

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

COFICAB Maroc

Mechanical sector

Context

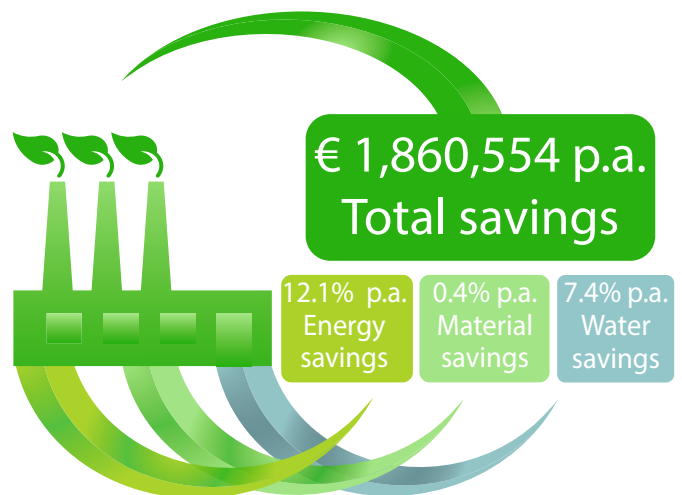
Number of employees: 305

Key products: Cables and Electrical Wires, Auto Parts, Wholesale Accessories.

Main markets: Local and international

COFICAB MOROCCO, established in 2001, is one of the main divisions of the ELLOUMI Group, specializing in the manufacture of electrical cables and wires for the automotive industry. The market leader, its greatest strength is to provide high quality products, optimize logistics and innovative services offering impeccable solutions for customer satisfaction. The company is ISO 9001/2000 (2006), ISO / TS 16949 certified and ensures the continuous improvement of its processes and its management system while respecting the environment.

Benefits



Graphic: UNIDO

The MED TEST II project has identified opportunities for total annual savings of € 1,860,554 in raw materials, water and energy for a projected investment of € 2,910,708. The average return on investment time for the identified RECP measures is 1.6 years. All the identified measures have been accepted by management and are being implemented.

Through the improvement and optimization of production and the installation of more efficient equipment, the measures implemented will reduce energy consumption by 12.1 %, water consumption by 7.4 % and raw materials by 0.4 %. The environmental benefits achieved through photovoltaic electricity production and several energy consumption optimization and solid waste management measures, will reduce annual expenses and decrease CO₂ emissions by 12.1% (1,631 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
Optimizing power consumption	217,229	57,647	3.8	-	303	Total: 1,631 t CO ₂ 2,349 m ³ waste water
Electricity production by photovoltaic self-consumption panels	355,143	66,538	5.4	-	854	
Energy and water management system	70,794	64,647	1.1	2,349 m ³ water	823	
ERP system, benchmarking and cost accounting	1,209,227	919,012	1.4	-	-	
Replacement of the wire drawing machine	1,058,315	752,710	1.5	81 t raw materials	239	
TOTAL	€ 2,910,708	€ 1,860,554	1.6	81 t raw materials 2,349 m³ water	2,219 MWh	

¹ Numbers based on production value from 2015

Optimizing power consumption

The replacement of direct-current motors by induction motors equipped with variable speed drives and phased replacement of electric motors by more efficient models will reduce power consumption. The optimization of contracted power, reconfiguration of electric charge, improvement of lighting performance by installation of LED appliances and heat insulation of the extruder heating collars will generate additional savings. The replacement of direct-current motors by induction motors equipped with variable speed drives and phased replacement of electric motors by more efficient models will reduce power consumption. The optimization of contracted power, reconfiguration of electric charge, improvement of lighting performance by installation of LED appliances and heat insulation of the extruder heating collars will generate additional savings.

Electricity production by photovoltaic self-consumption panels

The independent production of photovoltaic energy (496 kWp) covering 4.6% of the company's annual consumption.

Energy and water management system

The implementation of an electrical energy management system, to implement standard ISO 50001 on energy management will allow continuous improvement, optimization and control of processes, reduction of loss in non-produced outputs and better use of water resources.

ERP system, benchmarking and cost accounting

The implementation of an integrated computer system (ERP) with an analytical accounting module will generate considerable gains through the reliability of data, instantaneous information, transfer of information and real-time follow-up of production situation, customer service, purchasing, quality, management control and financial standing. The generalization of the common KPI Indicators to all the plants in the group will become a tool for measuring performance of each unit.

Replacement of wire drawing machine

Replacing the TF2 wire drawing machine with a TF8-type machine (up to 24 strands) will free up capacity on the other five current drawing machines, improve efficiency by 5% by generating energy savings and planning preventive maintenance.

For more information, contact:



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