



PERIODIC DIGESTORS FOR WET INDIFFERENTIATED WASTE BY NON-NOBLE INERTS

The MARCOPOLO GROUP with the PAN... Companies has developed / patented a dozen projects MES-BAP&BH (patent) Marcopolo Ecotone System Periodic Anaerobic Bioreactor called Biomethane / Humus - ZERO WASTE, these are periodic annual digesters with flat production of electricity, thermal energy, biomethane, compost.

A real novelty that, with low costs, makes up for the landfill and compensates for those plants (waste-to-energy plants - sorters - composting) that up to now have not solved the problems, on the contrary they have multiplied them with: odors, pollution and no longer sustainable costs.

BAP & BH is the perennial solution (hundreds of years) with simplicity! With low costs! And finally, the microbes work!

These plants can be sized from 50,000 to 500,000 inhabitants and are to be built near the cities to have greater benefits.



ADVANTAGES:

- 1.** In tourist areas and islands, the problem of distortion in the production of waste both in quantity and quality is solved due to tourism that increases and decreases in different periods of the year, in large cities and / or industrial areas it recovers the land of factories undergoing decommissioning, especially unsanitary ones (petrochemical, chemical, steel, etc.);
- 2.** the production of leachate to be purified which causes difficulties-costs-risks is avoided, so that the little leachate produced becomes process liquid;
- 3.** precise quantities of zootechnical and agro-industrial organic sewage can be withdrawn to make up the process liquid, eliminating purification costs;
- 4.** a stable and continuous energy supply is obtained for self-consumption, both electrical and thermal;
- 5.** the consequent negativity of landfills, ranging from landscape degradation to pollution of the atmosphere, subsoil, river courses and the sea, is avoided, as well as 30 years postmortems are avoided...;
- 6.** the old concept of incinerators, aerobic composting and forced sorting is overcome;
- 7.** building one or more BAP & BH around the city avoids the transport of waste outside to increasingly distant landfills with vehicles and personnel dedicated to collection which generate very high costs for the communities;
- 8.** the construction of large waste disposal centers that would receive waste from other communities hundreds of km away in their own disposal area is avoided; this with a view to decentralization and enhancement of the waste piloted near the production area and in a short chain between a maximum of 50-70 km;
- 9.** due to its ideal location, it favors the recovery of abandoned industrial areas or ones meant to be disposed of;
- 10.** minimum environmental impact (it fits into the landscape as a green oasis as 10/12 of the surface are cultivated in green);
- 11.** profitability (reaching the maximum recovery of available biogas with minimum investment costs, as well as recovering 100% of the inert materials at the end of the cycle);
- 12.** creation of permanent jobs about 16 internal employees (in addition to favoring induced activities and generating agricultural activities, such as greenhouses, crops, etc.);
- 13.** high degree of acceptability (no odor is emitted, papers and plastics do not disperse with the wind in the nearby fields, no birds dependent on waste and minimal visual impact so that there is no disturbance for the community);
- 14.** production of electricity and green methane to supply methane and electric vehicles in the area and in transit in situ, with a special distributor.