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LIFE10 ENV/GR/605

Composting of source separated biowaste in the MBT plant of EDSNA

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MECHANICAL AND BIOLOGICAL TREATMENT PLANT, ANO LIOSIA



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- The MBT plant is part of Attica's solid waste management plan.
- The solid waste processing facility is located in the municipality of Ano Liossia, West Attica. The plant occupies 45 acres including four buildings that comprises 12 acres.
- The processing capacity of MBT plant is 1.200 tons of MSW per day.



INTRODUCTION TO MECHANICAL AND BIOLOGICAL TREATMENT PLANT



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WASTE FEED

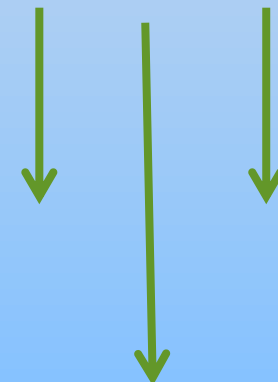
GREEN WASTE



SRF

Fe, Al

RESIDUALS



LANDFILL



RESIDUALS

COMPOST

INTRODUCTION TO MECHANICAL AND BIOLOGICAL TREATMENT PLANT



INTRODUCTION TO MECHANICAL AND BIOLOGICAL TREATMENT PLANT



NOVEMBER 2012, LAUNCH OF SOURCE SEPARATED BIOWASTE COLLECTION IN KIFISSIA – DOOR TO DOOR COLLECTION



30lt bins outside houses



Collection with dedicated vehicles
(continuous monitoring through GPS) and
trained personnel



OCTOBER 2013, LAUNCH OF SOURCE SEPARATED BIOWASTE COLLECTION IN ATHENS – KERBSIDE COLLECTION



660lt και 1.100lt bins outside block of flats and restaurants/catering facilities

Collection with dedicated vehicles (continuous monitoring through GPS) and trained personnel



RECEPTION FACILITIES OF SOURCE SEPARATED BIOWASTE AT MECHANICAL & BIOLOGICAL TREATMENT PLANT



Biowaste Reception Area



Biowaste Feeder (manufactured for Athens Biowaste)



RECEPTION OF SOURCE SEPARATED BIOWASTE AT MECHANICAL & BIOLOGICAL TREATMENT PLANT



Reception of Biowaste



Remove of impurities (plastic bags, packages, etc)



RECEPTION OF SOURCE SEPARATED BIOWASTE AT MECHANICAL & BIOLOGICAL TREATMENT PLANT



Feeding of Biowaste into the feeder



COMPOSTING PROCESS



Biowaste conveyor belt

Biowaste composting channel



COMPOSTING PROCESS



Final product - Compost



**Refinate : Impurities removal
(Rotary screens – Trommels,
Gravimetric separation beds,
Vibration screens)**

BIOWASTE QUALITY CONTROL COLLABORATION OF EDSNA & NTUA



BIOWASTE QUALITY CONTROL COLLABORATION OF EDSNA & NTUA



A series of laboratory tests to control and monitor the composting process and to characterise quality of the produced compost (containing impurities, pH, heavymetals, pathogens) were carried out and appropriate software developed to correlate the quality of compost to the collection and processing of biowaste.



MBT Quality Control Laboratory



NTUA, Chemical Engineers Laboratory

OPPORTUNITIES



- Expansion of source separated biowaste collection in all Attica.
- Production of high quality compost in the existing Mechanical Biological Plant (Ano Liosia).
- Compliance with Greek Law 4042/2012 targets (EU 2008/98/EC)
- Less waste to landfill.



ΔΗΜΟΣ ΑΘΗΝΑΙΩΝ



ΔΗΜΟΣ ΚΗΦΙΣΙΑΣ



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