

Transfer of Environmentally Sound Technologies in the Southern Mediterranean

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Strategic Partnership for the Mediterranean Large Marine Ecosystem

MedPartnership

MED TEST



What is the MedPartnership?

- A Global Environment Facility (GEF) funded **Large Marine Ecosystem Approach project**
- **Main objective** is to assist countries in the implementation of the priority regional and national actions agreed in two Strategic Action Programmes (SAPs) for the reduction of pollution from land-based sources (SAP-Med) and the conservation of biological diversity (SAP-BIO) and the implementation of the Integrated Coastal Zone Management ICZM Protocol;
- **Financing:** 12.9 M US\$ (GEF funds) plus 36.5 M US\$ co-financing
- **5 year duration** (2009 to 2014)
- Morocco, Algeria, Tunisia, Libya, Egypt, Lebanon, Syria, Turkey, Albania, Montenegro, Croatia, Bosnia and Herzegovina
- Led by UNEP/MAP with 10 leading regional organisations: UN bodies and NGO's

The UNEP/MAP led Component

Component 1 Integrated approaches

for the implementation of the SAPs and NAPs

- 1.1 Management of Coastal Aquifer and Groundwater
- 1.2 Integrated Coastal Zone Management (ICZM)
- 1.3 Integrated Water Resources Management (IWRM)

Component 2. Pollution from land based activities, including Persistent Organic Pollutants

- 2.1 Facilitation of policy and legislation reforms for pollution control (a) Industrial pollution pilot projects
- 2.2 Transfer of Environmentally Sound Technology (TEST)
- 2.3 Environmentally Sound Management of equipment, stocks and wastes containing or contaminated by PCBs in national electricity companies

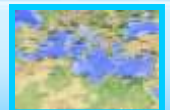
Component 3. Conservation of biological diversity: implementation of SAP BIO and related NAPs

- 3.1 Conservation of Coastal and Marine Diversity through Development of a Mediterranean MPA Network
- 3.2 Promotion of the sustainable use of fisheries resources through the application of the Ecosystem Approach to Fisheries

Component 4.

- 4.1 Project Co-ordination, NGO Involvement, Management and M&E
- 4.2 Information and Communication strategies
- 4.3 Replication Strategy

countries
MED TEST



Pollution Prevention from industrial land-based sources

Overall Objective: Build national capacities in UNIDO-TEST integrated approach and conduct pilot projects within priority industrial areas affecting the Mediterranean basin to demonstrate the economical/environmental benefits of resource efficiency and sustainable production.

Countries: Tunisia, Morocco and Egypt

Funding: GEF (MSP), Italian Government, Private Sector

Demonstrations: 43 industries, 7 industrial sectors

Duration: 2009-2012



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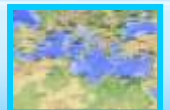
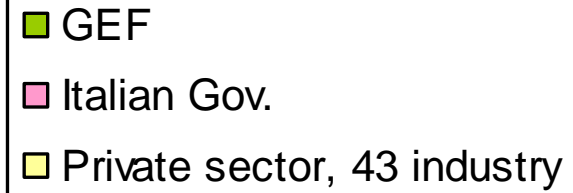
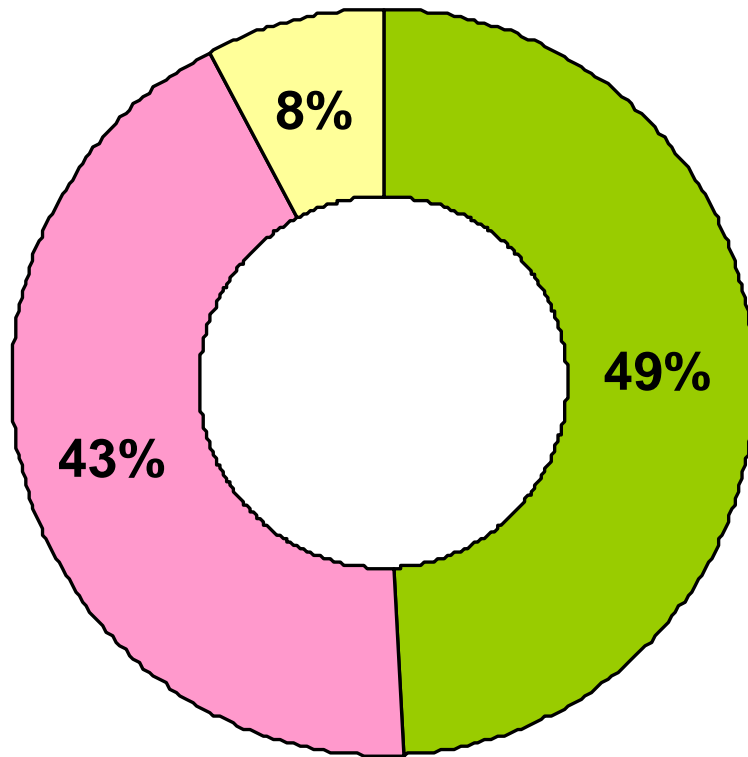
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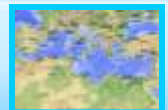
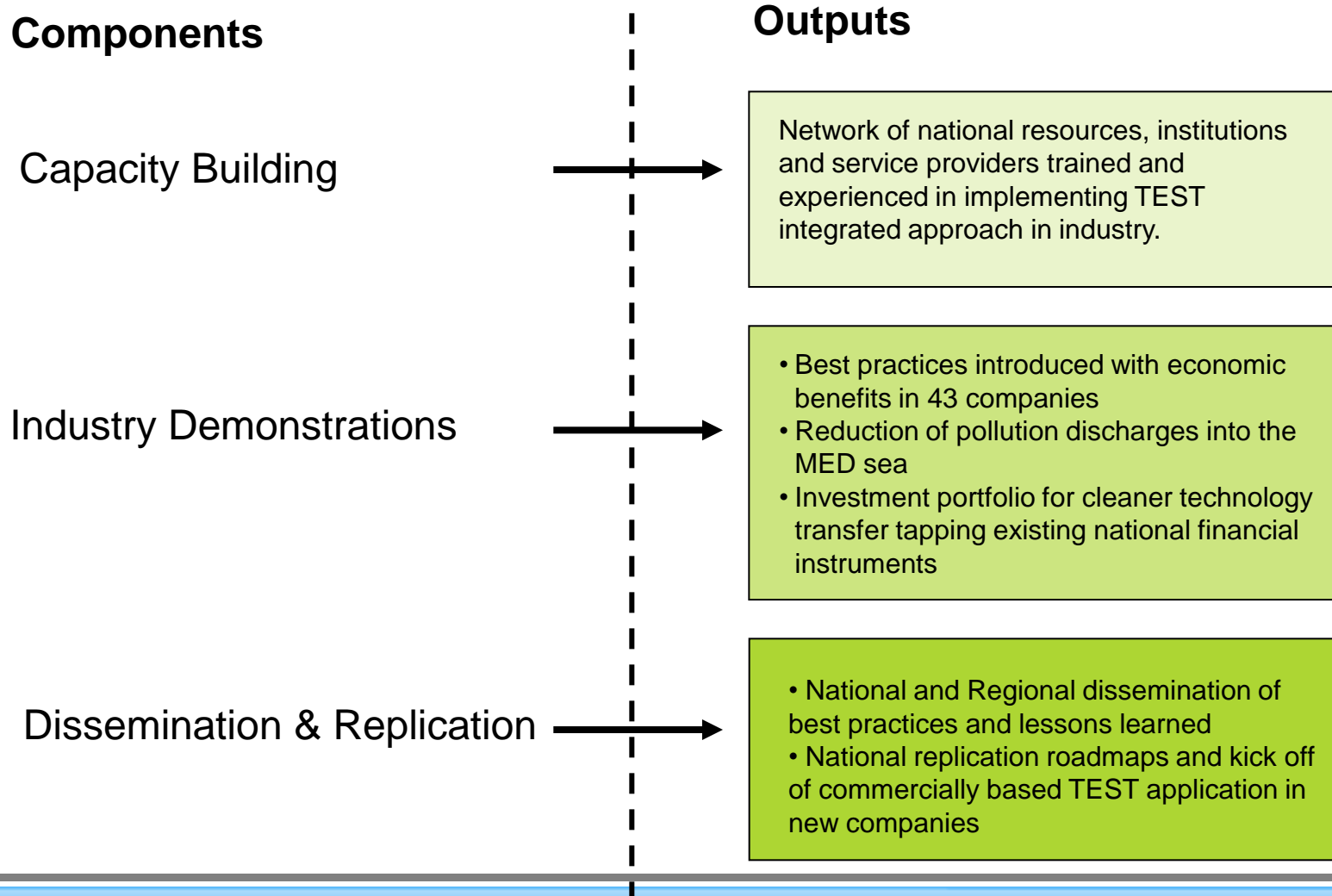


Funding

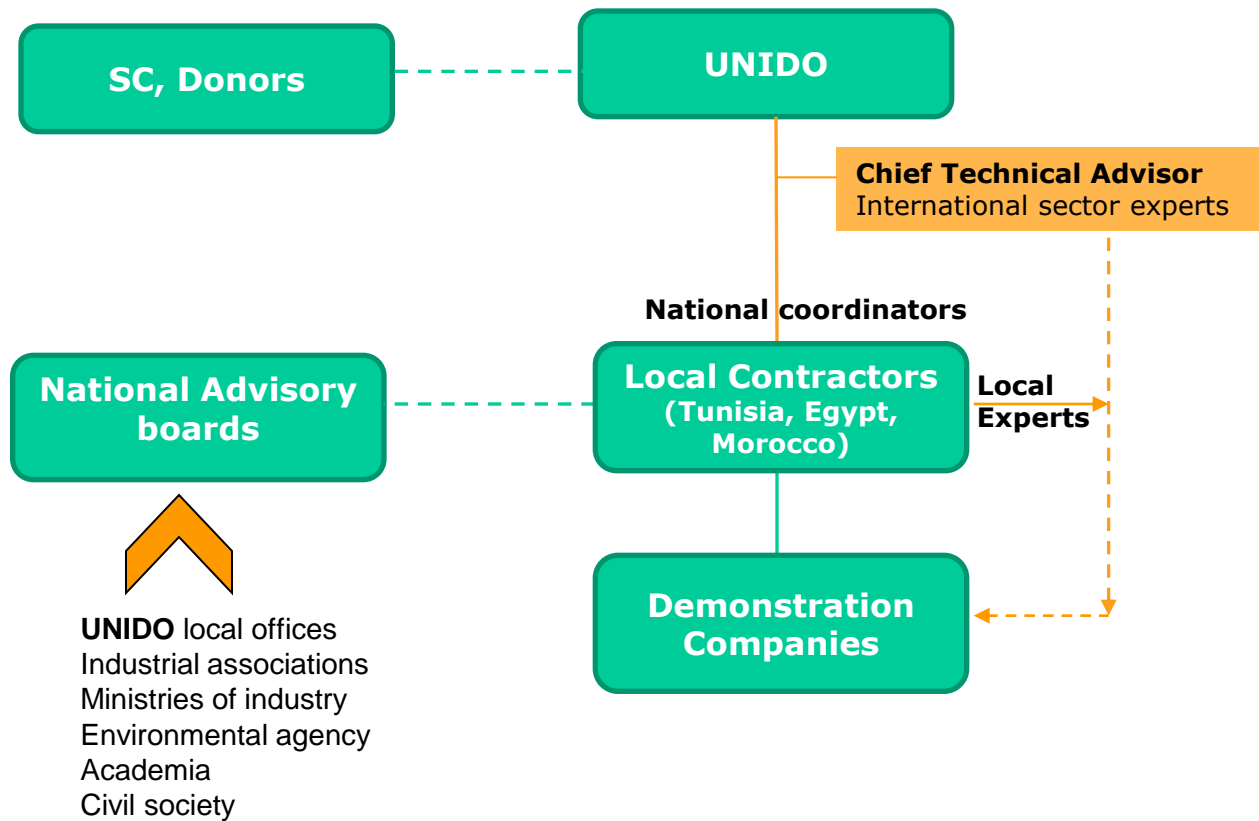
TOTAL COST ~ 2.1 Millions USD



MED TEST Components & outputs



Project's Organisation



Partners & contractors

- Consortium of Technical Centers
- National cleaner production centers
- Local consulting firms



Selection of national contractors & sectors

Consultations with
UNIDO local offices
and local stakeholders



Priority
Sectors
→
National
set up

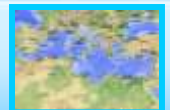
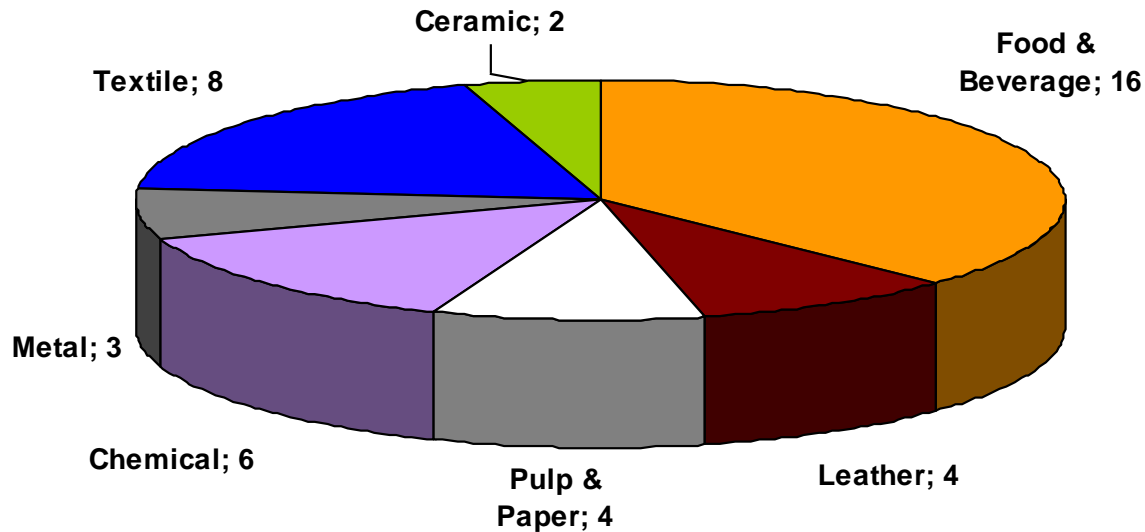


EU delegations were consulted during the country assessment phase. Periodical communication exist between **UNIDO country offices** and EU delegations in the field, ensuring full coordination and cooperation.



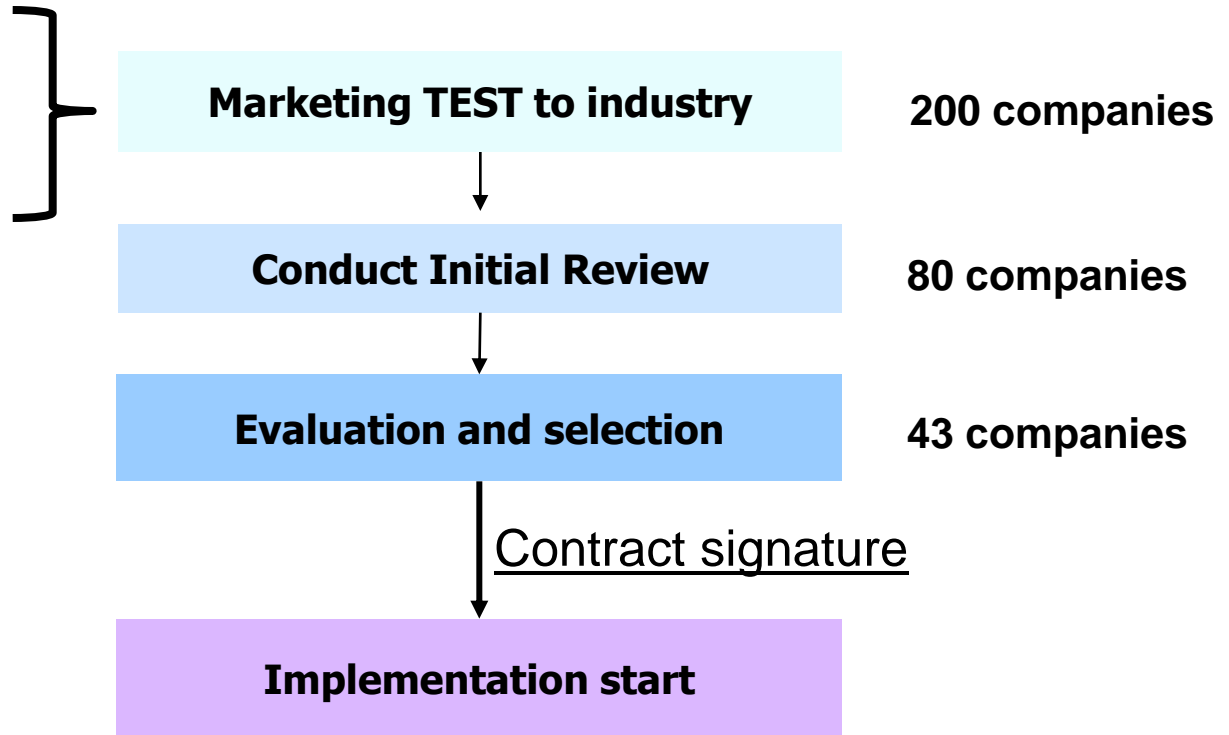
Priority Sectors

- Tunisia: Agro-food, Textile, Leather
- Morocco: Agro-food, textile, Metal, Ceramic
- Egypt: Agro-food, Chemical, Pulp & paper



Selection of companies

Site visits
Newsletters
Web Advertisement
Seminars



Company selection is driven by local contractor with the oversight of UNIDO



Selection of companies

- Company participation is voluntary
- Industry motivation to join TEST: productivity and cost reduction, pressure from supply chain and customers, regulatory compliance
- Cash Co-financing from companies required (ownership)
- Selection criteria:
 - Management commitment
 - Environmental problems & potential for improvement
 - Financial viability - creditworthiness



Fundamentals of TEST programme

- ✓ Integrated approach that links sustainability to core business strategy, management systems and manufacturing processes
- ✓ Benchmarking company performance with ratios/technology in the global market (key driver)
- ✓ Training, Monitoring, Follow up & Top management engagement
- ✓ Multidisciplinary skills and Technical sectorial expertise
- ✓ Flexible approach depending on company size and baseline, applicable at existing sites and at green-field/extension projects (sustainable design)
- ✓ Linking to existing financing investment schemes (SMEs)



TEST integrated approach: tools



Resource Efficiency and Cleaner Production (RECP)

Reducing energy & raw materials usage per unit of production



Environmental Management Systems (e.g. ISO14001, OEKOTEX,



Environmental Management Accounting (EMA)



CSR (Global Compact)



Eco-design of products

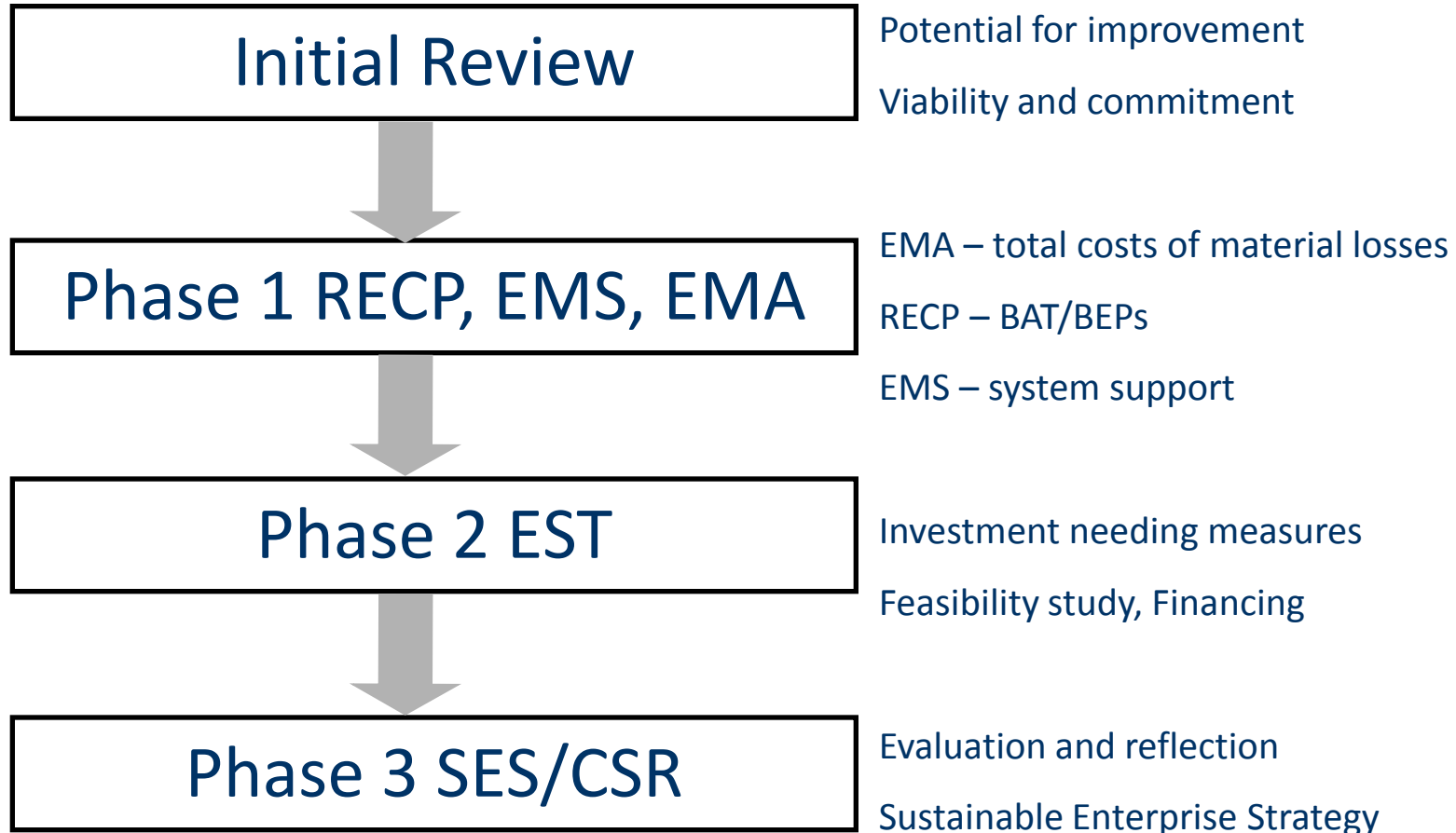
Enterprises can redesign their products so that they contain less materials (dematerialization) or use less harmful substances



Recycling and valorization of waste/water



TEST: major steps

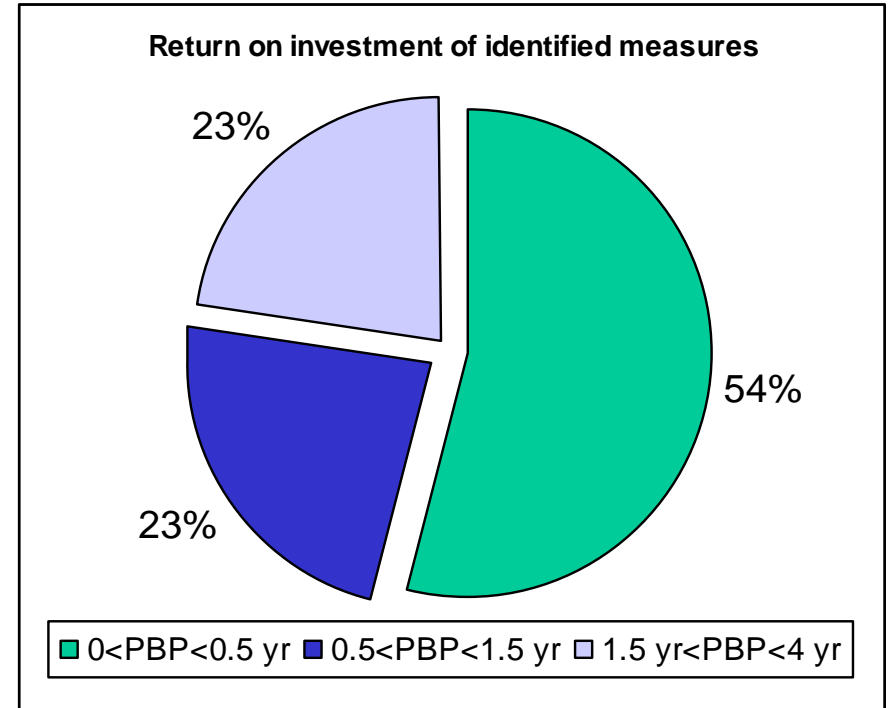
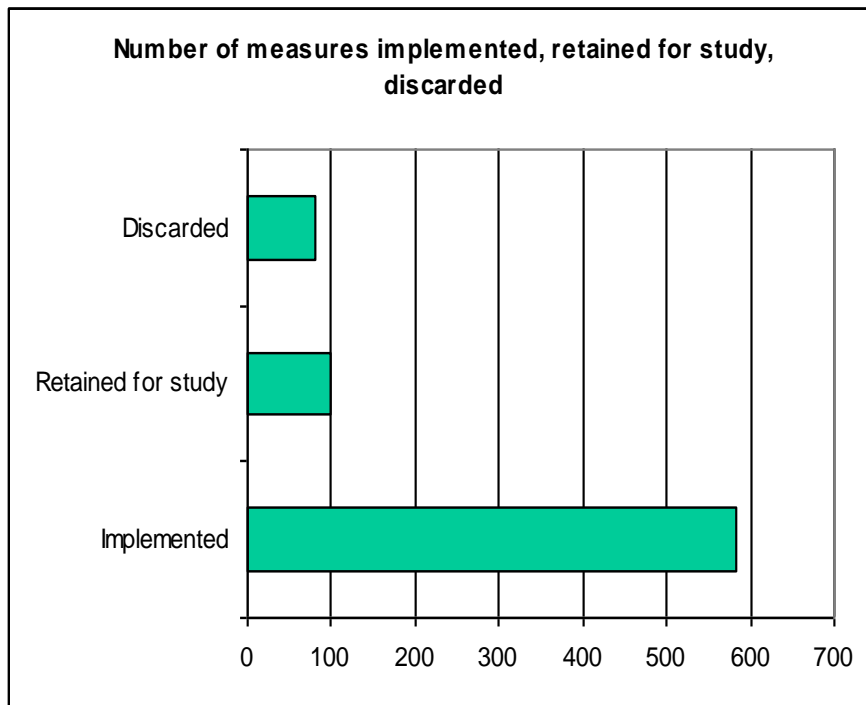


RECP: Type of measures

- **Water conservation:** cleaning techniques, CIP, in process recycling (e.g. blancher) and second grade applications (water treatment units)
- **Product recovery & valorisation:** product push before CIP, in process recycling, off specs & retours from clients, packaging
- **Steam generation and distribution:** boiler house, blow down heat recovery, insulation, fuel switch, process integration
- **Electric system:** power factor, compressors, VSP, Chillers (optimiazation and heat recovery), cold storage rooms, lightening



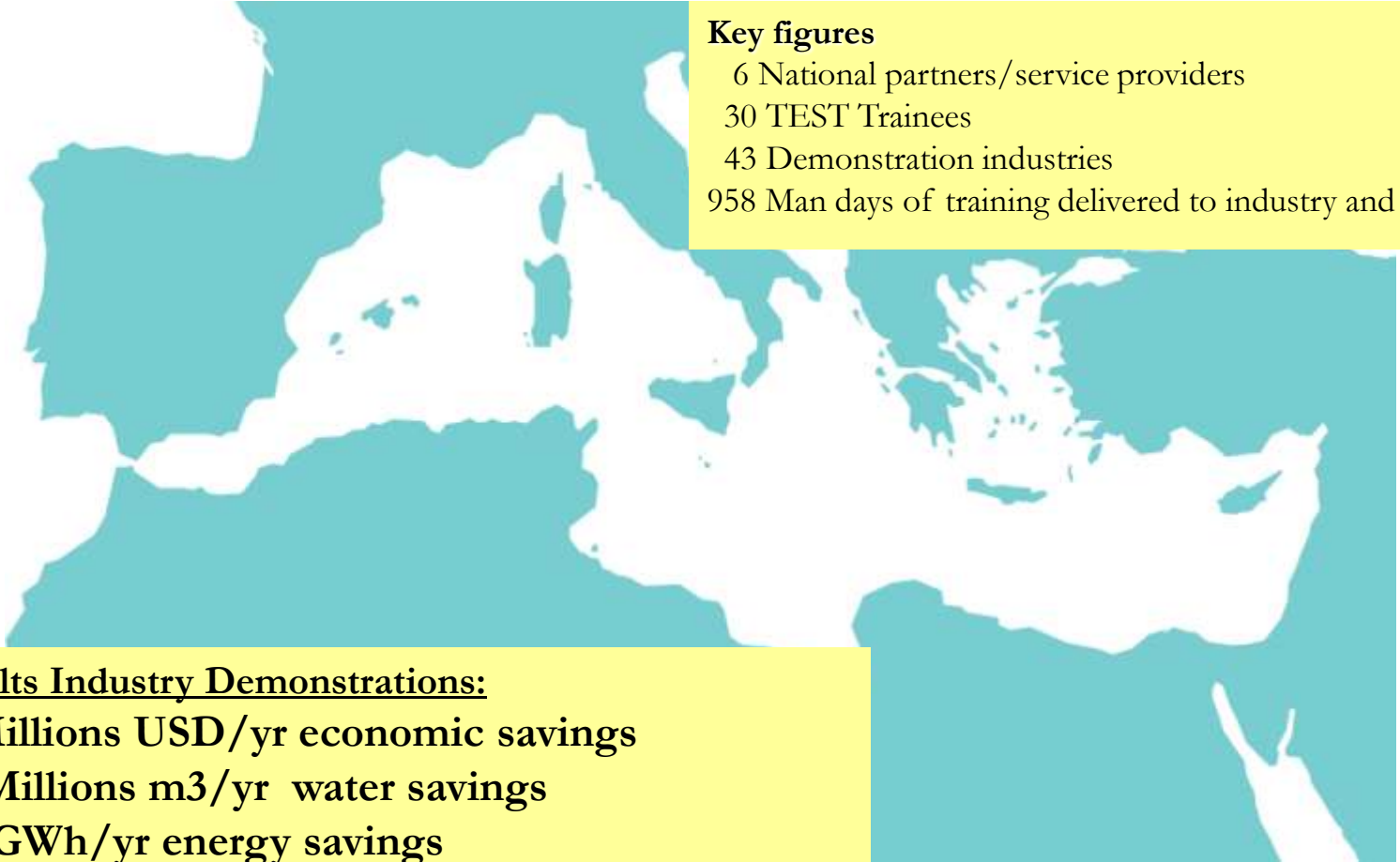
Project's achievements in industries



Private sector Investment portfolio of 20 MUSD for industrial processes upgrades and cleaner technology



Project's achievements



Key figures

- 6 National partners/service providers
- 30 TEST Trainees
- 43 Demonstration industries
- 958 Man days of training delivered to industry and trainees

Results Industry Demonstrations:

17 Millions USD/yr economic savings

9,7 Millions m³/yr water savings

263 GWh/yr energy savings



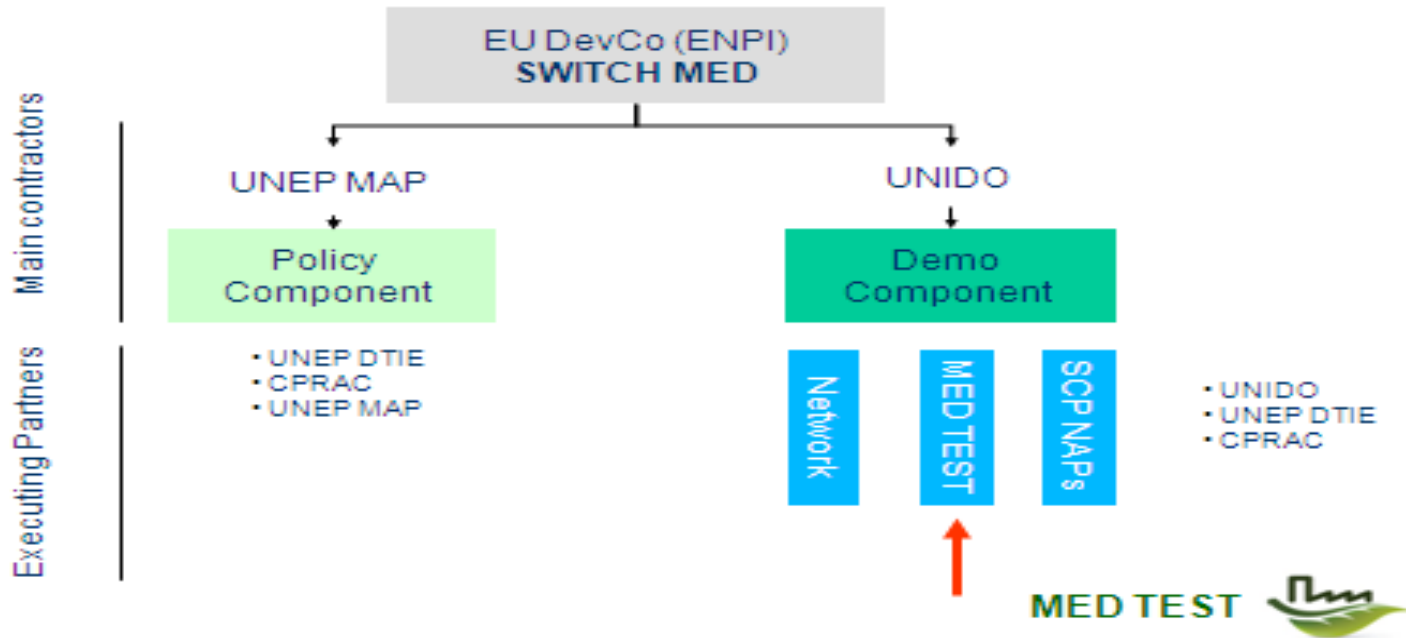
Conclusions

- Country demonstrations are essential to convince local industry that sustainable production is a sound business strategy
- MED TEST initiative highlighted the “huge” and “unexploited” potential for resource efficiency in the Southern Mediterranean Region.
- Industry has been very responsive to MED TEST: only 10% discarded measures, above 20 MUSD private sector investments
- Upscale and Replication activities are essential to avoid that the experience would remain confined at the level of the demonstration sites
- A large scale follow-up initiative in the MED should aim at developing the local market of service providers (besides the NCPCs) for the provision of TEST services to industry.
- UNIDO is currently exploring the possibility for upscaling TEST experience in **Mediterranean Region**, where there is a very high potential.



From MED TEST to SWITCH-MED

SWITCH MED



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