



BIOGAS LANDFILL

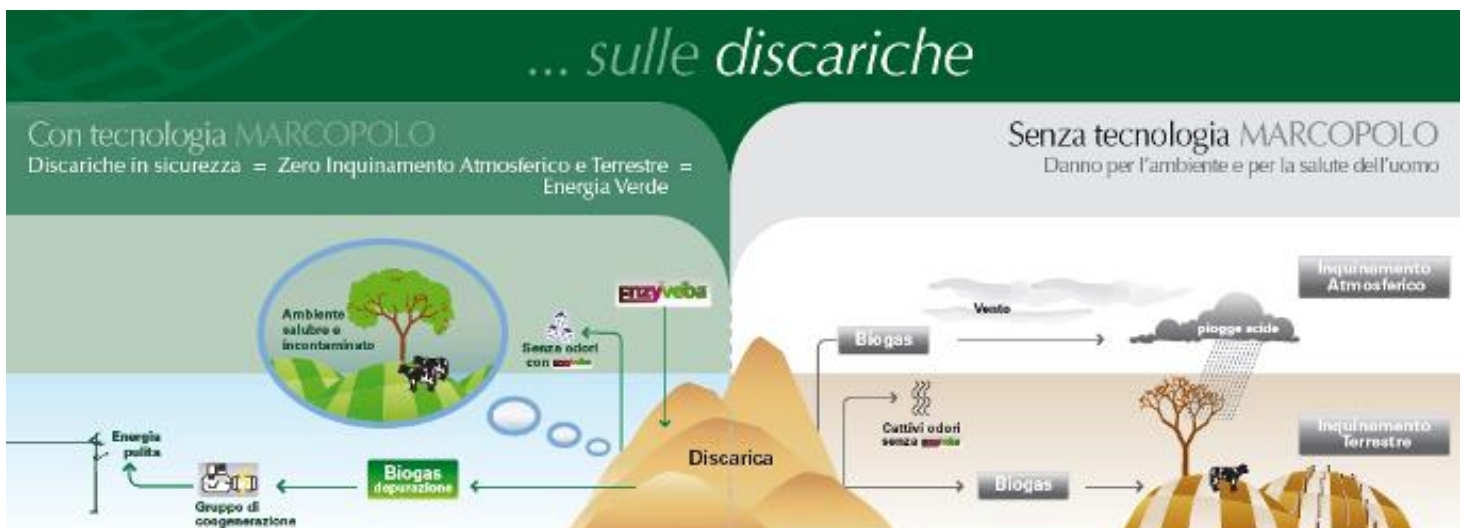
MARCOPOLO REMEDIATION AND SECURING LANDFILLS WITH THE DESTRUCTION OF THE HARMFUL BIOGAS PRODUCED USING IT AS A FUEL TO PRODUCE GREEN ENERGY ACTIVITY.

Cleaning the air from what is one of the worst causes of acid rain, implementing the safety of landfills after they have been filled with solid urban waste, by capturing the toxic and harmful biogas that is produced for about thirty years during the anaerobic degradation of waste and its destruction using it as a fuel to produce green energy. Landfill biogas with over 60 MW built and managed on over 50 landfills, producing the following environmental and social benefits.



HOURLY:

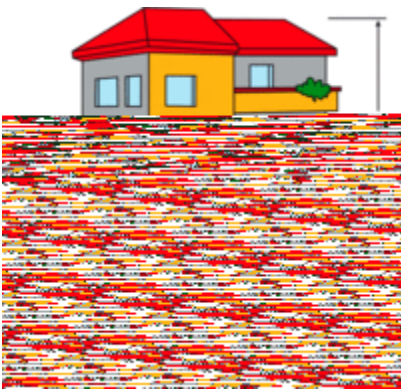
- biogas destroyed: 160 MDL / Nm³ equivalent to 160 buildings;
- (1,000 meters high, 1,000 meters wide and 1,000 meters long), equal to a 1 mm thick gaseous sheet that every hour deposits on all building and agricultural surfaces of 160,000 hectares;
- CO₂ avoided now: 274 tons;
- oil saved now: 7,83Mt;
- trees saved now: 190;
- private homes powered by the energy produced: 85,000.



Without **MARCOPOLO** technology, the biogas, toxic and harmful, migrates into the atmosphere and into the subsoil, polluting; chemicals are dispersed into the atmosphere and the so-called "volatile acids" fall on crops and homes even hundreds of kilometers away. Thanks to the safety of landfills, **MARCOPOLO** in addition to producing alternative green energy, reclaims the environment while preserving, from this front, the sanitary quality of agricultural and typical local products. Furthermore, thanks to the inoculation of non-genetically modified microorganisms, "molds, bacteria and fungi" produced by the company, not only does the organic degradation of the waste accelerate, but the foul-smelling fumes present in landfills are reduced, as this product is a natural microbiological bio activator, the result of years of research with leading Italian Universities.

What is BIOGAS?

The decomposition of waste present in landfills produces a gas rich in methane, commonly called biogas. This gas represents a problem but at the same time a resource, if well used. It must be captured and can be used as fuel in cogeneration plants to produce electrical and thermal energy to be fed into the network and thermal energy to be used in any district heating systems. If energy recovery is not possible, it can be disposed of by controlled combustion. MARCOPOLO ENVIRONMENTAL GROUP provides a double service: it produces green energy, subtracting it from the fossil, destroying a pollutant such as biogas.



ENVIRONMENTAL AND SOCIAL ADVANTAGES that derive from it EVERY HOUR

- Destruction of 12,500 m³ of biogas, equivalent to a building, 50 m high, 10 m long and 25 m deep, and a gaseous sheet 1 mm thick, which is deposited on 1250 hectares every hour of building and agricultural land
- Abatement of 175 tons of CO₂ EVERY HOUR
- Saving of 25 barrels of oil EVERY HOUR
- Powering about 85,000 private homes EVERY HOUR
- Saving 121 trees EVERY HOUR