

# Supporting the Development of Green Industry and Sustainable Production in the Southern Mediterranean

*The UNIDO Transfer of Environmentally  
Sound Technology Programme (TEST) to harness  
the full potential of industry's contribution  
to Inclusive and Sustainable Industrial Development.*



SwitchMed, funded by the EU, is collaboratively coordinated by the EU, United Nations Industrial Development Organisation (UNIDO), United Nations Environment Programme Mediterranean Action Plan (UNEP/MAP), Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC) and the UNEP/DTIE (Division of Technology, Industry and Economics).

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[www.switchmed.eu](http://www.switchmed.eu)   



SwitchMed Programme is funded by the European Union



## 1 Challenges of the manufacturing sector

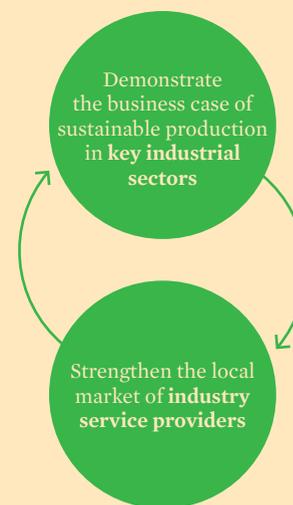
Manufacturing activities are the engine of the global economy, particularly in developing countries, and they play a key role in poverty eradication and job creation. However the industrial sector uses more materials and energy than their production processes would require due to the use of obsolete technologies and methodologies, being responsible for nearly a third of all CO<sub>2</sub> emissions, 20 % of global water use and most of the raw materials use, as well as significant pollution and waste generation.

*The greening of industries is a core determinant of economic competitiveness and sustainable growth.*

## 2 The Transfer of Environmentally Sound Technology (TEST) integrated approach is part of the solution

TEST is a comprehensive and integrated approach developed by UNIDO to address the challenges and barriers industries face to become more resource and energy efficient, non-polluting and safe, produce products that are responsibly managed throughout their life cycle, while increasing productivity, access to international markets with good quality products and comply with environmental standards.

The MED TEST II component of the SwitchMed Programme will target industries to increase their knowledge about business opportunities for resource productivity as well as service providers to increase their capacity to deliver sustainable production services matching the industry needs.



### 3 Benefits for industry

Industries applying sustainable production models can gain the following benefits:

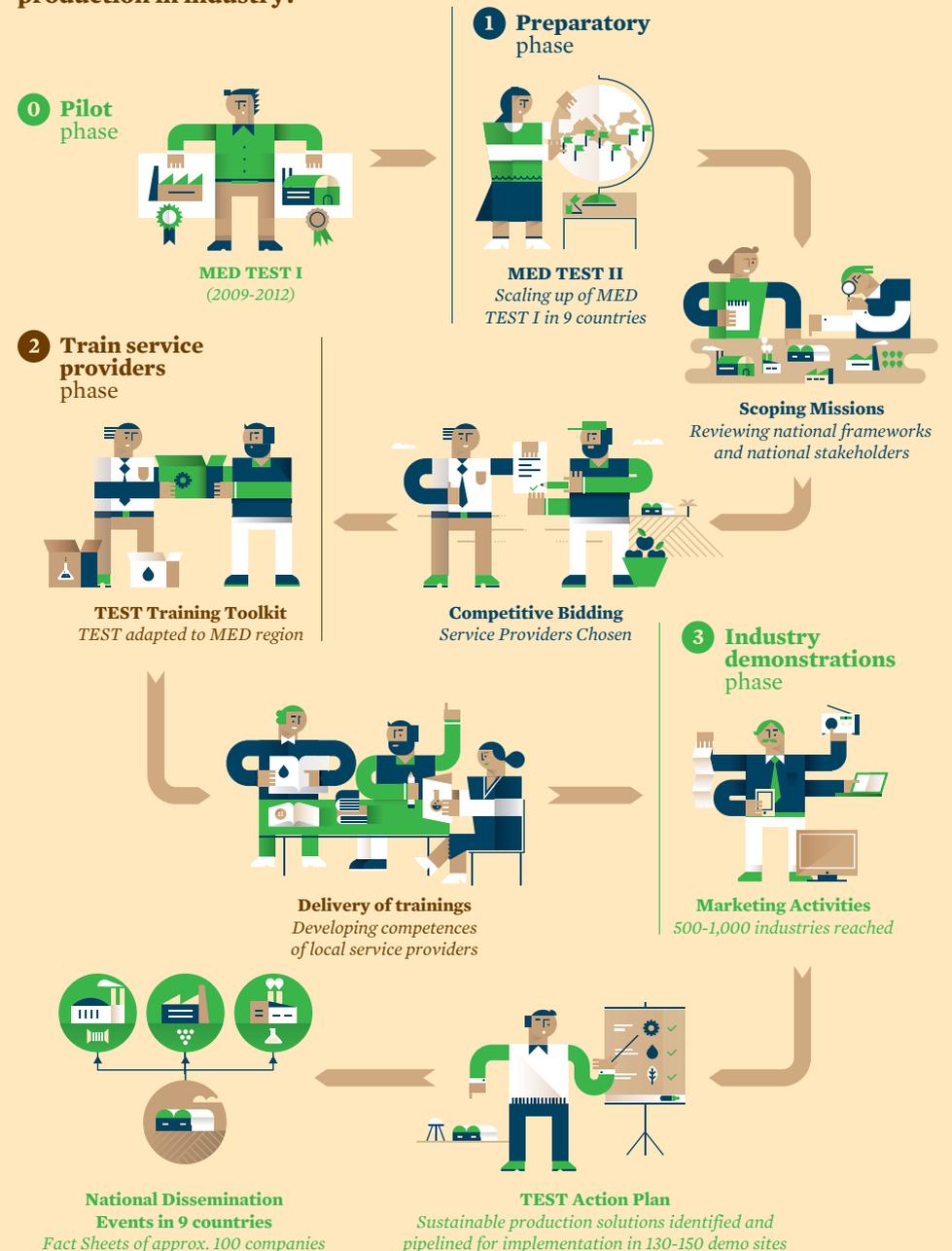
- Increase productivity, reduce operational costs, optimize investments;
- Minimize environmental compliance costs, reduce environmental risks and environmental footprint;
- Comply with international environmental standards to access new markets (global supply chains and export markets, new green markets and public procurement, etc.);
- Secure long term supply of production inputs: the adoption of a resource efficiency strategy can mitigate the effects of disruptions and price volatility in the raw material supply chain;
- Improve relationship with stakeholders (investors, banks, regulatory body, local communities, consumer associations, etc.).

### 4 Benefits for service providers

By joining our programme service providers will learn the following:

- How to conduct integrated resource and energy efficiency audits with focus on process optimization;
- Benchmarking techniques for environmental performance of industries;
- How to integrate resource efficiency into environmental management systems for continuous improvement;
- Material flow cost accounting techniques to reveal to company managers the actual economic losses due to inefficient use of resources within production processes and the potential gains;
- Best practices and eco-innovative technology for specific industrial sectors;
- How to market sustainable production services to industry.

### 5 How is SwitchMed promoting sustainable production in industry?



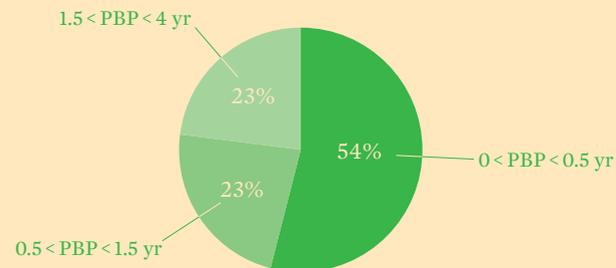
## 6 The business case of sustainable production

The business case for sustainable production in the Southern Mediterranean context was demonstrated within the framework of the UNIDO MED TEST I pilot initiative implemented in Egypt, Morocco and Tunisia (2009-2012). This initiative, funded by the Global Environment Facility and the Italian Government, applied the TEST integrated approach as a win-win strategy for successful resource efficient and sustainable production.

A pool of 43 manufacturing industries across seven industrial sectors received technical assistance in identifying and implementing improvement measures. In the 3 participating countries, the project identified 17 M USD in annual savings, corresponding to a 20 M USD investment portfolio with significant environmental savings, such as 9.7 M m<sup>3</sup> of water and 263 GWH in energy. On average, more than 50% of the identified measures had a return on investment of less than 0.5 years. Significant savings opportunities for energy, water and raw materials were achieved (>20% compared to baseline) revealing a huge and untapped potential for shaping business strategies to accommodate constraints on natural resources. Companies participating in MED TEST I adopted new visions and policies to embed resource efficiency into their management systems (e.g. ISO14001), improving their image and brand value, and strengthening stakeholders' relationships. MED TEST I industry fact sheets and case studies can be viewed here: [www.unido.org/medtest](http://www.unido.org/medtest).

Return on investment of identified resource efficiency measures for the 43 demonstration industries that participated in the MED TEST I pilot initiative.

PBP stands for payback period.



## SwitchMed

The SwitchMed Programme aims at facilitating the shift toward Sustainable Consumption and Production in the Southern Mediterranean Region including: Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, and Tunisia.



The SwitchMed Programme target countries are: Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, and Tunisia

The programme is about changing the way goods and services are produced, sold and consumed, so that human development and satisfaction of human needs is decoupled from environmental degradation. It supports industry, emerging green entrepreneurs, civil society and policy makers through policy development, demonstration activities and networking.

SwitchMed, which works with a wide range of stakeholders, is committed to catalyse the market of sustainable products and services in the Mediterranean via:

- trainings for start-ups and entrepreneurs to build skills in design, business plan, marketing and financing of sustainable products and services;
- capacity building in industry service providers targeting small and medium sized enterprises for resource efficiency improvements;
- 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.

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## MED TEST II in Palestine

MED TEST II in Palestine is implemented with the support of Palestine Academy for Science and Technology in partnership with Palestine Polytechnic University and Environmental Park in Italy. The main sector that are targeted are Food and Beverages. The project will target 10 industry demonstrations.

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## Join our SwitchMed Action Network

SwitchMed Action Network is a community of practice with the mission of achieving *productive*, *circular* and *collaborative* economies in the Mediterranean. We exchange, build synergies, create, take and multiply actions towards this mission.

Our Action Network is made up of entrepreneurs, small businesses, industry service providers, designers technical experts as well as individuals coming from public administrations, business intermediaries, multinational companies, development agencies, civil society organisations, and financing institutions.

Join us now: <http://www.switchmed.eu/en/join-the-action-network>

For more information on the SwitchMed Action Network please get in touch with the Networking Facility at [networking.switchmed@scprac.org](mailto:networking.switchmed@scprac.org)