



# 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 Sm<sup>3</sup>/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 m<sup>2</sup>  
**Design period** May 2020

## TECHNICAL DATA

### OFMSW TREATMENT SECTION

**Capacity:** 46.700 t/year  
**Process length:** 90 days  
**Anaerobic digester:** 2 of 1.500 m<sup>3</sup> each  
**Bio-cells for aerobic stabilization:** 7 of 120 m<sup>3</sup> each  
**Maturation platform:** 6 of 444 m<sup>3</sup> each  
**Compost produced:** 8.400 t/year  
**Biomethane produced:** 430 Sm<sup>3</sup>/h

### MSW TREATMENT SECTION

**Capacity:** 44.300 t/year  
**Stabilization process length:** 14 days  
**Bio-cells anaerobic:** 10 of 530 m<sup>3</sup> 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