

As part of the SwitchMed programme, UNIDO supports industries in the Southern Mediterranean through the transfer of environmental sound technologies (MED TEST II) to become more resource efficient and to generate savings for improved competitiveness and environmental performance.

Tunisia

L'Homard

Food sector

Context

Number of employees:	30
Key products:	Frozen seafood products (cephalopods, crustaceans, fish)
Main markets:	Local and international
Management standards:	ISO 9001, ISO 22000

L'HOMARD, a leader in the freezing and packaging of seafood in Tunisia, was established in 2008 and is based in Soussse. The company produces 670 t of finished products annually. It markets its products on the local market, and exports 70% of total production, mainly to Spain and Italy. At the start of the project, L'HOMARD was already ISO 9001 and ISO 22000 certified.

With the support of the MED TEST II project, the company intends to start introducing ISO 14001.

“L'HOMARD joined the MED TEST project in order to optimise its production chain while rationalising its consumption of resources and minimising its impact on the environment, to achieve a transition to green industry and sustainable industrial development.”

Ali Aichi
Chairman and Chief Executive Officer

Benefits



Graphic: UNIDO

The MED TEST II project identified total annual savings of EUR 66,399 resulting from raw materials, water and energy savings with a total investment of EUR 23,120. The payback periods on the investments varies between 0 and 2 years. The company's management have decided to implement the 11 measures identified.

Resource savings will be approximately 34% for raw material purchases and 10 % of the energy costs, and will be achieved through the implementation of RECP measures. The environmental benefits include a 10% reduction in CO₂ emissions and a 57% reduction in solid waste.

With regard to the environmental and energy components, and thanks to the expertise of the project, the company management intends to put in place an environmental management system based on ISO 14001

Saving opportunities¹

Action	Economic key figures			Resource savings & Environmental impacts per year		
	Investment euro	Savings euro / Yr.	PBP Yr.	Water & Materials	Energy MWh	Pollution reduction
Recovery of waste and non-compliant raw materials	15,600	62,250	0.2	385 primary materials	-	Total: 16.3 t CO ₂ 385 t solid waste 25 t BOD ₅
Energy and water consumption optimisation	7,520	1,741	4	23 m ³ water	10	
Implementation of good practices and optimisation of procedures	0	2,408	Immediate	-	14	
TOTAL	€ 23,120	€ 66,399	0.3	385 t raw materials 23 m³ Water	MWh	

¹ Numbers based on production value from 2015

Recovery of non-compliant raw materials

In this respect, 3 recovery approaches were identified and deemed to be very interesting for the overall reduction of waste:

- (1) Recovery of residue for human consumption, enabling the transformation of shrimp husks after shelling into bisques intended for human consumption. This has resulted in a reduction of 215 t of waste per year;
- (2) Recovery of non-compliant shrimp into breaded products which will enable a reduction of 24 t per year of non-compliant shrimp after shelling deemed to be waste;
- (3) Recovery of residues for animal feed. This involves the transformation of all beheading, gutting and filleting residue into livestock feed. This results in a reduction of 146 t of fish waste per year, and a reduction in BOD₅ of 25 to 30 tonnes per year.

Energy and water consumption optimisation

This involves:

- (1) Acquisition of an air compressor to replace old equipment which is vastly oversized for single use;
- (2) Installation of a bank of automated capacitors enabling a cos φ of 0.99 to be achieved;
- (3) Thermal insulation through the installation of barriers in the freezing tunnel;
- (4) Acquisition of automated freezing equipment which will enable a reduction in water used for the freezing of raw materials of 3%, or 23 m³/year.

Implementation of Good Practices and optimisation of procedures

The main measures involve the following tasks;

- (1) The management of the cold rooms, which involves planning the entry into service of the company's four cold rooms. This has resulted in a reduction in thermal energy consumption of 5 MWh per year;
- (2) The optimisation of the production process by performing timing tests and organising the steps so that the product remains at the company for as little time as possible.

“Thanks to the MED TEST II project, we have been able to implement a culture of sustainable development within the company's different departments with regards to resource conservation and waste reduction, which has enabled us to achieve economic and environmental gains”

Ali Aichi

Chairman and Chief Executive Officer

For more information, contact:



United Nations Industrial Development Organization
 Department of Environment
 Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
 Telephone: (+43-1) 26026-0, Fax: (+43-1) 26926-69
 E-mail: C.GONZALEZ-MUELLER@unido.org
 Web: www.unido.org



Centre Technique de l'Agro-alimentaire (CTAA)
 12, Rue de l'Usine 2035 Chargaia 2,
 Tunis Carthage, TUNISIA
 Telephone : +216 71 940 081 / 71 940 198 / 71 941 015
 Fax: +216 71 941 080
 Mail : ctaa@ctaa.com.tn
 Web : www.ctaa.com.tn