

Oum Azza Valorization Center

An industrial and social excellency

National Ambition Project

For more than 20 years, PIZZORNO Environnement is present in Morocco all over the waste trades, from waste collection to property, valorization of treatment. Being an actor known in the kingdom, a number of regional capitals delegated their public service of waste management to different branches of the Group operating under the Moroccan law.

Attentive listening of needs, adaptability to specificities of each territory, making adapted means available such as the signature of PIZZORNO Environnement in Morocco.

Key figures

Treatment capacity: 850 000T/year

Opening: 2007

Surface area: 110 ha

Staff:

Valorization center: 165

Cooperative: 200

Contract period: 20 years

Valorization objective 50%

The project of Oum Azza valorization center is born out of the determination of the King Mohammed VI to eradicate non controlled landfills that are the origin of environmental and health pollutions.

Inaugurated by his Majesty, the center meets the objectives of the PNDM aimed at improving the waste treatment conditions in the country. The construction of a new center has ; therefore, enabled to close landfills in Rabat (Akreuch), Salé and Ain Attik. It represents today a real technological image of the know-how of the operating company TEODEM.

RABAT CITY OF LIGHT

The opening of the center is in line with the ambitious program for the development of the Bouregreg valley and widely participates in the engaged policy of « Rabat City of Light, Cultural Capital ».

A respectful environmental technology

In Oum Azza, wastes are treated in compliance with the highest international and environmental standards. TEODEM put all its expertise in the development of technologies serving the environment; hence, valorizing the two effluents produced through waste storage: leachate and biogas.

Leachate: under the action of both rainwater and natural fermentation, waste produces a liquid called "Leachate". Rich in organic matters, it should be collected and treated. In Oum Azza center, the treatment of the leachate combines several techniques:

- Natural evaporation
- Forced evaporation
- Reverse osmosis
- Bacteriological treatment

Biogas: originating from the waste biological degradation process, this gas possesses a high calorific and energetic potential. Captured from the waste by a grid, biogas is treated by a torchiere. Setting up of this equipment limiting the emissions of greenhouse gas is included in the MDP project (Mechanism of Clean Development), a cooperative mechanism established by the Protocol of Kyoto (1997).

An industrial reference

In Oum Azza, TEODEM operates the most important center of valorization of waste in North Africa. This facility receives 850 000t/year of waste generated by 13 communes, in the region of Rabat-Sale-Skhirat. Its creation contributed to wastes reasonable, ecological, and economic management.

In total, more than 220 MDh were invested in the construction of 3 transfer quays in Sale, Rabat and Temara, storage cells, installations for treatment of effluents and sorting lines. Operation management and infrastructures quality were recognized by the world bank<

Certification

Since October 2016, the valorization center and the 3 transfer quays of Oum Azza are ISO 14001 certified. Being a tool for ensuring environmental performance, this certification recognizes that the international standards regarding the environmental risks are mastered by TEODEM.

Recovering materials: a referral center

Since 2010, Oum Azza Center disposes of a sorting unit that allows the recycling of matters such as paper, metals, plastics. A facility which is unique in the kingdom of Morocco, with a social, industrial, and environmental dimension, it participates to the reduction of the volume of waste intended for treatment. 200 sorters are operating in the 2 sorting lines of this cooperative facility and they extract more than 5000 tons per year of recoverable materials.

An integrated social responsibility

The opening of Oum Azza center resulted in the closing of the former landfill of Akreuch on which hundreds of informal sorters ensure their living through the selling of recoverable materials.

Aware of the social impact of the opening of this new center and desirous of encouraging the policy of recovering materials, TEODEM engaged in involving and integrating these populations in its functioning

By creating its first sorting center in the kingdom of Morocco, the technical and economic conditions enabled the concretization of a project associating social accountability, economic realism, and environment protection.

Since then, the ex-waste pickers have become workers-sorters and formed the workers cooperative ATTAWAFOUK, for which TEODEM designed and equipped the center of 2 sorting lines. Today, the 200 persons working in it finance themselves and earn their living from selling materials recovered during sorting.

The re-socialization actions (children schooling, combating illiteracy training, ...) and professionalization of these sorters were introduced to the working environment through trainings on security and the technical aspects of this type of work.

Valorization 50% objective

Composting:

80000 tons per year of recovered green waste

By organizing the separate collection of green waste, the urban commune of Rabat recovers more than 80000 tons per year of green waste collected over its territory. Once received in the center, the waste undergoes a natural biological process of degradation transforming it into good quality compost. In collaboration with Elephant Vert Company, this compost is sold as a natural fertilizer for agricultural purposes.

Generating energy out of waste, the first of its kind in Morocco

Producing energy from waste is becoming today a reality. Through an innovating partnership with Lafarge Holcim Group, each year, more than 90000 tons of wastes are used to generate energy. Originating from Oum Azza sorting center, wastes are used as solid recovered fuel (CSR/SRF).

This fuel supplies several cement Factory in the Kingdom and participates to creating a national chain. For TEODEM, the production of CSR is an illustration of the future challenges of waste treatment and recovery. Proposing a source of local energy that substitutes itself and preserves fossil energy.

Under study:

Production of Electricity

Within this leading spirit that enables Oum Azza treatment center to develop more in this field of valorizing waste, TEODEM wishes to transform biogas captured in its storage facility into electricity. Today, it is captured and burned by torchiere, this effluent may become in the future a source of renewable energy, electricity, and be distributed on the national network.