

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.

Morocco

ATTAGHLIF

Chemical sector

Context

Number of employees: Between 75 and 100

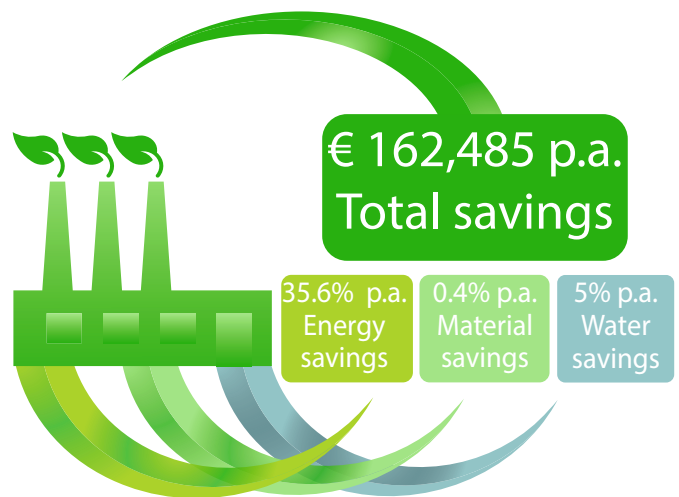
Key products: Plastic Films (90%),
Waste Disposal Site (10%).

Main markets: Local and Africa

ATTAGHLIF, established in 1991, is specialized in the fields of extrusion and inflation, printing, finishing, welding, cutting and recycling of polyethylene. It is distinguished by the quality of its services as well as the diversity of the products on offer, with the objective of establishing, maintaining and improving a quality management system.

The latter ensures the regulations related to the business, customer satisfaction, security and legality of products. The company committed to the TEST approach in order to reinforce its strategy: development, respect for environmental values and promotion of human capital and social responsibility.

Benefits



Graphic: UNIDO

The MED TEST II project has identified opportunities for total annual savings of € 162,485 in raw materials, water and energy for a projected investment of € 446,810. The average payback period on the identified savings is 2.7 years. About 90 % of the measures identified have been accepted by management, two having been rejected.

Under the improvement and optimization of production and installation of more efficient equipment, the measures implemented, will reduce energy consumption by 35.6 %, water consumption by 5 % and raw materials - plastics, inks, glues and solvents by 0.4 %. The environmental benefits achieved by these measures including the use of solar energy will reduce annual charges and reduce CO₂ emissions by 35.6 % (808 t).

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
Electric energy and compressed air	31,852	12,635	2.5	-	128	Total: 808 t CO ₂ 44 m ³ waste water 60.7 t solid waste
Treatment of volatile organic compounds and reduction of the risk of contamination	16,288	5,296	3.1	-	-	
Optimizing consumption of inks, solvents and films	14,965	56,590	0.3	18.3 t raw materials	-	
Resource management improvement and production optimization	27,190	18,204	1.5	44 m ³ water 1.4 t raw materials	154	
Photovoltaic installation	356,515	69,760	5.1	-	817	
TOTAL	€ 446,810	€ 162,485	2.7	19.7 t raw materials 44 m³ water	1,099 MWh	

¹ Numbers based on production value from 2015

Electric energy and compressed air

Energy consumption will be reduced through measures aimed at optimizing contracted power, improving the performance of indoor and outdoor lighting by installing LED appliances and phased replacement of electric motors with more efficient models. The production of compressed air will be improved by the installation of a more efficient variable speed compressor and repairing of leaks.

Treatment of volatile organic compounds and reduction of risk of contamination

The treatment of VOCs generated in the printing plant and the solvent and ink storage room and the use of appropriate safety and protection methods will limit the risk of accidents, improve safety, productivity and the environmental situation, while contributing to certification sought by the company (BRC).

Optimizing consumption of inks, solvents and films

In order to optimize raw material loss and thus reduce the lack of production and sales, several measures will be applied during all phases of the process: improved storage conditions for raw materials, chemicals, solvents and the finished product

according to the rules guaranteeing safety and non-contamination, reduction of ink and solvent loss, reduction of film scraps by optimizing the width.

Resource management improvement and production optimization

Establishment of a complete system of energy and water management to implement the ISO50001 standard on energy management will reduce loss and a better use of resources. Equipment optimization, allowing change and adjustments of rapid tooling during product launch, will improve productivity.

Photovoltaic installation

The independent production of photovoltaic energy (496 kWc) covering more than a quarter of annual consumption will have a positive impact on the company's environmental performance.

For more information, contact:



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



Fraquemar
Résidence Atlantic, Imm K appt.n°2,
Cité Yacoub El Mansour, Rabat
Tel: (+212) 5 37 28 14 26, Fax: (+212) 5 37 28 14 29
E-mail: yvan.gravel@fraquemar.ma
Web: www.fraquemar.ma



MSI Conseil
148, Bd BAHMAD, Bureau N° 15, Belvédère,
Roches noires, Casablanca
Tel: (+212) 0522 40 90 09, Fax: (+212) 0522 40 90 08
E-mail: msiconseil1@gmail.com
Web: www.msiconseil.ma