

INTEGRATED PLATFORM FOR URBAN WASTE TREATMENT TO BE LOCATED IN BRINDISI

The urban waste platform is expected to produce biomethane and quality compost from the OFMSW and RDF and recycled materials from the residual fraction of MSW. The treatment and recycling platform is organized into two independent sections, ones for the OFMSW and the other one for the residual waste treatment.

The plant has a maximum treatment capacity of 54,000 t/year for the OFMSW section and 100,000 t/year for the residual fraction of MSW and the dry fractions of the separated collection.

The project aims to assure the waste management operations R3 - R4 - R5 - R13- D8 - D13 - D15 according to Legislative Decree 152/2006 (as indicated in Annex B and C of the fourth part).

The Plant activities can be divided as follows:

A. OFMSW TREATMENT SECTION

- reception and storage of the incoming waste
- mechanical pre-treatment
- anaerobic digestion
- digested post-treatment
- composting process
- biogas treatment and biomethane production

B. RESIDUAL WASTE TREATMENT AND RECOVERY SECTION

- reception and storage of the incoming waste
- aerobic stabilization into biocells
- screening and disposal of the stabilized undersize
- separation of the recyclable materials
- RDF refining and pressing

The biologic treatment of the OFMSW produces a high-quality compost equal to about 8,400 t/year and biomethane for about 390 Sm³/h.

From the treatment section of the residual waste fraction and the dry fractions of the separated collection, it is obtained a stabilized organic fraction (O.F) of about 32,900 t/year, a RDF equal to approximately 17,300 t / year, ferrous and non-ferrous recycled metals equal to 1,600 t/year and 750 t/year and recyclable plastics equal to approximately 11,500 t /year.



DESIGN DATA

Public client Ager Puglia
Type of service Definitive design
Project cost € 37.081.730,75
Location Brindisi
Tot area 69.601 m²
Design period May 2020

TECHNICAL DATA

OFMSW TREATMENT SECTION

Capacity 46.700 t/year
Process length 90 days
Anaerobic digester 2 of 1.500 m³ each
Bio-cells for aerobic stabilization 7 of 120 m³ each
Maturation platform 6 of 444 m³ each
Compost produced 8.400 t/year
Biomethane produced 430 Sm³/h

MSW TREATMENT SECTION

Capacity 44.300 t/year
Stabilization process length 14 days
Bio-cells anaerobic 10 of 530 m³ each
Post-treatments for undersize compound induced currents separator (ED current) and iron separator
Post-treatments for oversize compound aeraulic separator-optical separators
Final treatments secondary shredding, pressing of the RDF and the recycled plastics in bales
Bio stabilized fraction produced 32.900 t/year
Recycled plastics produced 5.970 t/year
Recycled metals produced 2.670 t/year