

*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

### Flash SPA

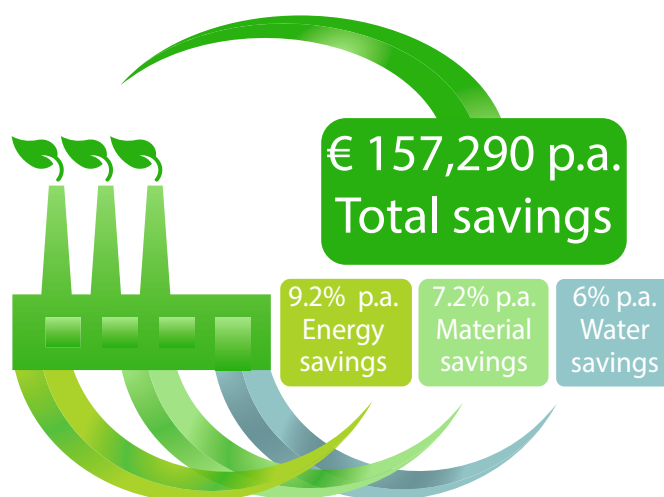
#### Food and beverages sector

#### Context

Number of employees:	165
Key products:	Fruity lollipops
Main markets:	Local
Management standards:	-

FLASH ALGERIE SPA is a family business founded in 1989 by the BOUMARAF brothers, for the production and marketing of Flash fruity lollipops. The production unit is located in the industrial zone of Oued-Smar in Algiers.

#### Benefits



Graphic: UNIDO

The implementation of the TEST approach within the Flash company has identified annual savings worth 157,290 euros for a total investment of only 5,357 euros. The return time on investment rate for these measures is immediate.

All the measures identified have been retained by the company and 92% have been implemented. The resource saving is 7.2% on raw material consumption and total packaging, water saving are 6%, and energy efficiency measures to reduce annual consumption by 9.15%.

Based on the MED TEST II project results, the company now has the basic elements to embark on an ISO 14001 or ISO 50001 certification process.

## Saving opportunities<sup>1</sup>

Action	Economic key figures			Resource savings & Environmental impacts		
	Investment euro	Savings euro / Yr.	PBP Yr.	per year		
Optimization of blending and pasteurization of ingredients	0	37,064	Immediate	338 m <sup>3</sup> water 51.3 t raw materials	36	Total:  1.85 t CO <sub>2</sub>  2,056 m <sup>3</sup> waste water
Optimization of the lollipop film packaging sealing machine	0	102,458	Immediate	1,688 m <sup>3</sup> water 115 t raw materials	55	
Welding of pipes	1,786	6,750	0.3	30 m <sup>3</sup> water	-	
Energy efficiency	3,571	11,018	0.3	-	10	
<b>TOTAL</b>	<b>€ 5, 357</b>	<b>€ 157,290</b>	<b>Marginal</b>	<b>166.3 t raw materials 2,056 m<sup>3</sup> water</b>	<b>MWh</b>	

<sup>1</sup> Numbers based on production value from 2016

### Optimization of blending and pasteurization of ingredients

By eliminating the mixing tank in a high traffic area (opening and closing doors), the production saves on one hand the raw material in the form of deposits in the bottom of tanks and on the other hand secures its product by reducing the cross-contamination risks. This measure saves 14.23 t of raw materials and 11 MWh energy annually. In addition, the decrease of pasteurization temperature from 95 ° C to 80 ° C allows us to save energy consumption by 25.2 MWh annually.

### Optimization of the lollipop film packaging sealing machine

This action relates to the proper calibration of the sealing machine and its preventive maintenance. Differences in wastage (raw material, water, packaging) were recorded for a month depending on the teams. Savings of 1,688 m<sup>3</sup> water, 71.15 t of raw materials, and 43.4 t of packaging annually can be offset without any investment.

### Welding of pipes

This is to eliminate the waste associated with water leaks located in some pipes. This action saves 30 m<sup>3</sup> water annually for an investment of 1,786 euros.

### Energy efficiency

The main measures identified as part of energy efficiency are:

- Reduction of the power made available, PMD and modification of Sonelgaz tariff;
- DMD gas rate reduction made available;
- Spread of consumption from peak hours to off-peak hours;
- Elimination of the transformer running at idle and installation of capacitor banks.

The total energy gain is 9.6 MWh and a saving of 11,018 euros annually.

## 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



**Le Centre National des Technologies de Production plus Propre (C.N.T.P.P)**  
1, rue Hamlet Said  
Hussein Dey – Alger – Algeria  
Telephone : + 213 (0) 21 77 83 85,  
Fax : + 213 (0) 21 77 83 87  
E-mail : tpp@cntppdz.com  
Web : www.cntppdz.com