

## A first waste recovery plant in Sharjah

Geotechnical design

2018 – On-going



UNITED ARAB  
EMIRATES - Sharjah

Client

CNIM

Partner

SETEC ENERGIE  
ENVIRONNEMENT

Terrasol fees

38 500 €

Owner

BEE'AH



### The Project

The emirate of Sharjah created in 2007 a municipal waste management company - BEE'AH (a public-private partnership) - which chose CNIM to design and build the first waste-to-energy plant of the United Arab Emirates.

The plant will ultimately convert 300,000 tons of waste per year into 30 MW. The electricity produced will be sent out to Sharjah (except for the part used for the specific needs of the plant).

### Our Services

TERRASOL works on behalf of CNIM, and as a subcontractor of SETEC ENERGIE ENVIRONNEMENT, firstly carrying out a geotechnical diagnosis mission, which made it possible to propose optimizations of the structures foundations.

TERRASOL then participated in the detailed design of this project. This includes the geotechnical design of the foundations of the power plant's major structures (boiler, turbine foundation, waste storage area) and the study of the interactions between the structures supported by deep foundations and those built on rafts (deformation estimation, taking into account the effects of the negative skin friction on the piles).

TERRASOL also provides on-site technical supervision at the beginning of the deep foundation works in May 2019.

### Key features

- Geotechnical diagnostic mission with optimization of the structures foundations
- Detailed design
- On-site technical supervision at the beginning of the works