

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.

Algeria

SPA Mami

Food and beverages sector

Context

Number of employees:	269
Key products:	Soft drinks and juice
Main markets:	Local and export
Management standards:	ISO 22000 v. 2005

Established in 1937 under the name SMACK SODA, the family business was re-established in 2003 as a stakeholder company "SPA MAMI". The company manufactures and markets soft drinks, non-carbonated and flavoured beverages and fruit juices.

“The Mami Spa affirms the company’s strong commitment to continued efforts to ensure improved energy efficiency and reduced environmental impacts, as well as associated costs.”

Kamel Addiche
Director General

Benefits



Graphic: UNIDO

The MED TEST II project identified a total annual savings resulting from RECP measures in raw materials, water and energy worth 25,059 euros. The identified RECP investments require an overall investment of 24,490 euros and have an average payback period of one year.

88 % of the identified measures have been implemented, based on a 65 % retention rate. Through the implementation of the identified RECP measures the economic gains will be 0.11 % on the purchase costs of goods (sugar and packaging) 6.26 % on water consumption costs, and 0.16 % on energy expenditures.

The environmental gains will result in a annual reduction of 36.4 t of CO₂ emissions and of 447 kg in plastic waste generation (Packaging). In addition to the actions identified during the course of the project, the company is reviewing the option of improving the production process of Mojito and Sangria beverages, which should bring additional savings.

Encouraged by the results of the TEST project, the company plans to integrate the MFCA tool into the company’s accounting management system and use the TEST methodology for the next exercise.

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
Energy efficiency	21,490	10,559	2	-	184	Total: 36 t CO ₂
PET 1 & PET 2 Line optimization	1,000	14,500	Immediate	10,000 m ³ water 40.2 t of raw materials 447 kg PET packaging	-	447 kg solid waste
TOTAL	€ 22,490	€ 25,059	0.9	40.6 t raw materials 10,000 m³ water	MWh	10,000 m ³ waste water

¹ Numbers based on production value from 2015

Energy efficiency

Two main actions are carried out under the project by SPA MAMI company for improvement of energy performance:

- The first is the revision of contracts with the energy provider. This made it possible to adjust contracts to actual consumption needs.
- The second is the organization of production programs to lower consumption in peak hours. This allowed the company to make financial gains in excess of 3,459 euros annually.

Other actions are under review: Installation of the capacitor banks and replacement of the CMC piston compressor by a 90-kW power screw compressor and maximum pressure of 16 bars. The annual economic gains from these measures would be 2,320 euros and 3,663 euros respectively.

PET 1 & PET 2 Line optimization

Focusing on CO₂ and raw material losses, this procedure involves establishing a pilot team "WASTAGE" for improvement of monoblocs maintenance, restoration of cooling units, improvement of the CO₂ standards. This action will have a positive effect to guarantee the quality of the finished product and stabilization of the process. The CO₂ loss is reduced by 60% on average and sugar by 30%. The total economic gain is 14,500 euros annually at an investment of 1,000 euros, which corresponds to an almost immediate payback period.

For more information, contact:



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