her workshop, Nour is happy to accept all unwanted plastic bags. Product visibility and access to the market are crucial for any entrepreneur, at national and international levels, and this is something that SwitchMed is very much promoting. For instance, she was invited to speak as part of a panel at the "Business switch to green with innovative

"That programme helped me to acquire the knowledge deemed necessary for turning my green business idea into an up-and-running company."

Lina Al-Kuri, founder of Lina Energy, Jordan

SwitchMed Business Support Programme



services" session at the European Development Days in 2017 to show how our programmes engage with the private sector to promote an inclusive green economy. Her products and many more from other incubated green entrepreneurs can also be found at switch-products.eu, a website that has been launched in cooperation with SwitchMed and the SWITCH-Asia Network Facility. Also in Lebanon, George Kassab, founder of M.A.D., which stands for Modern Advanced Polymers aims to offer eco-friendly car and door step mats made from recycled dumped tyres. Re-build aims to produce construction blocks made of unsorted solid waste that are affordable, free of chemicals and help to reduce the use of raw materials. Elyssa Skaff is providing a solution to the current marine litter problem through her newly created H2GO! by creating trendy, reusable and customised plastic water bottles.

Many of these entrepreneurs also attended a national synergy workshop in their country that aimed to identify challenges and opportunities to promote green entrepreneurship and social eco-innovation initiatives, to identify specific measures and tools to strengthen the regulatory framework and to stimulate the market for sustainable products and services. Together, these important economic actors are making significant progress towards the goal of the SwitchMed Green Entrepreneurship Programme and one of the region's key sustainable development objectives: 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, yet limited natural resources.

To read more about these green entrepreneurs and other top sustainable stories, please visit switchmed.eu

Green entrepreneurs in action



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“At NK we managed to introduce 5 new product items which helped us increase the amount of single-use plastic bags discarded and we aim to double that amount up to 70kg which is 9000 bags in the next 5 years.”

Nour Kays, NK, Lebanon

“Our organic waste recycling project has also a positive social impact as 24 permanent jobs will be created for a period of 10 years.”

Khaola Remmal, ENRD²
Engrais Bio, Morocco

“By recycling around 2,800 tires per year, I contribute to reduce the level of energy consumption equivalent to 114,800 refrigerators per day, the CO₂ emissions equal to a car traveling for 33,300 km, and the amount of water consumed by 11,200 washing machine cycles.”

Elomari Naoual, PNUR,
Morocco

“Currently we receive between 300-400 visitors per year but through the increase of accommodation capacity and the food production area, I expect to triple the number of eco-responsible visitors and double the organic production up to 15 tons by 2020.”

Salaheddine El Azzouzi, Sté Green Services et Terroirs,
Morocco

“Eden has collected and recycled more than 200 m³ of wood per year, which means around 30 tonnes of wood waste during these 3 years. We have also upcycled 150 tonnes. Our goal is to recycle 400 tonnes of wood waste per year in 3 years’ time and to create 20 inclusive jobs.”

Ben Yavnieli, EDEN Social Wood Recycling, Israel

“Almost every green construction project we work on we created 5 new jobs to local people in the area where the building was built. Moreover, we can guarantee now to our customers a 30% reduction of their energy bills.”

Anas Saleh, Building WORX,
Jordan

“In Tunisia, over 1,170 tons of non-degradable, ultra-toxic pesticides are dumped into the environment.

Through my project, I aim to reduce this amount by 20% over the next 10 years by expanding my activity and turn more lands from conventional to organic farming. By doing so, I will compensate the negative environmental effects of our agricultural system and its impact on global warming.”

Leila Horchani, Ferme Bio Warda, Tunisia

“As a winner of OSCE GEMS Award of the SwitchersFund, we are investing these 15,000 Euros to buy new equipment including sewing machines, to hire one staff, to establish an agreement with an NGO that employs 28 immigrant women to help us to produce some our products and to re-design our new website.”

Yara Yasin, Up-Fuse, Egypt

“Plastic4Life will positively impact both the environment and the local economy. My objective is recycling 2300 tonnes of plastic waste yearly, will reduce CO₂ emissions by up to 3530 tonnes a year.”

Oussama Boutrigui,
Plastic4Life, Morocco

“Electronic waste is becoming a global problem with lots of implications on the environment and public health. The UN estimates that there are around 40 million tons of e-waste that accumulates globally each year. Tafkeek offers a global collection system to connect e-waste generators in Palestine and e-waste recycling companies abroad.”

Tasneem Abuhijleh, Tafkeek

“My dream now is scaling up and replicating the Oasis Community Center in different governorate and different countries. SwitchMed is helping me to achieve this.”

Sally Bahgat, Oasis Community Centre

“After finishing SwitchMed Green Entrepreneurship Programme I was able to register my company legally”

Ahmed Abdallah, Eco Food Dehydrator

“We have employed five members of staff and we aim to double that number by 2020”.

Lina Al-Kurdi, Lina Energy

“Waste to Value aims to reduce the harmful effects associated with chemical fertiliser use and the decomposition of 240 tons of used coffee grounds in landfills. By producing yearly 240 tonnes of organic fertiliser we are reducing the emissions of CO₂ and restoring the soil fertility.”

Mohamed Khelil, waste to Value, Tunisia

“In order to make the vitamin supplement based on wheatgrass extract, we use 80% less space for growing, as to grow 1 ton of wheatgrass we require only 40m² of land and we use 90 times less water than soil-based farming. Our system allows water reuse up to the 90% too. Our packaging is reusable and made of biodegradable material.”

Amina Abu Hamdeh, Oro Verda, Jordan

“We have established a sustainable and circular system for the production of organic mushroom. Comparing to regular producers we use 0.49 kWh less energy per Kg. of mushroom produced. We also up-cycle 55 tonnes of agricultural waste per year”.

Wissam mansour, Lili’s farm manager, Lebanon

“In the south of Algeria, we build housed with high energy performance and respectful with the environment, while keeping the architectural and urban styles inspired by ancestral modes of construction, like those of ksour from the M’Zab Valley. About fifty workers will be recruited during the next 3 years and trained to use these techniques”. Daddi Addoun El Khoudir, Les batisseurs des oasis, Algeria

“Our circular prickly pears revalorization process has the potential to convert 1200 tonnes per year into 600 litres of high quality oil and hundred employees will be needed to properly manage Ferrah Cactus”.

Ferrah Reguia, Ferrah Cactus, Algeria

Green Entrepreneurship SwitchMed’s publications

Handbook for green entrepreneurs in the Mediterranean: This book explains all the major steps for setting up your green business project. It provides the necessary theoretical basis, tools and methodology and presents also different examples of entrepreneurs and their businesses.

Workbook for green entrepreneurs in the Mediterranean: This book is directly associated with the Handbook. It will help you to put into practice the knowledge you acquired with the Handbook, but above all, to make your project progress more practical. It will guide you through the business creation journey, from a business idea to a green business model.

Crowdfunding guide: This guide addresses eco-entrepreneurs and eco and social initiatives in the southern Mediterranean, to orient them in the implementation of a crowdfunding campaign: preparing a campaign, mobilising a community, optimising the transformation, carrying out a campaign, and creating loyalty in a community.

Incubation programme for green entrepreneurs in the Mediterranean: This toolkit is intended to provide you with the necessary guidance and support to help you out in the most critical phase of your business: the take off! Throughout this document and other complementary templates and assistance activities, you will be reviewing the work you have done so far, validating your proposal and getting ready to launch and run your business.

White papers: The white paper is a photograph of the moment that highlights the strengths and weaknesses of the green entrepreneurship ecosystem in each beneficiary country, in order to reveal the areas and axes where the needs for action are greatest. It summarises the opinions of 40 stakeholders interviewed individually (public institutions, financial institutions, support structures, project sponsors) as well as the results of the Synergies workshop held in each country during the SwitchMed programme. Each country has one white paper.

The stories of the people **THE** who are changing the world

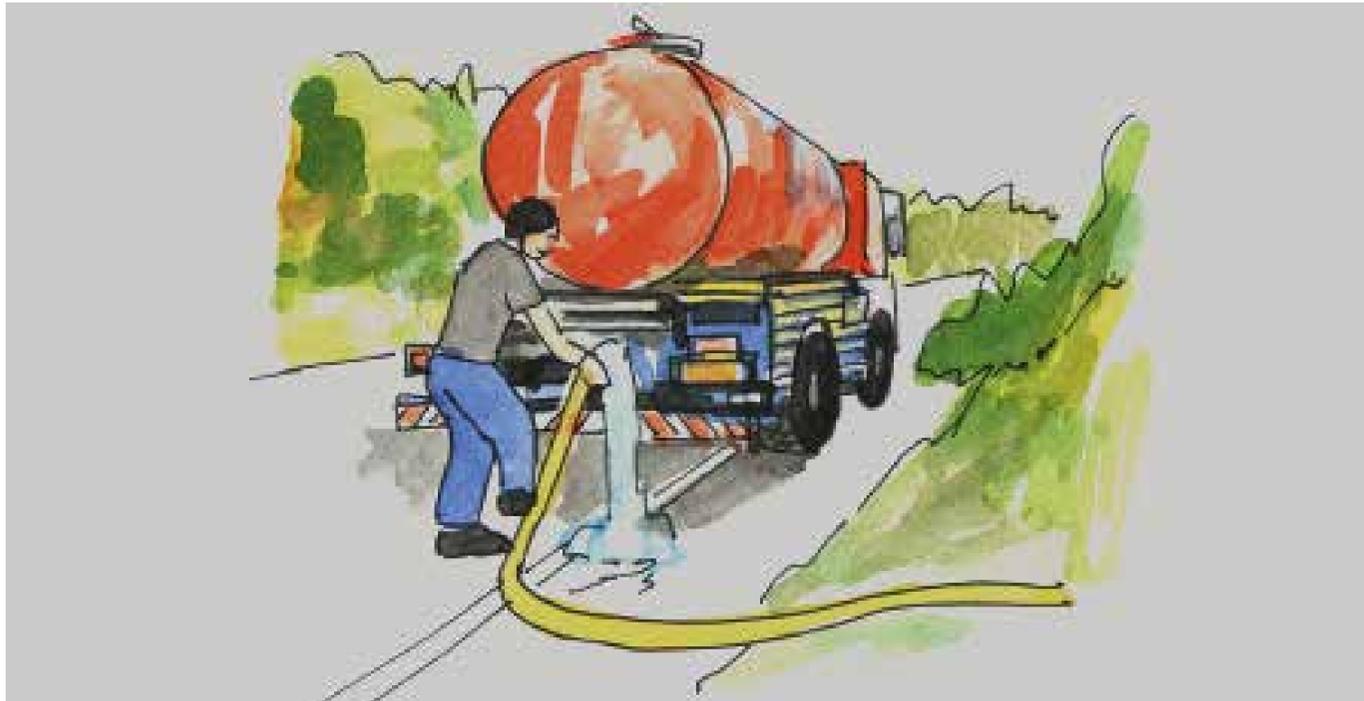
SWITCHERS

There are 300 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.

The Switchers is a community of inspiring green entrepreneurs and change-makers in the Mediterranean region. Switchers are individuals, enterprises or civil society organizations implementing innovative and ecological solutions that contribute to sustainable and fair

consumption and production models. They are active in a variety of fields, such as organic farming, green tourism, renewable energy or waste management. The platform www.theswitchers.eu tells their stories of sustainable transformation and change.

Drawings by Angela Palacios



- Are you also working for a fair and sustainable future?
- Are you based in a Mediterranean country?
- Are you an independent initiative (non-governmental), either a non-profit organization or a for-profit startup?

If so, then you can be a Switcher too!

Join the tribe to connect with other like-minded people, and benefit from a community supporting its members to grow and scale their solution.

Explore the new Switcher's Travel Guide

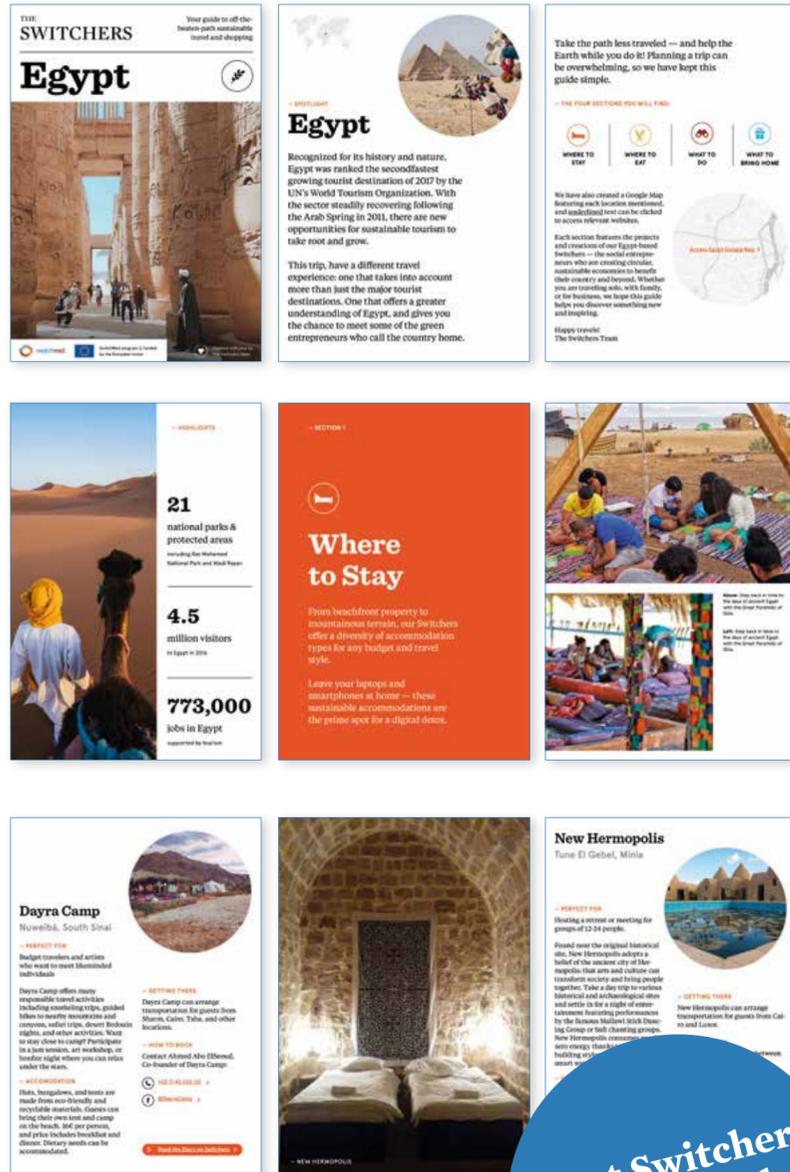
Your guide to off-the-beaten-path sustainable travel and shopping is now ready. Discover a travel-ready pocket guide, the so-called Switchers Travel Guide, that will ease planning your trips, while being sustainable and supporting our Switchers. The first one out is Egypt. Algeria, Israel, Jordan, Lebanon, Morocco, Palestine, Tunisia will come too.

Each section of the Switchers Travel Guide features the projects and creations of our Switchers — the eco and social entrepreneurs who are creating circular, sustainable economies to benefit their country and beyond. Whether you are traveling solo, with family, or for business, we hope this guide helps you discover something new and inspiring.

As planning a trip can be overwhelming, we have kept this guide simple. Here are the four sections you will find:

- Where to Stay;
- Where to Eat;
- What to Do;
- What to Bring Home.

The main intention for this guide is to be used on mobile. Thus, while it is a normal PDF, it is responsive to mobile devices and invite you to view it on your phones as well. We have also created a Google Map featuring each location mentioned, and underlined text can be clicked to access relevant websites.



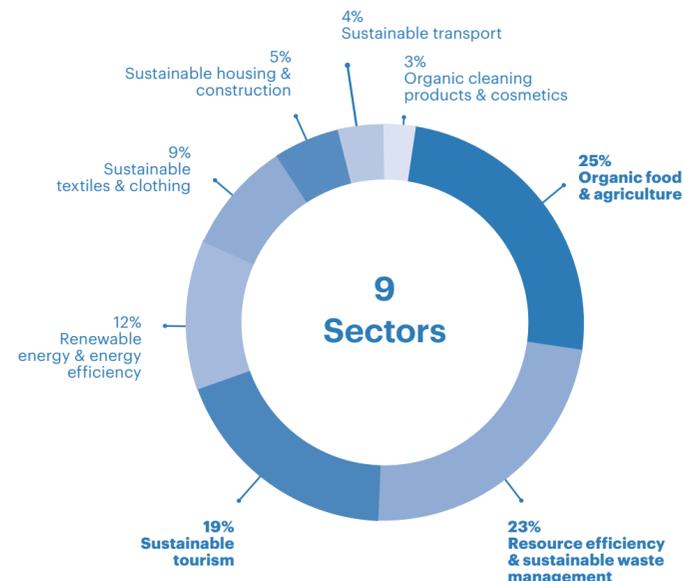
Egypt Switcher's Travel Guide coming soon!

Switchers in numbers

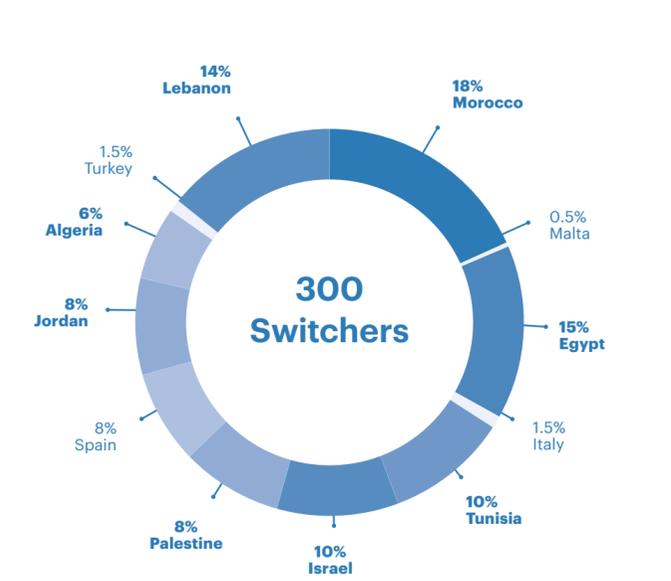


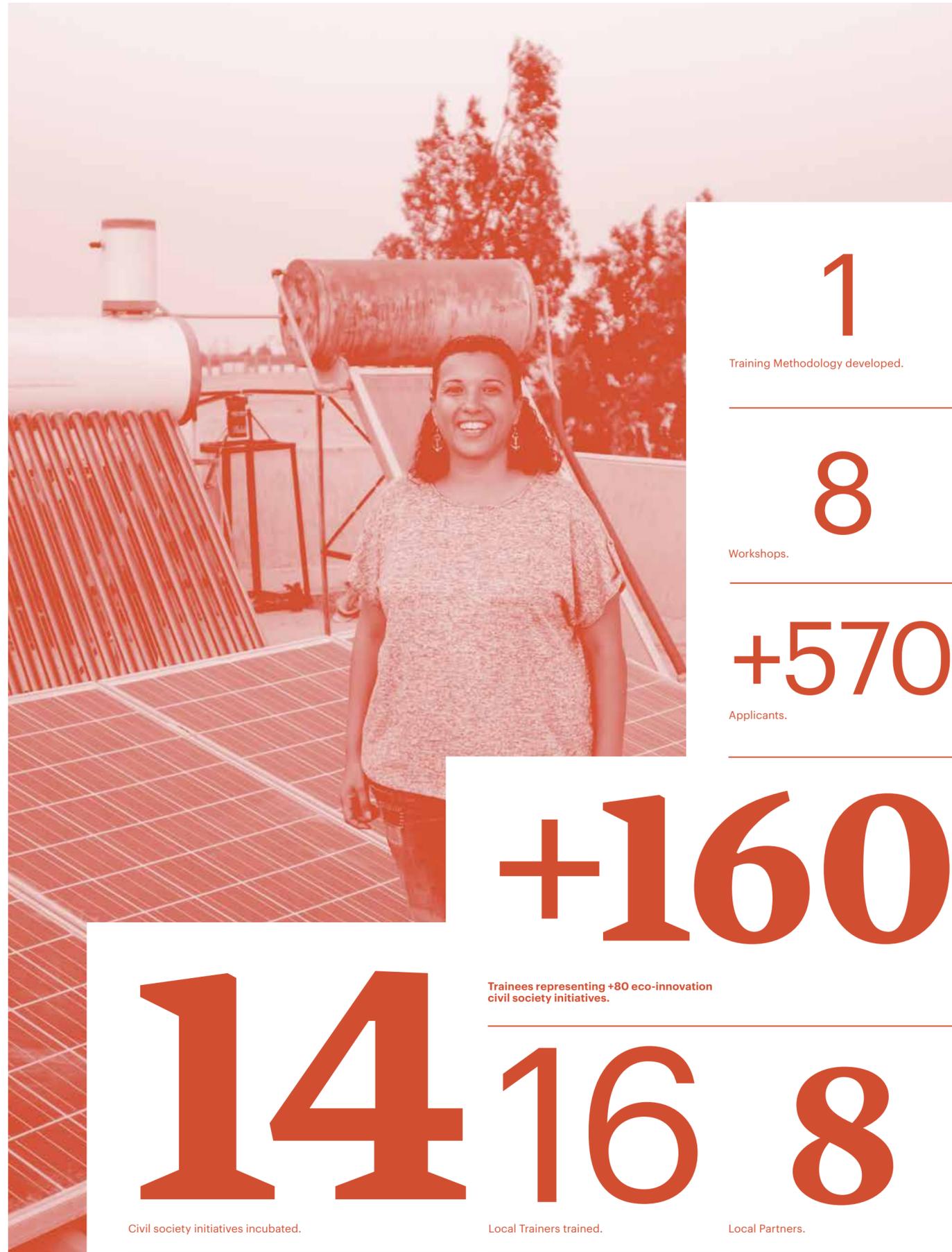
Photo credit @Markus Spiske

Switchers per sector



Switchers per country





1
Training Methodology developed.

8
Workshops.

+570
Applicants.

+160

14 Trainees representing +80 eco-innovation civil society initiatives.

16 Local Trainers trained.

8 Local Partners.

Civil society initiatives incubated.



Civil Society Organisations sectors

Sector	Percentage
Sustainable waste management	22%
Sustainable agriculture & waste management	8%
Sustainable agriculture & environmental education	5%
Sustainable agriculture	11%
Sustainable tourism	8%
Renewable energy	4%
Culture	1.5%
Organic food & biodiversity conservation	9%
Diversity & inclusion businesses	3%
Sustainable consumption & education	11%
Other	5%
Sustainable businesses	6%
Sustainable transport	5%
Sustainable housing	1.5%

Civil Society Organisations trainees gender balance

52% Men

48% Women

Country	Men	Women
Algeria	65%	35%
Lebanon	57%	43%
Tunisia	45%	55%
Morocco	85%	15%
Jordan	50%	50%
Palestine	25%	75%
Egypt	65%	35%
Israel	39%	61%

From promising grassroots innovative ideas to real initiatives

Grassroots initiatives are innovative networks of activists and organisations that lead bottom-up solutions for sustainable development. Solutions that respond to the local situation and the interests and values of the communities involved. Nevertheless, initiatives from the southern shore of the Mediterranean have received little attention and support to date.

Empowering them is one of the main objectives of SwitchMed. More than 160 trainees representing 80 eco and social innovation organisations from civil society were trained and fourteen initiatives received close follow-up and comprehensive incubation.

At SwitchMed we support community-based eco and social innovation initiatives to maximise their influence and impact, thereby contributing to the emergence of more sustainable models of consumption and production. A training methodology was developed to support these grassroots initiatives in SCP followed by an intensive four-day national workshop held in each of the SwitchMed beneficiary countries in co-ordination with our local partners. All trainees had the opportunity to apply for the support phase of the programme. In total, fourteen initiatives led by grassroots organisations from Algeria, Egypt, Israel, Jordan, Lebanon Morocco, Palestine and Tunisia benefited from the support phase. During this phase, SwitchMed helped implement these initiatives by developing a support plan and providing coaching sessions over six months, networking opportunities and external technical support based on the needs identified in the support plan. In addition, after the implementation of their projects, the initiatives were given the opportunity to become members of the Switchers community.

The traffic in Beirut is crazy. "Even though traffic is a daily issue raising commuters' stress levels, Lebanese people seem not to want to give up their cars, as public transport in Lebanon is confusing and unregulated", explained Baaklini, one of the two founders of Bus Map Project, one of the initiatives selected by SwitchMed. Jad Baaklini and Chadi Faraj, together with the support of a group of volunteers, are working to map these bus routes to achieve two objectives: help non-users understand the transport system and build up an association of bus riders who are conscious of and devoted to fight for the rights of passengers. "SwitchMed supported us in such a way that we could move from an idea to an impact story", said Baaklini. "The technical assistance was tailor-made. We received support on data gathering and website development for the new online portal that will give access to transit data to encourage general public to use public transport", he added.

Improving public transport is also at the heart of Taxi Social, a Moroccan initiative led by Abdelkrim Boughoud, which aims to facilitate mobility amongst members of a community living in an isolated area called Douiret-Sbaa, in the province of Figuig. "We were very lucky to be nominated to join the training. Life has been changed for the better for nearly 50 families. Previously, the inhabitants, many of them facing reduced mobility, had no other option but to walk a distance of 16 km back and forth, regardless of the weather conditions or the heavy loads they were carrying. Getting supplies from the weekly market or simply going school or the doctor was inconvenient for them. Taxi Social has hired an adapted vehicle with a capacity for seventeen people, which guarantees the journey once every fortnight. It is also available to the inhabitants in case of emergencies such as childbirth, medical appointments and family issues. There is now more social interaction, especially amongst the youngsters. We are raising awareness on the importance of reducing CO₂ emissions while travelling together and changing transport habits to be more sustainable", explained Abdelkrim. "Thanks to this initiative we have reduced travel time by 20% and the number of visitors to the village has increased by 50%", he added.

Three other beneficiary grassroots initiatives, based in Tunisia, Egypt and Israel, are also promoting sustainable transport. The Tunisian Pedalo is a social co-working space and a bike-delivery company that tackles pollution and unemployment. Adnen Ben Haji, its founder, created the initiative with a two-fold action: "it is primarily for helping to reduce the impact of pollution in urban areas, but is also a means for young people to make some money", explained Adnen. "One aspect that greatly benefited from SwitchMed's support phase was defining our economic model", said Adnen. The initiative is already having a social and economic impact. "The young members of the co-working space learnt from Pedalo's development process. They also became aware of programmes like SwitchMed and other financing mechanisms. Others became

couriers at Pedalo", added Adnen. In similar terms, Go Bike is an Egypt-base initiative that promotes sustainable mobility by organising weekly events using bicycles. "We have consolidated our financial and operational plan and increased visibility and outreach", explained Mohamed Samy, the founder. The initiative is an example of the "Reduce" principle in the 3Rs, as it contributes to reducing carbon emissions, fuel consumption, traffic congestion and noise pollution.

Another beneficiary of the programme, Leila Community Bike Centre, entered the SwitchMed programme in a conscious effort to empower women and the LGBT community to use bicycles as a regular means of transport and also to provide bike repair classes. The Tel Aviv-based initiative has also had a positive environmental impact, as it helps reduce waste by reusing discarded bicycles. "Since we started the initiative, many people have contacted us wanting to get rid of their old bikes. Bikes are brought in, we repair them and we sell them very cheaply to people who cannot afford market prices", explained Dana Yair. "Our mentor assigned by SwitchMed was excellent. Besides her expertise, she was very well connected to different organisations, the municipality and others, and that was a great help. Also, we have developed a very robust business plan that will allow us to get a permanent site for our workshop for both repairing the bicycles and organising courses".

"Thanks to this initiative we have reduced travel time by 20% and the number of visitors to the village has increased by 50%."
Abdelkrim Boughoud, Taxi Social, Morocco

Waste management is another priority for grassroots initiatives. A SwitchMed beneficiary tackling this issue is the Algerian Environmental Association Thazmurth, which is reducing the environmental impact caused by the olive industry in the Aghbalou region. It recycles the pollutant waste from olive oil extraction activity into compost, to be used locally by farmers. The association also promotes waste recycling and environmental protection within its community. "The training provided by SwitchMed's local and international experts in agro-ecology and composting techniques was excellent. It allowed us to change things and start managing our association and its activities in a more efficient manner", said Mohamed Ouchene. "We received coaching from a local mentor for six months to support the implementation of the initiative. Moreover, the association members received entrepreneurship skills training to strengthen the green micro enterprise creation movement and sustainable local socio-economic development. In Mostaganem, seventeen locals benefited from the green "Economic Competence Through Entrepreneurship Training" (CEFE label) and gained valuable hands-on experience in project management and green entrepreneurship", summarised Ouchene.

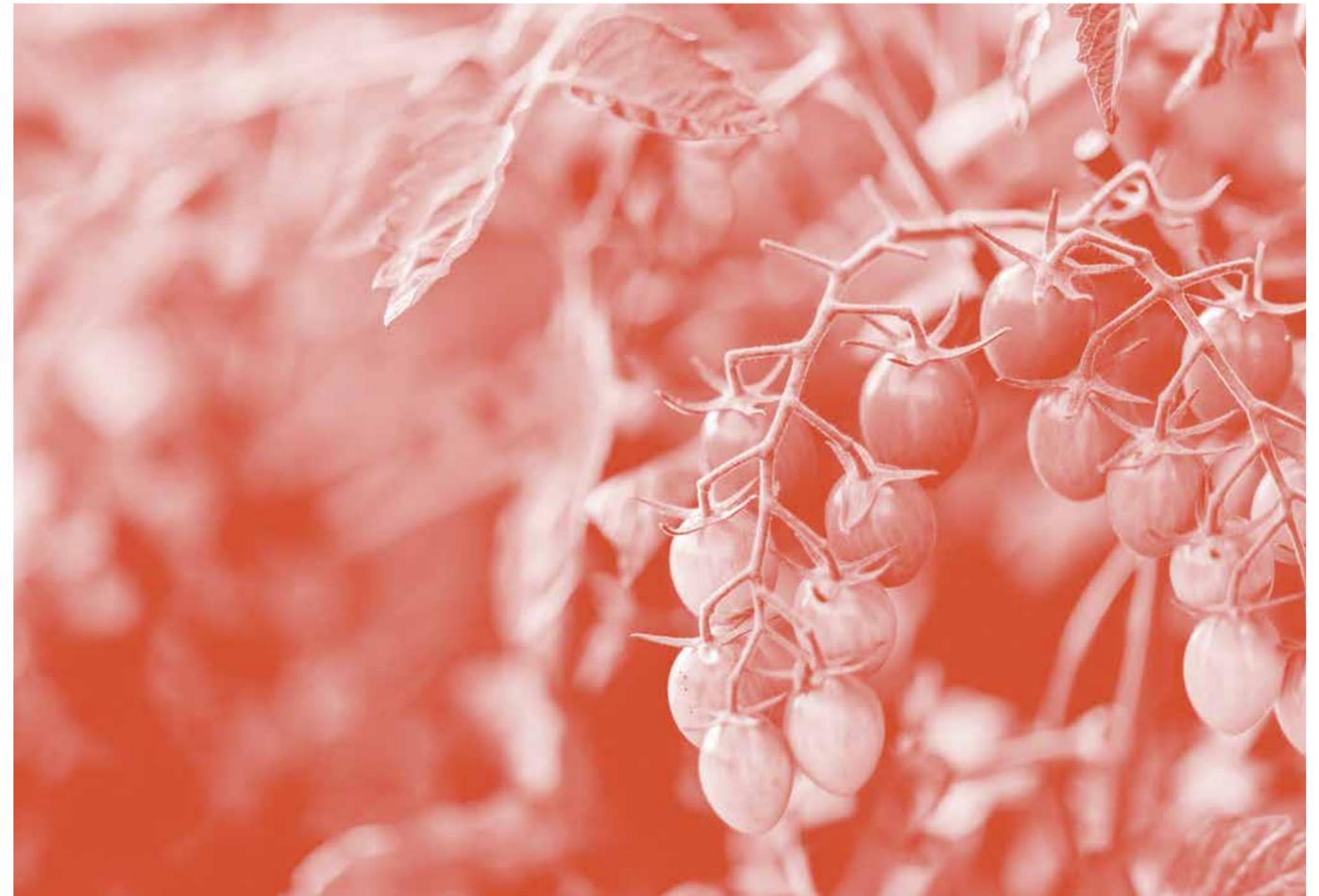
Organic farming and agricultural sustainable practices is another area of work among grassroots initiatives in the MENA region, aligned to work related to education and sustainable consumption. The three founders of the Palestinian Sun4You have found a smart way to reduce food waste while providing a source of income for many marginalised women. Led by Jerusalem Women Forum, Sun4You members use a solar energy system to dry collected market's spare fruits and vegetables that would be wasted, and sell them once they are dried. "Thanks to SwitchMed, we were able to work with the Jerusalem District Electricity Company to build the solar oven" explained Saeda Ibrahim, one of the founders. Recycled cardboard packaging will be used to package the dried products. "The most important thing is that the initiative will create jobs amongst marginalised women in the drying and packaging sector, so they can become financially independent and economically productive" said Saeda Ibrahim.

"We have received pivotal technical and managerial support from SwitchMed and we are already reaping the benefits", explained Abdelmadjid Arfa, founder of the educational and agroecological farm Torba, whose mission is to raise awareness about agricultural production methods and sustainable farming as well as promoting healthier food consumption amongst urban dwellers and consumers.

Green spaces in urban areas are of great value. In Jordan two selected grassroots initiatives are working in this field. Green Patches aims to encourage community members to create green recreational spaces and parks in Azraq, which is 100 km east of Amman. "Setting up the selection of the pilot area and identifying potential areas is crucial for the initiative, and this is what we have learnt during the support phase at SwitchMed", explained founder Turki Hamed. "We have also acquired comprehensive knowledge on mechanisms related to the re-use of water and waste water irrigation systems for gardening. In Amman, Rakena Oliane and Reef Jalamdeh are leading the Renewable Sun initiative, which aims to accelerate progress in the green transition in cities. By setting up green roofs and promoting green areas in public spaces and balconies, we are committed to the transition to a greener, more sustainable and inclusive future".

Make your Rooftop Paradise is a similar initiative in Egypt, which promotes the planting of edible crops and medicinal plants on roofs to insure a continuous healthy food supply to marginalised families in the Qena and Sohag areas. It also aims to raise awareness on the importance of recycling household waste to tackle environmental pollution. In Palestine, the Ecological Agriculture and Sustainable Tourism, which is based in a farm in the beautiful region of Deir Ballut, encourages

Photo credit @Markus Spiske



farmers, citizens and students to adopt sustainable farming practices and promotes locally produced healthy food by connecting farmers with consumers. The initiative, which received technical support on the assessment of agroecological practices and research into potential eco-tourism business opportunities in the area, also promotes ecotourism and raises awareness about the unique natural and historical heritage in the region.

Creating a "green revolution" in Jerusalem by promoting a sustainable urban lifestyle is at the heart of Kayamuta. The initiative empowers individuals through workshops, festivals, courses and shared community spaces and resources. By way of example, the "Reuse and Repair Festival" has been held for two years running with the main 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 tours to gather food waste and scraps which are then used to cook a community dinner are other examples of activities", explained Latif Eliaz, founder of the movement. This initiative includes a number of specific projects that address concrete challenges. For instance, Plastic Lab collects plastic waste and turns it into new objects. Another initiative involves growing vegetables on roof tops for self-consumption while empowering community participation. "The rooftop garden is located on the rooftop of Abraham Hostel in Jerusalem, fostering partnerships between the private sector and civil society organisations", explained Latif. "SwitchMed helped us massively in reaching out to a wider audience. The support we received on improving the way we communicate on social media was marvellous", she added. Now we are receiving support from the Jerusalem Municipality to implement their events, something that was not possible before SwitchMed's support.

"The rooftop garden is located on the rooftop of Abraham Hostel in Jerusalem, fostering partnerships between the private sector and civil society organisations", explained Latif Eliaz, founder of Kayamuta, Israel

Gueghlan Boujemâa and his team, members of "Terre et Humanisme-Maroc" set up the Crossroads of Initiatives and Agroecological Practices (CIPA) initiative, a multidisciplinary agricultural space located 30 km north of Marrakech. CIPA's mission is to use agroforestry as a tool against illegal youth immigration. Boujemâa explained that "youths from Rhamna and other rural areas are particularly susceptible to illegal immigration, with a high chance of ending up in low-skilled, high-risk occupations. With 52% of arable land severely affected by soil degradation due to climate change, unsustainable farming and overgrazing, circumstances are not favourable for economic development. The solution to reverse this situation was evident for members of Terre et Humanisme-Maroc: creating a second chance for the land and its youth. SwitchMed advised us strongly to diversify our activities, and so we did. We have expanded our project to a fruit forest, a pastoral area, a nursery and an educational beekeeping area. So far, hundreds of locals have benefited from this agro-ecology training", explained Boujemâa.

Join the SwitchMed community to support civil society organisations in the transition to the circular economy in the Mediterranean. Together we are shaping a more sustainable and prosperous future.

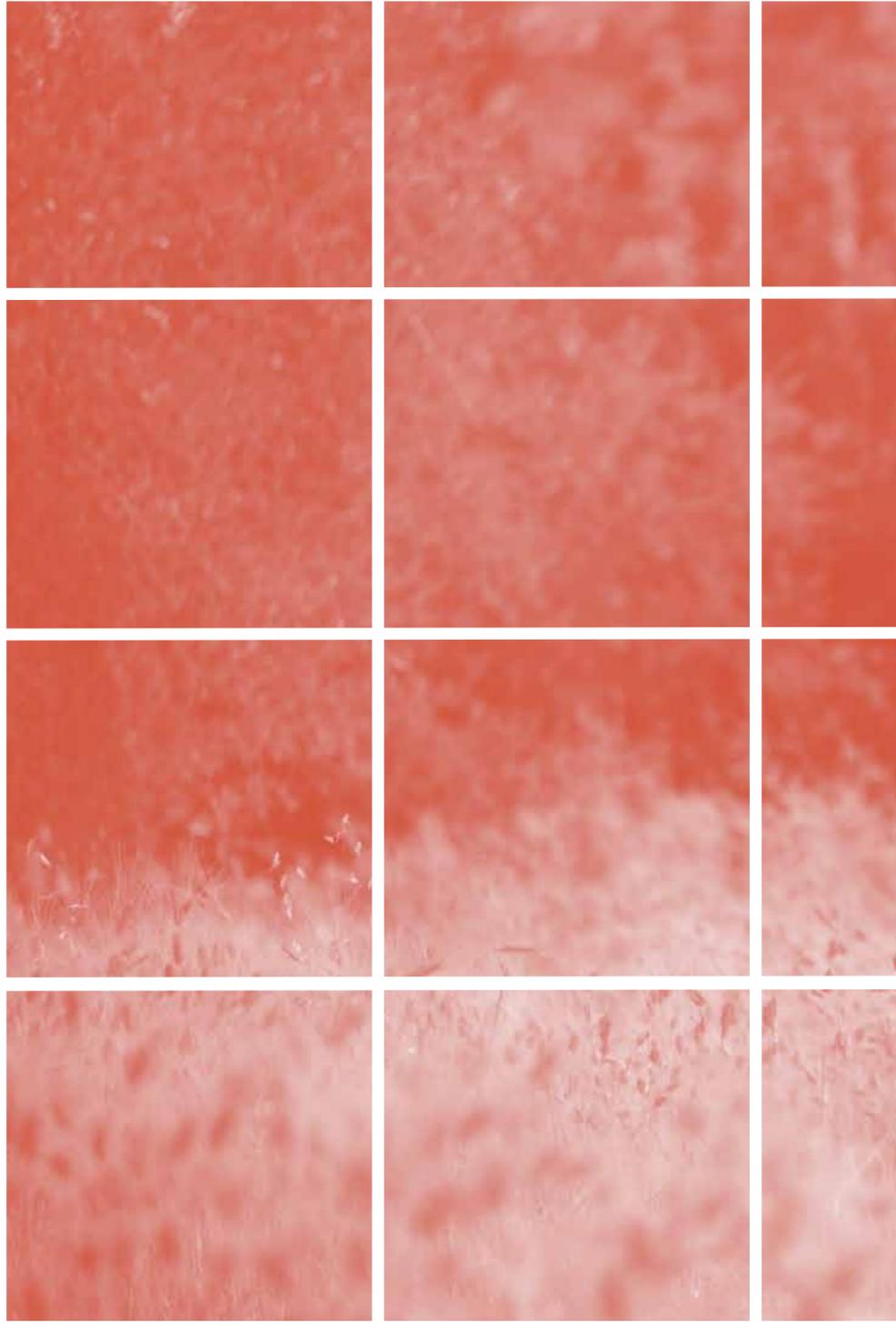
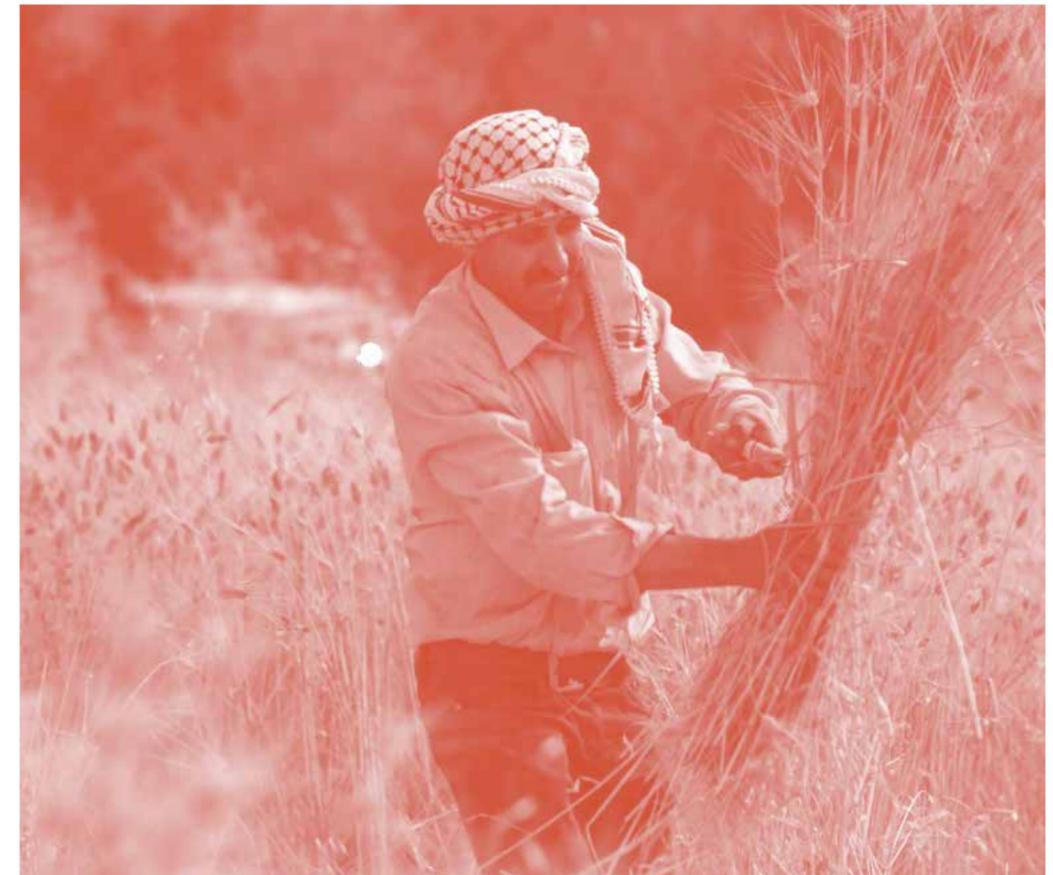
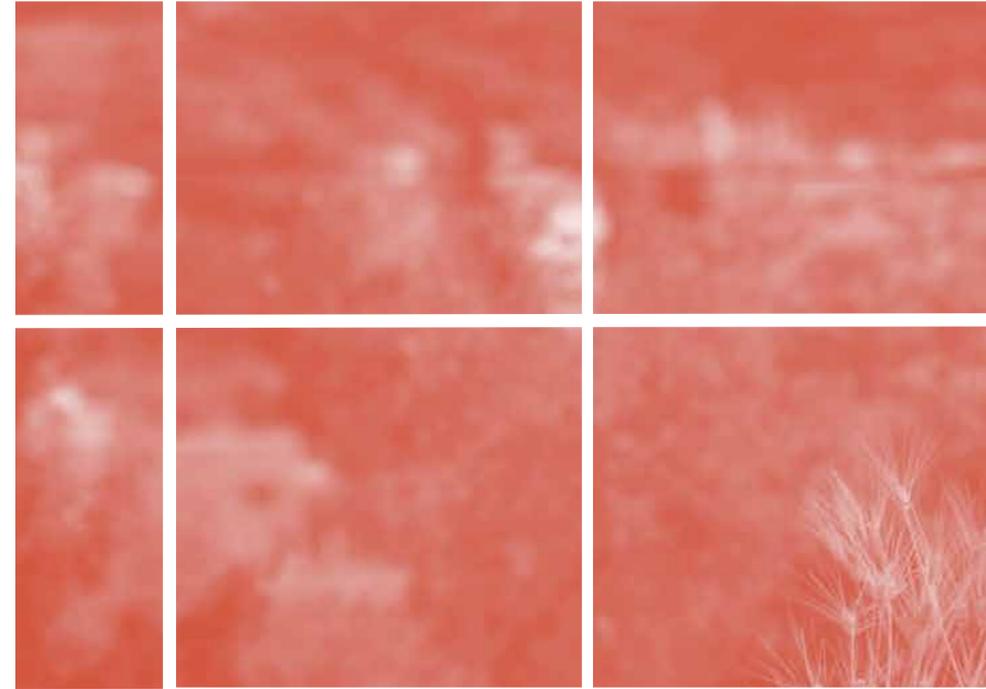


Photo credit: @Near East Foundation on Flickr





2,150,000€

Potential investment raised by the green entrepreneurs.

1,400,000€

Money raised by green entrepreneurs.

89 79 67

Green entrepreneurs.

Potential investors participating in the "green start-ups meet investors."

Selected green entrepreneurs for showcasing at the "Green start-ups meet investors."

262 245 240h

Financial actors mapped.

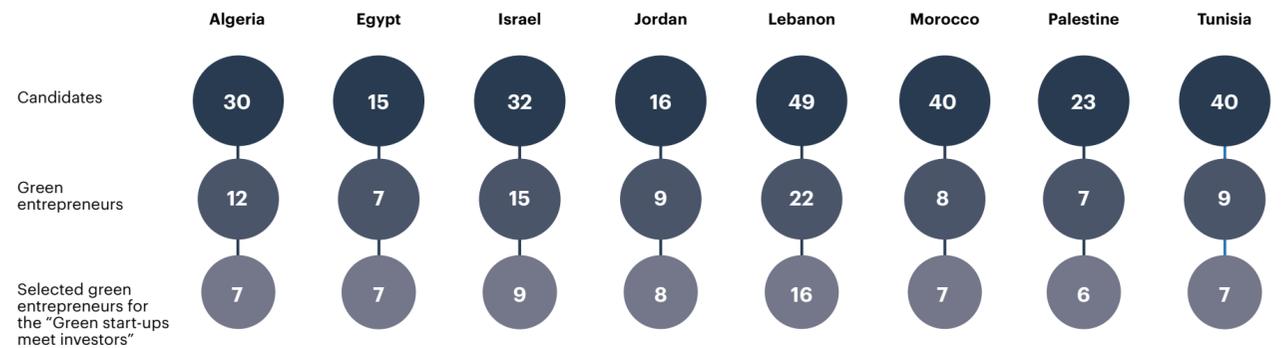
Candidates.

Total hours of capacity building.

Photo credit @Econcrete



Number of candidates, green entrepreneurs and selected ones for the 'Green start-ups meet investors'

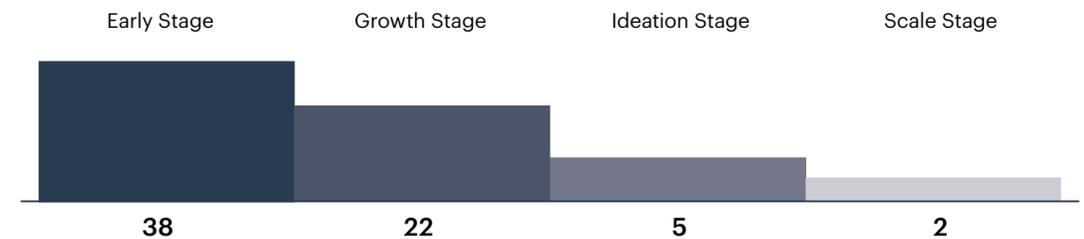


Candidates: Candidates who applied to enrol the capacity building programme where green entrepreneurs learn to understand the stages of the investment process, to prepare their business to be evaluated by financial players and to improve their communication skills to promote their business idea.

Green entrepreneurs: Green entrepreneurs who attended the capacity building programme.

Selected green entrepreneurs: Selected green entrepreneurs to pitch during "Green startups meet investors".

Green Entrepreneurs' Business Stages



Enabling access to finance: financial instruments for innovative green businesses

SwitchMed promotes enabling access to finance for green businesses and circular economy in Southern Mediterranean to promote job creation and sustainable

economic growth. A total 2,150,000€ potential investment raised by the entrepreneurs is expected by the end of the programme.

Switching from a linear to a circular economy approach in business models has been recognized as an effective means of increasing business competitiveness by minimising waste and the inefficient use of resources, thus reducing costs and adverse environmental impacts. To this end, SwitchMed is promoting inclusive growth, job creation and sustainable development by supporting policy makers, ecoinnovative small and medium sized enterprises, industries, startups and entrepreneurs in the Southern Mediterranean countries.

To stimulate the green market, to enhance a sustainable economy and to boost a real financial inclusion in the MENA region, access to finance continues to be a top priority challenge to be addressed. To this end, SwitchMed has been working to identify and attract other investment networks as well as international and national financial sectors in the MENA region. Thus, we conducted specific missions in 5 pilot countries, Egypt, Tunisia, Morocco, Lebanon and Jordan, to assess the finance ecosystem and the interest of financing institutions regarding investments in ecoinnovative or green businesses.

SwitchMed that connects start-ups with the right investors during matchmaking events, the so-called 'Green start-ups meet investors', is a national event held in each beneficiary country.

Morocco offers a small ecosystem for the development and financial support of startups. The lack of available financing, especially for startups and specifically, for green entrepreneurs is confirmed by the fact that banks remain very riskaverse, although there is indeed an interest in new products. In Egypt, funds for startups and green entrepreneurs are normally locally raised and the main investors tend to be existing Egyptian entrepreneurs

who want to help develop young Egyptian startups. Despite having a large number of banks in Tunisia, there are still very few funding opportunities for SMEs and startups. The banks tend to be risk averse and funding seems to be a slow and bureaucratic process that requires a high level of guarantee or a number of guarantees in place. During the mission, only a few initiatives developed by noncommercial banking institutions with regard to the green economy were detected and entrepreneurs do not seem to be aware of them.

Lebanon has a very sophisticated and well developed financial 'ecosystem', especially if we compare it to other countries in the region. However this financial ecosystem remains very focused on the ICT sector. The country offers a very large number of banks and its banking sector shows an excess of liquidity that should potentially allow private sector to easily access capital. However access to finance for early stage SMEs and startups (including green startups) seems to be a problem for several reasons, mainly related to business models that are difficult to assess and a lack of harmonised criteria to do this.

In Jordan, access to finance remains as a struggle and there are two challenges that currently stand between innovative green entrepreneurs and financing, which are. The first one is the limited awareness of green innovation locally, at both community and institutional levels, is narrowing down financing options for such businesses. The second one is the fact that the green innovation' market value is not yet recognized by Jordanians, making it difficult for green entrepreneurs to prove market access when approaching financial actors.

The lack of available financing for startups remains also significant in Palestine, where very little understanding of eco and green projects was evident among bankers and financial institutions employees. In fact, very little support was provided by those intuitions and by the government to such projects. In addition, green entrepreneurs are facing also legislative, awareness and incentives problems according to the final report drafted after our investigation.

One of the key factors when seeking finance is learning how to choose the right funding for your needs. "When you talk to financiers, you have to talk their language" said Claudia Pani, project manager at SCP/RAC. Green entrepreneurs, more than any other entrepreneurs, have few opportunities to meet a wide panel of investors and to put their project into the spotlight. In this light, SwitchMed that connects startups with the right investors during matchmaking events, the so-called

"Green startups meet investors", 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 startups 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 were

Prior to the pitch, the green entrepreneurs that were selected received 30 hours of capacity building session to improve their communication skills and to prepare their business to be evaluated by the financial players.

selected received 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 were 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 was offered to the green entrepreneurs with the aim of improving their capacity to meet the appropriate financial players.

Shimrit PerkolFinkel, founder and CEO of EConcrete and winner of the "Green startups meet investors" in Israel said that "the capacity building session prior to our pitch contributed to help me to hone our story and to improve storytelling skills, including sharpening our pick deck". The feedback from investors and overall feedback on our winning pitch was very meaningful for our transition for early stage to scaleup phase. The mentors gave helpful feedback on our business model, our strengths, potential barriers, and provide ideas for potential future growth". "We have learned that having a brilliant technology is not the only think to take into account, it is also important to

strengthen our capacity to build a smart business model to accompany our premium sciencebased products", she added.

"Communicating around your startup is often difficult at the beginning, but it is essential to make yourself known and attract the first customers. Thanks to event we have learnt how to highlight our key messages in order to attract the investors' attention", expressed Zouhair Chakir, who won "Green startups meet investors" in Morocco with some statements such as "our innovation allows small and medium sized industries to minimize their harmful effect on their environment and fellow citizens".

In total, 245 applicants submitted an application to join the "Green startups meet investor", 89 green entrepreneurs were selected and coached to give their pitch in front of investors and 67 showcased their green business. A total of 79 investors attended the events. A total 2,150,000 potential investment raised by the entrepreneurs is expected by the end of the programme.

Photo credit @Econcrete



The SwitchersFund, a novel way of bringing finance directly to eco and social innovators in the Mediterranean

Enable access to funding for green businesses and the circular economy in the Southern Mediterranean to promote job creation and sustainable economic growth is the mission of the newly created The SwitchersFund.

Launched in 2017, their first activity was setting up an award that would give 90,000€ in grants to entrepreneurs to implement their green businesses.

Photo credit: @SwitchMed



Launching a green business in the Mediterranean is no easy feat and entails a new way of doing business where the environment is a priority. Yet it is also an exciting employment opportunity for young people and an inspiring example for others to follow. The combination of existing environmental challenges in the Mediterranean, high youth unemployment figures and migratory pressures make investing in green start-ups a logical step to tackle all these challenges at once.

For the last two years, the Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC), in collaboration with the European Federation of Ethical and Alternative Banks (FEBEA), has been working to ease access to funding for green entrepreneurs in the Mediterranean. In order to understand the current green entrepreneurship ecosystem in the MENA region, workshops with green entrepreneurs were organised and interviews with many investors were conducted with both bankers and microfinance organisations to learn more about the role of incubators and entrepreneurship support programmes. Private foundations were also contacted and governments listened.

"All of these key stakeholders deal with entrepreneurship in different ways, but one thing they share is their tendency to address only one piece of a bigger picture. However, they all agree that a comprehensive approach is needed to better support more investor-ready entrepreneurs", explained Claudia Pani, project manager for impact investors at SCP/RAC. "The entrepreneurship journey demands strength, perseverance and great determination in order to succeed", she added.

One of the main findings during missions is that financiers and investors have limited understanding of these novel business models; they seem to shy away from supporting the seeds of the new circular economy. Furthermore, microfinancing instruments often fall short of fitting entrepreneurs' needs, and there is often the barrier of having to present track records, which early-stage businesses lack. Another finding is that the current funds and mechanisms available to support start-ups are taken by high-tech companies with high risk but also high financial return potential. In contrast, investors perceive green start-ups as risky and insufficiently profitable investments. Indeed, these findings were confirmed by the mapping of financial instruments carried out in six MENA countries with the support of the Union of the Mediterranean (UfM). This mapping concluding that there is a financing gap and difficulty accessing funding between 15,000 and 150,000 euros. According to a survey given to Switchers,

community of eco-innovative and green entrepreneurs, in 2017 revealed that 73% considers access to finance as the top challenge, while 56% are not finding the right investors. Also, more than 80% of the 540 green entrepreneurs who completed the survey are currently seeking investments mainly for business expansion (46%) and working capital. **"This mapping concluding that there is a financing gap and difficulty accessing funding between 15,000 and 150,000 euros." (55%).**

Yet, circular economy, green energy production and water efficiency systems, short agricultural circuits, ecotourism and other social innovations have great potential for development in many Mediterranean countries and could contribute to generating economic growth, job opportunities and a better environment for everyone. For example, according to the 'Better Business Better MENA' report published by the Business and Sustainable Development Commission in December 2017, companies pursuing eco-innovative strategies might create US\$637 billion and generate 12.4 million jobs across the region by 2030.

For this reason, in 2017, SCP/RAC and FEBEA have jointly created "The SwitchersFund", a tool providing and facilitating direct funding and business support services to existing and future green entrepreneurs, and to mobilise local investors and enterprise support programmes as well as European resources. The SwitchersFund wants to make seed financing, through a mix of grants, loans and equity participations, a way of strengthening start-up projects and a stepping-stone towards raising additional funds in their countries.

The SwitchersFund officially launched its activities in 2017 with the OSCE GEMS Award, which was created as result of the partnership between the Organisation for Security and Cooperation in Europe (OSCE) and the SwitchersFund, and established thanks to the support of the Italian Government. The Award granted six green entrepreneurs, who received 15,000 Euros each to implement their green businesses. Anyone from Algeria, Egypt, Israel, Jordan, Morocco and Tunisia under the age of 35 was eligible to apply. In total, 240 applications were submitted, of which 30% were presented by

women. Rima Dates, for instance, a company that processes unused and low-quality dates and turns them into new products, was the winner in Algeria. Luisa Balbi, policy advisor on Mediterranean affairs at OSCE, explained that "Rima Dates had the capacity to show how the seed fund would be used to enhance the quality and the job opportunities for women in their community, contributing gender balance. Another relevant aspect that convinced OSCE was the capacity they showed to dramatically reduce the waste of organic products and reintroduce 60% of the varieties of dates which normally end up as cattle feed back into the value chain". The Jordanian winner and founder of Green Roof, Lina Al-kurdi, explained that "investment is crucial to grow", adding that "as the need to buy equipment arises, people need to be recruited, etc., so I was thrilled to learn that I was the winner in Jordan". Thanks to this, she explained, "I managed to rent a greater area of land, so I have increased the production capacity that I have for the green roof system vegetation by 100 percent". In Egypt, Yara Yasin, founder of Up-fuse, who is turning waste into fashion, said that "with the funds we received we will buy new equipment, hire another employee, establish a working relationship with an NGO that employs 28 immigrant women to help us produce some of our products and re-design and launch our new website".

"In March 2018, Up-fuse, a brand that promotes an eco-conscious lifestyle by designing and producing upcycled bags from discarded plastic waste in Egypt became one of The SwitchersFund's first grantees, receiving 15,000 Euros to internationalise her green, social business."

Additionally, The Switcher Fund's Business Support Services provide technical assistance to green businesses for further development of their products. Attracting investor capital depends greatly on whether they are "investor ready" or not. Approaching investors unprepared is probably the single most common reason why entrepreneurs fail to attract capital. This is why Business Support Services is developing an attractive pipeline of green entrepreneurs by implementing training and an eight-month incubation programme. Engaging with partners such as policy-makers, business intermediaries, and funding organisations that have a role in opening the ecosystem up to those businesses is also facilitated. The technical assistance also includes access to funding services such as Green Startups Meet Investors, Crowdfunding Campaign Support and a funding self-help toolkit. For entrepreneurs, finding the right funding strategy is a daunting task so a new funding self-help toolkit can be found on The SwitchersFund's website. It is a practical tool developed by SCP/RAC to help entrepreneurs to better understand how to get their hands on funding and, specifically, to figure out what the right funding strategy for their projects might be according to their business stage. Through four easy steps, the financial toolkit guides entrepreneurs to understanding funding opportunities and tackles the issues such as how to engage with business angels, how to get their project into an accelerator or what procedures to follow to start a crowdfunding campaign. By the end of the four steps, the green entrepreneurs are better prepared to approach potential investors, and they can take informed decisions on fundraising strategies. Amina Abu Hamdeh, an incubated green entrepreneur from Jordan, tested the toolkit for her project Oro Verda, a start-up that aims to tackle nutritional deficiencies by producing the first organic wheatgrass extract. "I think that this kind of tool is excellent for helping to define the right fundraising strategy because for green entrepreneurs it is very challenging to figure out what is the most suitable investors' door to knock on". The SwitchersFund wants to be a combination of multi-level support and adapted financial tools that push green start-ups to develop, to test their innovations in the market and to build sustainable business models. In other words, a combination of technical assistance services and patient capital and market access.

Promoting eco-Innovative business solution to industries

Eco-innovations can help create new business opportunities, jobs and a green growth in the Southern Mediterranean region. The UNIDO B2B networking for eco-innovative business solutions have

demonstrated that there is a potential for eco innovations in the region that could help Southern Mediterranean industries to produce at a better profit for the business and the environment.

42

42 EU marketready eco-innovations to industries in the Southern Mediterranean.

6

In 6 B2B events.

1.4

All preliminary investments amounted to 1.4 million euros in total.

725

That attracted more than 725 participants from industries.

16

16 business partnerships have so far been concluded, resulting in technology cooperation agreements, skills transfer, and innovation research collaborations across several industrial sectors.

315

Connected EU technology providers with MENA industries in over 315 business meetings.

Developing a circular economy is both good for businesses as for the environment. But to get there we need to get more out of each raw material, each drop of water and each watt of energy and develop practices that can close material cycles. The European Union estimates that transition toward circular economy can create 600 billion euros annual economic gains for industries in the EU alone. Eco innovations are an important building block in this process as they help industries to save money and valuable resources and can thus support SwitchMed's objective to further sustainable production and consumption in the Southern Mediterranean region. Eco-innovation's describes the contributions of businesses to sustainable development while it improves their competitiveness and can be defined as innovations that lead to a decrease of the environmental impact, no matter whether or not that effect is anticipated.

Building partnerships between the European Union and businesses in the Southern Mediterranean region to promote eco-innovative business solutions does not only make business sense, it is also the way forward for industries in this region to address environmental challenges while ensuring their competitive advantage. For industries in the Southern Mediterranean investing in eco-innovations is therefore essential. Building on this, UNIDO has in the SwitchMed programme promoted market ready European eco-innovations to industries in Egypt, Lebanon, Morocco, and Tunisia. These business networking activities aimed to reinforce internationalization of start-ups and SMEs in Southern Mediterranean through improvements of their capacity to manage innovation and to develop resource efficient and greener business models.

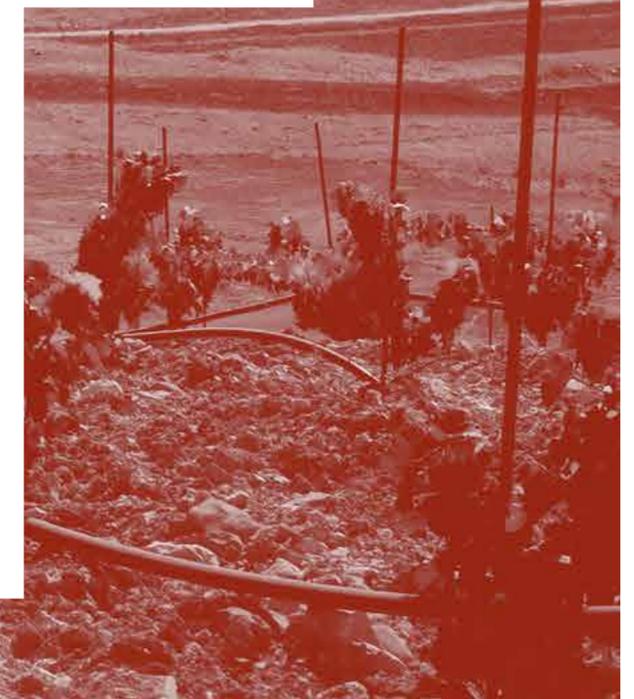
A pool of 42 relevant and ready for market uptake eco innovative business solutions, developed under the framework of the EU "Eco innovation Programme", "Best Life Environment", the "European Business Award", and the "innovation Seed" initiative, were proposed to local companies during a series of Business to Business (B2B) events in each of the four targeted countries. 725 participants from local industry stakeholders joined the six B2B events in Egypt, Lebanon, Morocco and Tunisia, concluding over 315 business meetings between European eco-innovators and local industries. The results from the B2B events have not only engaged investment networks and created stages for eco-innovative business solutions relevant to the local context, it has also revealed to key decision makers the positive impact circular business solutions can have for businesses and the economic growth. So far, 16 business partnerships, with a preliminary investment of 1.4 million euros have been concluded, resulting in technology cooperation agreements, skills transfer, and innovation research collaborations across several industrial sectors.

"Ultimately, everything has to be economic. You can make as many environmental savings as you want to but if it is still not cost effective you are wasting your time."
Graham Downhill, MLSE – United Kingdom

"At this B2B event I met a number of companies that work in the sector that turns waste into something viable and that can help us earn money. Waste is often misinterpreted and seen as not adding any value, but in fact we can have something good that works well that can reduce costs of the final product, becoming more competitive in the international market."

Ragheb Ben Ayed,
Sobecom - Tunisia

"By promoting business partnerships between local businesses and eco-innovators from the EU, new business opportunities have been opened and knowledge exchange between local industries and the EU has been enabled."



Producing denim with less water, chemicals and energy at a better cost

SwitchMed B2B for eco-innovation brought game changing European technologies to textile industries of the Southern Mediterranean that will improve their resource consumption, competitiveness and could have wide-ranging impacts for the whole sector.

Water is a scarce resource in the Southern Mediterranean region and with a growing population in, this resource will remain threatened to many parts of the society. On the other hand, water is also an essential resource that is used extensively in the textile and apparel industry, a sector that plays a major role in shaping the economy for the region. In Morocco, the textile sector alone offers employment to over 200,000 Moroccans and contributes 3% of the GDP. So, how can this indispensable resource be saved without impeding the economic development of the region?

In the wake of the SwitchMed programme, Jeanologia, a European company with more than 20 years of experience in developing sustainable and efficient technologies for fabric and garment finishing, took part in the UNIDO organized B2B eco-innovations events in Tunisia (December 2016), Morocco (January 2017) and Egypt (February 2018), with the objective of promoting business partnership that would create opportunities to save water, energy and costs. As a provider of eco-system solutions, Jeanologia currently leads the transformation of the textile industry with laser, ozone and E-flow technologies, that help increase productivity, reduce water and energy consumption and eliminate harmful emissions and waste, guaranteeing ZERO contamination. During the events, the G2 ozone-washer and the Eflow Nanotechnology from Jeanologia, two technologies that help reduce water consumption and energy by more than 60% and chemicals by about 85%, have seized the interest of several textile producers from Egypt, Morocco, and Tunisia.

New Amico, a leading manufacturer of jeans attended the event in Tunisia and soon realized that the eco-innovative technology offered by Jeanologia could be a game changer to the use of water and chemicals in the production.

As an outcome from the SwitchMed B2B, the company decided to purchase two G2 ozone-washers and three machines outfitted with the Eflow nano-bubbles technology, with an investment of 366,000 euros. This will allow New Amico to reduce its water consumption by 13,000 litres per piece of jeans, saving 28,500 m³ of water per year.

In the same way, Jeanologia set up a partnership with Emessa, a garment treatment centre located in Egypt, producing high quality denim for the European market. Emessa made an investment of 600,000 euros in Jeanologia's G2 ozone-washer and Eflow Nano technologies, which will reduce Emessa's water and energy consumption by more than 60% and the use of chemicals by about 85%. Similar cooperations between Jeanologia and textile producers have been achieved in Morocco, and given the importance of the garment sector in the Southern Mediterranean region, the adoption of Jeanologia technologies could reduce environmental impact of this sector dramatically.

To illustrate this, Morocco has an estimated production ranging from 52 to 62 million pieces of denim per year. If the combined Jeanologia technologies in Morocco's denim sector would be used, the water savings would range from 3.75 million m³ to 5.58 million m³ every year, equivalent to the water consumption of a Moroccan city with the size of 11,850/17,650 inhabitants. Accordingly, the adoption of the combined Jeanologia technologies in Egypt, Morocco, and Tunisia could result in water savings that would range from 19 million to 24 million m³ of water per year, cutting dramatically the water requirements of the textile sector. Consequently, every saving made in the garment sector will not only protect the water resources of the region, but could also improve the ability of region's textile industry to better compete in the global market, where growing demands in eco-friendly products have created additional pressure for companies to accomplish green standards. The adoption of eco-innovations, like the one offered from Jeanologia, is an excellent example of how eco-innovative solution not only helps to save money for the industries, but also resources for the environment and can help an entire sector to produce at lower costs with products that have a better environmental footprint.

Meet New Amico at the MED TEST II Innovation Bazaar on the 14th of November

"We participated in the B2B networking event organised by UNIDO. This is where we were introduced to Jeanologia. By using their technology, we are able to save 70% of water, 30% of energy and finally eliminate the use of harmful chemicals in our production. All in all, we were able to save over 135,000 euros allowing us to reinvest in our business, increase exports and become more competitive."

Bouguila Jelloul, the Director General of New Amico.

Photo credit: UNIDO



Photo credit: UNIDO



Photo credit: Jeanologia

Exporting green products to the EU with a better footprint

Adopting common methodologies to measure the environmental footprint of products is part of the EU's efforts to move toward a single market for green products. However, this development will also have a significant impact on businesses already exporting to the European single market and on their ability to compete on equal terms with their green products. We explain how in the SwitchMed programme, UNIDO conducted pilot studies in four countries, from some of the most significant export sectors for green products, to measure the preparedness of businesses to the new EU framework for green products.

For businesses in the Southern Mediterranean region, the EU single market is not only one of the most important trading partners but also a market with a huge export potential. Knowing which rules and regulations applies on the EU single market is not only essential in gaining access, but also critical in order to compete on equal terms with other competitors. SwitchMed recognizes the potential of the Single Market for Green Products Initiative, not only for EU manufacturers, but also for non EU producers which aim to produce at a higher environmental performance, offering more competitive products and to meet standards of sustainable production for the EU single market.

For a company that looks into the prospect to market its product under a green certification in Germany, France, Spain and Switzerland, the company's product would need to apply different schemes in order to compete based on environmental performance in the different national markets. For instance, in France, it would need to carry out an environmental assessment in line with the French method, in Germany it would need to apply according to the German standards, in Switzerland the product would need to apply the Swiss approach etc. The same company would then also need to develop an Environmental Product Declaration (EPD) based on ISO 14025 for the Swedish market. They may then need to undertake multiple EPDs as there are at least six competing EPD systems around the world with their own specificities, even if they are all based on ISO 14025. Does this sound confusing to you? Well it is, not only for producers of green products, but also for consumers on the EU single market.

To address the growing numbers of certifications and environmental labels on the European market, the European Commission launched in 2012 the Single Market for Green Products Initiative in response to a development where dissimilar national and private labels, for environmental certified products, had created a situation of mistrust,

confusion and intransparency among consumers and rising costs for the manufacturers. As a first step in providing reliable, meaningful and verified information about the environmental footprint of products to its consumers, the European Union has commenced testing whether such information can be generated at reasonable cost and effort.

To support this initiative, the Product Environmental Footprint (PEF) framework is developed with the aim to measure the environmental performance of a good or service throughout its life cycle. This framework takes into account various supply chain activities that can model the environmental impacts of the flows of material/energy and the emissions and waste streams associated with a product throughout its life cycle and has been developed with the aim to understand the real potential of the methods before proposing new policies.

Stakeholders from the European industry have been involved in the development of how the PEF methodology would work in different manufacturing sectors. Based on these consultations, 22 Product Environmental Footprint Category Rules (PEFCR) for certain product categories, have been developed. Each PEFCR contains a set of rules on how to measure the life cycle environmental performance of the product in scope and offer general guidance to undertake PEF studies for certain product groups.

Starting in 2017, UNIDO invited relevant partners in Egypt, Lebanon, Morocco and Tunisia, such as, industrial associations and export orientated businesses, to take part in local organized PEF workshops. The workshops were organized to present the outcomes of the European pilot studies related to the PEF framework development, to inform industry stakeholders on the methodology, and to find suitable businesses from four sectors which could undertake a pilot PEF study in order to see how this new framework would work in the region and the specific sector. The selected sectors for these studies are related to the product category of wine, intermediate paper products, pasta and olive oil, and were selected on the basis of an

Photos credits: UNIDO



existing PEFCR and their financial value in the national exports to the EU and consequently the importance of this sector to the national economy. The selection process was done in this way to ensure not only the interest of the export oriented industries but also the potential for replication in the national or regional context later on, based on the capacity built during the project.

A high interest from local companies was noted and nine companies were selected for the implementation of the PEFCRs on a specific product that they export or plan to export in the EU. Their motivation to participate in this activity, even though the PEFCRs were not yet final at that point, was mainly based on the need to understand their products environmental footprint and the potential for improvement. For each company product, one local expert has been assigned to implement the PEFCRs, after receiving an in-depth training from the international PEF experts from PRE Sustainability, a Consultancy based in the Netherlands involved in their development. These experts now form the core which can respond to future demands from the industries that wish to have the PEF Category Rules implemented on their products.

The studies developed demonstrated the need for national Life Cycle Assessment (LCA) databases which can be used by the LCA and PEF experts. Hopefully, this will be addressed in the near future, enabling the companies and experts in the region to optimize the production faster and much more accurately. In addition, national partners in Egypt, Lebanon, Morocco and Tunisia were assisted in raising awareness among national stakeholders about the framework for a Single Market for Green Products initiative, contributing to the adoption of greener standards for the national manufacturing businesses in order to compete on equivalent terms in the EU market.

- **First assessment of implementing the PEFCRs outside of the EU.**
- **Product Environmental Footprint (PEF).**
- **4 product sectors selected for PEF pilot studies (wine, intermediate paper products, pasta and olive oil)**
- **9 companies were selected for the implementation of the PEFCRs.**

PEF – A footstep to be followed

Dr Dalia Nakhla has more than 20 years of experience as an environmental and energy management consultant. She is a Certified Environmental Impact Assessment Consultant and Solid Waste Management Consultant by the Egyptian Ministry of Environment. She is also certified by the United Nations Industrial Development Organization (UNIDO) as an Energy Management Systems National Expert. She is an expert in the area of environmental management especially environmental impact assessment. She was the project manager and participated in a number of EIAs related to different sectors; oil and gas, industry, solid waste, infrastructure and tourism. Dr Nakhla also aided in the introduction of Energy Management Systems in a number of energy-consuming industries in Egypt according to the requirements of ISO 50001, including cement, petrochemical and ceramic industries.

Photo credit: Dr. Dalia Nakhla



She is one of the first experts in Egypt to apply life cycle assessment methodology as a researcher and as a consultant. As a consultant to UNIDO, she carried out a PEF study to a leather industry, first of its kind in Egypt. Dalia shares with us her perspective on how the PEF methodology can improve Egyptian business to produce with a better impact for the environment and for their ability to compete on the global market, and what reasons can further this development in Egypt.

Could you please briefly describe in your words, what is PEF?

Product Environmental Footprint is a multi-criteria measure of the environmental performance of a product or means to identify significant issues and support in the assessment and labelling of the products.

PEF is based on Life Cycle Assessment Methodology which evaluates the environmental impacts of a product through its life cycle stages; from "cradle to grave". It is modelling the environmental impacts of the flows of material/energy and the emissions and waste streams.

What benefits can a company in Egypt have from it?

A company in Egypt will benefit from the fact that a complete inventory of its material and energy flows as well as the emissions and waste streams will be compiled. Their consumption in terms of material, chemicals, water and energy will be identified in detail as well as all their waste streams. The environmental impacts associated with their inputs and outputs will be evaluated and the 'hot spots' identified. The impacts of the product's life cycle on the environment will be identified not only in the local context but rather in the global context.

The environmental performance of the product produced by an Egyptian company will be comparable to that of the same product produced by other companies in Europe. PEF will allow the company to be rated on an international scale and will enable the company to export to European countries that are keen to allow only "green" products on their markets.

What consequences could PEF have on the economy and business level in Egypt?

Having "Green Products Made in Egypt" is in line with Egypt's Vision 2030 or Sustainable Development Strategy (SDS), which promotes sustained improvement of the quality of life for the present generations and to raise awareness on environmental protection, and reduce the impact of climate change in order to provide a clean, safe environment for the future generations. An integrated environmental approach that strikes the balance between economic growth and environmental factors is adopted. This will prevent environmental degradation and maintain its balance, move towards more sustainable consumption and production patterns, and protect biodiversity. SDS also aims at fulfilling environmental international obligations, waste management based on governance concepts, and the promotion of recycling with a high environmental cognitive technical content.

PEF would allow Egyptian Products to be competitive in the international markets not only in terms of quality and performance but also in terms of protecting the environment or environmental sustainability in the global context.

You implemented the PEF methodology in Piel Color. Take us through your experience of the process and its implementation specifics.

The Product Environmental Footprint Category Rule for Leather Products was a great guide on the requirements of primary data that had to be collected from the factory.

The company was willing to cooperate but had to understand why data was requested in that detail such as the type of chemicals used with indicators on their composition as their commercial names were not enough. Also, data on quantities of material, water, energy, emissions and wastes were not all available. They had to be calculated by the technical team of the factory from their records and referenced to the reference flow as per the request of the PEF expert. This required time from the company's team and data verification by the PEF consultant. As there were no benchmarks to verify the data, the Consultant searched for publications for the same product to verify the range of data collected from the factory and suspected data was recalculated by the company.

The other challenge resided in modelling the electricity mix of Egypt as per the requirements of the PEFCR instead of using default mix of similar countries. That was done per the annual reports of the Egyptian Electricity Holding Company.

As for the upstream including animal farming and slaughtering, default data as per the PEFCR were used as well as the inventories of Ecoinvent. It was assumed as per the information provided by Piel Color that 80% of the slaughtering was carried out in Egypt and the remaining amount was imported. This influenced the source of water and electricity mix in the slaughtering inventory.

Generally, Egypt lacks life cycle inventories for its basic infrastructure including fuel composition, energy production and electricity generation, national electricity mix, energy transmission losses, water and wastewater treatment, etc. Egypt does not have national emission factors for

environmental characterization, such as emission of greenhouse gases from different sources including transport modes, energy generation, industrial processes etc., and thus relies on international guidelines such as that of IPCC to make these calculations. Uncertainty can be improved for the inventory by having a country-specific database on electricity, transport, upstream activities such as slaughtering etc.

What conclusions can you bring from the PEF pilot study in Piel Color?

PEF pilot project was found beneficial by Piel Color and it is recommended to expand the experience of the life cycle assessment and environmental footprinting to other industrial sectors and to other industries in Egypt even if it is not for the exporting objective but rather to promote the idea of 'green production' and 'green products'.

Photo credit: @SwitchMed



2,000 +1,000

2,000 subscribers to the SwitchMed Newsletter.

+1000 participants from 16 different countries attended SwitchMed Connect.

11 440,000 1,509

11 SwitchMed Newsletters sent.

Since the launch of the SwitchMed webplatform, more than 440,000 page views have been recorded indicating at wide dissemination.

1509 members of the Action Network.



4

4 websites (SwitchMed, The Switchers, SwitchersFund, SwitchMed Connect).

10,000

10,000 Followers on Facebook page on the SwitchMed and The Switchers channel.

3

3 SwitchMed Connect organised. It is the main gathering of the SwitchMed that brings leading start-ups and entrepreneurs, industry agents, initiatives, change agents, policy and financial institutions working on applications of productive, circular and sharing economies in the Mediterranean in Barcelona.

32

32 strategic partners are likeminded organizations to facilitate the exchange of ideas, build bridges and synergies and foster cooperation among diverse organisations in different countries with shared goals.



Photos credits: @Joan Bardaletti

A large graphic for 'SwitchMed Connect 2018' featuring a blue-tinted photograph of the Sant Pau Art Nouveau building in Barcelona. A large, multi-colored circular graphic is overlaid on the image, containing the event details. The text is white and centered within the circle. The background image shows the ornate architecture of the building, including a prominent dome and intricate facade details. The circular graphic has a gradient of colors: yellow at the top, green on the left, and orange on the right.

SwitchMed Connect 2018
13-15 November
Barcelona, Sant Pau Art
Nouveau Site
www.switchmedconnect.com

SwitchMed Connect 2018 Agenda

■ Track Greening the Industry
 ■ Track Enabling Policies
 ■ Track Green Entrepreneurship and Civil Society Organisations
 ■ Track Accelerating the Circular Economy

Day 1 - Tuesday 13 of November (by invitation only)

		Francesc Cambó Auditorium	Auditorium Pau Gil (Live streaming)
9:30 - 10:00	Deep dive into the SwitchMed programme	Opening Plenary <u>Main moderator:</u> • Burcu Tunçer (SCP/RAC).	<u>Speakers:</u> • Carolina Gonzalez Mueller (UNIDO). • Giorgio Mosangini (SCP/RAC). • Luc Reuter (UN Environment).
10:00 - 13:00		Working Group 1: MED TEST II Component <u>Main moderator:</u> • Roberta De Palma (UNIDO).	Working Group 2: Policy Component <u>Main moderators:</u> • Luc Reuter (UN Environment). • Magali Outters (SCP/RAC).
13:00 - 14:00		Networking Lunch	
14:00 - 16:00	Hands-on workshops	RECP And Eco-Innovation In The Food sector (Hosted by UNIDO) <u>Speakers:</u> • Chris Arvanitakis (Food sector and business development expert). • Martin Shuring (Ttz-Bremerhaven).	Communicating Product Sustainability: 10 Guiding Principles (Hosted by UN Environment) <u>Moderators:</u> • Elisa Tonda (UN Environment). • Luc Reuter (UN Environment). • Yan Chang (UN Environment).
16:00 - 17:00		Coffee Break and Networking Time	

Day 1 - Tuesday 13 of November Evening event (open to the public)

		Francesc Cambó Auditorium	Auditorium Pau Gil (Live streaming)
17:00 - 17:20	SwitchMed Connect Opening	Welcoming	
17:20 - 18:30		High-Level Opening Panel	
18:30 - 19:00		Launch of SwitchMed Exhibition: The Circular Economy In The Mediterranean	
From 19:00		Visit of the exhibition	
19:30 - 21:00		Cocktail Dinner & live band	

Floor -1: Room 1-2	Floor 1: Room 3	Floor 2: Room 3-4
Working Group 3: Green Entrepreneurship And Civil Society Organisation Component <u>Main moderator:</u> • Giorgio Mosangini (SCP/RAC).		
#AMA Ask Me Anything Session for Green Entrepreneurs (hosted by SCP/RAC) <u>Moderator:</u> • Daniel Hires (SCP/RAC).	Opportunities For Bio Waste Management In The Southern Mediterranean (Hosted by SCP/RAC) <u>Moderator:</u> • Yara Saab (SCP/RAC). <u>Speaker:</u> • Francesc Giró (Waste Agency of Catalonia).	Toxic Chemicals In Plastic Production And Recycling: The Little BIG Unknown (Hosted by SCP/RAC) <u>Moderators:</u> • Kimberley de Miguel (SCP/RAC). • Pedro Fernandez (SCP/RAC). <u>Speaker:</u> • Ana Inés Fernández (University of Barcelona).

<u>Welcoming address:</u> • Marta Subirà, Secretary at the Secretary for Environment and Sustainability, Government of Catalonia.	<u>Moderator:</u> • Ferran Rodés (President of the Advisory Council for Sustainable Development of Catalonia). <u>Speakers:</u> • Tatjana Hema, MAP Deputy Coordinator. Officer in Charge, UN Environment Mediterranean Action Plan.	• Almotaz Abadi, Managing Director of the Environment and Water Division, Union for the Mediterranean Secretariat (UFM) • Elisa Tonda, Head of Consumption and Production Unit, Resources and Market Branch, Economy Division, UN Environment • Stephan Sicars, Director of the Department of Environment at the United Nations Industrial Development Organization (UNIDO) • Maciej Popowski, Deputy Director General in the Directorate General for Neighbourhood and Enlargement Negotiations, European Commission
<u>Remarks by:</u> • Maciej Popowski, Deputy Director General in the Directorate General for Neighbourhood and Enlargement Negotiations, European Commission	<u>SwitchMed stories:</u> • Lina Al Kurdi (LE Energy Solutions). • Hossam Allan (Center for Environment and Development for the Arab Region and Europe).	• Samy Awad (Alexandria Company for Industrial Packages). • Chadi Faraj (Bus Map Project).

SwitchMed Connect 2018 Agenda

Day 2 - Wednesday 14 of November (open to the public)

	Francesc Cambó Auditorium	Auditorium Pau Gil (Live streaming)
9:00 - 11:00	Greening the industry	<p>MED TEST II Innovation Bazaar</p> <p><u>Moderators:</u></p> <ul style="list-style-type: none"> Amy Serafin (Editor in chief and journalist). Nick Spicer (Reporter and news presenter). <p><u>Introduction on MED TEST II by:</u></p> <ul style="list-style-type: none"> Roberta De Palma (UNIDO). <p><u>Businesses:</u></p> <ul style="list-style-type: none"> ABCO group Egypt. ABCO, Tunisia . AMA, Morocco. Afrique Cables, Morocco. Al Hijaz, Palestine. BARIQ, Egypt. Boukellal, Algeria . Cochepea, Morocco. Farm Dairy, Jordan. Farm Frits, Egypt. Gipates, Algeria. Jordan Valley, Jordan. Kafrit, Israel. MAKLADA, Tunisia. Malco, Lebanon. NOEL, Tunisia. New Amico, Tunisia. PIF, Morocco. SAIF, Tunisia. Siniora, Palestine. Skaff Dairy, Lebanon.
11:00 - 11:30	Grab a coffee and enjoy the Marketplace	
11:30 - 13:00	Scaling-Up Resource Efficiency And Cleaner Production	<p><u>Moderator:</u></p> <ul style="list-style-type: none"> Vladimir Dobes (UNIDO). <p><u>Speakers:</u></p> <ul style="list-style-type: none"> Abdelkader Fergui (National Center for Cleaner Production Technologies Algeria). David Assaf (Ministry of Economy and Industry, Israel). Giovanna Ceglie (UNIDO MENA). Mark Goedkoop (PRé Consultants). Miroslav Maly (EBRD). Samy Awad (ABCO Group Egypt). Seloua Amaziane (Ministry of Env., Morocco).
13:00 - 14:00	Networking Lunch & Marketplace	
14:00 - 15:30	Enabling Policies	<p>Developing an Enabling Policy Environment For Circular Economy: Latest From Europe And The Southern Neighbourhood</p> <p><u>Moderator:</u></p> <ul style="list-style-type: none"> Magali Outters (SCP/RAC). <p><u>Speakers:</u></p> <ul style="list-style-type: none"> Giorgos Kremlis (European Commission, DG ENV). Maria Rincon-Lievana (European Commision, DG ENV). Maysoun Hassan (Egyptian Environmental Affairs Agency). Mohamad Afaneh (Ministry of Environment, Jordan). Nabil Hamdi (Ministry of Environment and Sustainable Development, Tunisia). Nathalie Boyer (OREE & Circular Economy Ambassador, France).
15:30 - 16:00	Grab a coffee and enjoy the Marketplace	
16:00 - 17:30	Enabling Circular Economy Opportunities in the Agro-food sector	<p>Policies For Sustainable Consumption: The Mediterranean Experience</p> <p><u>Moderators:</u></p> <ul style="list-style-type: none"> Elisa Tonda and Luc Reuter (UN Environment). Mamoun Ghallab (Zero Zbel, Morocco). Mohamad Afana (Ministry of Env. Jordan). Ohad Carny (Ministry of Env. Protection Israel). Zaghoul Samhan (Env. Quality Authority, Palestine). <p><u>Speakers:</u></p> <ul style="list-style-type: none"> Adi Ashkenazi (Env. Authority, Tel Aviv-Yafo Municipality). Faiza Hajji (Ass. du Docteur Fatiha, Morocco). Hossam Allam & Ghada Moghny (CEDARE).
17:30	End of day	

Photos credits: @SwitchMed



■ Track Greening the Industry
 ■ Track Enabling Policies
 ■ Track Green Entrepreneurship and Civil Society Organisations
 ■ Track Accelerating the Circular Economy

Floor -1: Room 1-2	Floor 1: Room 3	Floor 2: Room 3-4
<p>Enabling Policy Instruments to address Circular Economy Opportunities in Textile Value Chains</p> <p><u>Moderator:</u></p> <ul style="list-style-type: none"> Magali Outters (SCP/RAC). <p><u>Speakers:</u></p> <ul style="list-style-type: none"> Hussam Hanouni (FabricAID, Lebanon) Lobna Saidi (El Mensej, Tunisia). Lotfia Harbi (Green Economy Expert, Algeria) Monica Melero Rejas (Sustainable fashion Barcelona Association). Noelia Montero (Expert sustainable fashion). 	<p>Enabling instruments to implement safe alternatives to toxic chemicals</p> <p><u>Moderator:</u></p> <ul style="list-style-type: none"> Kimberley de Miguel (SCP/RAC). <p><u>Speakers:</u></p> <ul style="list-style-type: none"> Arianna Gamba (Health Care Without Harm (HCWH). Roland Weber (POPs international expert). Semia Gharbi (AEEFG, Hub regional IPEN-MENA/ North Africa, Tunisia). 	<p>Enabling Instruments to Create Circular Economy Opportunities in the Tourism Sector</p> <p><u>Moderators:</u></p> <ul style="list-style-type: none"> Annette Harzbecher (Consultant). Lucille Guiheneuf (SCP/RAC). <p><u>Speakers:</u></p> <ul style="list-style-type: none"> Aymen Louhichi (Tunisia Ecotourism). Imad Al-Baba (Env. Quality Authority, Palestine). Nabil Hamdi (Ministry of Env. and Sustainable Development, Tunisia). Noor Esoh (Expert). Robert Hamwey (UNCTAD). Skander Zeribi (Dar Zaghouane).

SwitchMed Connect 2018 Agenda

Day 3 - Thursday 15 of November (open to the public)

	Francesc Cambó Auditorium	Auditorium Pau Gil (Live streaming)
9:00 - 10:15	Green Entrepreneurship and Civil Society Organisations	<p>Switchers Pecha Kucha</p> <p><u>Moderator:</u></p> <ul style="list-style-type: none"> • Daniel Hires (SCP/RAC). <p><u>Switchers:</u></p> <ul style="list-style-type: none"> • Amel Ould Amer (Optima decision, Algeria).
10:15 - 11:00		<p>Green Entrepreneurship And Grassroots Ecological Innovation As An Innovative Pathway Towards Circular Economy: SCP/RAC's Switchers Support Programme</p> <p><u>Moderator:</u></p> <ul style="list-style-type: none"> • Giorgio Mosangini (SCP/RAC). <p><u>Speakers:</u></p> <ul style="list-style-type: none"> • Ali Abo Sena (ENCPC Egypt). • Lotfia Harbi (AHC Consulting). • Tracy El Achkar (Diane Foundation). • Yassine Ben Menadi (Bio-intrants Techonologie).
11:00 - 11:30	Grab a coffee and enjoy the Marketplace	
11:30 - 13:00	<p>Innovative Financial Instruments For Green Entrepreneurs In MENA</p> <p><u>Moderators:</u></p> <ul style="list-style-type: none"> • Alessandra Sensi (UfM). • Claudia Pani (SCP/RAC). <p><u>Speakers:</u></p> <ul style="list-style-type: none"> • Daniel Sorrosal (FEBEA). • Gian-Luca Gasparini (SEFEA). • Hala Mujalli (Finance Expert Jordan). • Michelle Mouracade (Alfanar). • Najib Saab (AFED). • Shada Elsharif (Jordan Environment Fund). • Tracy El Achkar (Viridis Fund). 	<p>How To Design A Business In The Circular Economy</p> <p><u>Moderator:</u></p> <ul style="list-style-type: none"> • Yair Engel (Center for Sustainable Design/EPEA Cradle to Cradle Israel). <p><u>Speakers:</u></p> <ul style="list-style-type: none"> • Andrés Gallardo (Inèdit). • Irene Diez Ruiz (ECOALF Foundation). • Michal Bitterman (The Natural Step Israel branch).
13:00 - 14:00	Networking Lunch & Marketplace	
14:00 - 15:30	Accelerating the Circular Economy	<p>SWITCH Synergies: Get To Know Other Regional SCP Programmes & Connect For Synergies (Co-Hosted By The EU SWITCH To Green Flagship Initiative)</p> <p><u>Moderator:</u></p> <ul style="list-style-type: none"> • Alexander Charalambous (EU SWITCH to Green). <p><u>Speakers:</u></p> <ul style="list-style-type: none"> • Ira Larasaty (SWITCH-Asia SCP Facility). • Rhoda Wachira (SWITCH-Africa Green Network Facility). • Fabienne Pierre (One Planet Network/ 10YFP, UN Environment).
15:30 - 16:00	Coffee break & closing <u>Closing Notes by:</u> Josep Maria Tost i Borràs (Waste Agency Catalonia)	
16:00	End of SwitchMed Connect 2018	
16:15 - 18:15	SwitchMed Steering Committee (by invitation only, SwitchMed closed-door event)	

■ Track Greening the Industry
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Floor -1: Room 1-2	Floor 1: Room 3	Floor 2: Room 3-4
<p>How To Facilitate Access To Market And Global Value Chains For Green Entrepreneurs</p> <p><u>Moderator:</u></p> <ul style="list-style-type: none"> • Burcu Tunçer (SCP/RAC). <p><u>Speakers:</u></p> <ul style="list-style-type: none"> • Ahmed Nour (Yomken). • Frank Maul (Import Promotion Desk). • Malick Kane (UNCTAD). • Mar Güell Blasi (DANONE Iberia). • Noa Aharoni (IEICI, Export Institute Israel). 		
<p>Financing SCP Practices: Fostering South-South Green Dialogue (Hosted by Switch Africa / SEFEA)</p> <p><u>Moderator:</u></p> <ul style="list-style-type: none"> • Gian-Luca Gasparini (SEFEA). <p><u>Speakers:</u></p> <ul style="list-style-type: none"> • Davide Libralesso (Etimos Foundation). • Fabio Petroni (E4Impact). • Paolo Pastore (Fairtrade Italia). • Wissam Mansour (Lili's Farm, Lebanon). 		<p>Promoting Youth and Women Entrepreneurship (hosted by Government of Catalonia)</p> <p><u>Speakers:</u></p> <ul style="list-style-type: none"> • Cristian Bevacqua (Oxfam Italy). • Jordi Panal (IES MED). • Mireia Borrell (Government of Catalonia). • Rudaina Haddad (Al Marj, Jordan). • Sarah Diouri (Social Green Tech incubator Morocco).

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

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

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- www.switchmed.eu

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