S WET DIFFERENTIATED WASTE BIOMASS

PROJECT BEBSSS!! ® ZERO WASTE (Good And Organic Only If Healthy)!! ® - LNG / HUMUS

It encompasses all the philosophy of the MEG and the PEG to obtain a closed-cycle organic that enhances the waste from door-to-door recycling (FORSU), agro-industrial waste and by-products, expired and unsold from large-scale distribution, fruit and vegetable markets, slaughterhouses, agricultural waste and livestock manure, an appropriate mix to produce biofuels (biomethane LNG), trigeneration and organic amendments (humus), technical CO2, hydrogen, building products, thus obtaining ZERO WASTE FROM TOTAL ENHANCEMENT.

This is a consolidated technology to give a serious answer in space, time and low costs to this large amount of wet waste that today covers many kilometers on European motorways. These plants are sized from 60,000 to 240,000 tons / year, built with a group of leading technology suppliers.



The "Project **BEBSSS!!**® **ZERO WASTE** (Good And Organic Only If Healthy!! ®)" energy recovery and enhancement plants, was conceived in 1978 with the transformation of 2,000 calves' dejections into earthworm humus and then expanded in 1982 with the production of digestate to be used as food for "rubellus" earthworms, specially imported by the Ohio (USA) faculty of agriculture where the founder of MEG, Antonio Bertolotto, conceived what was later achieved with Ciclo Srl.

Il Project **BEBSSS!!**[®] **ZERO WASTE** was born from the partnership between PEG and Marcopolo Engineering S.p.A. and takes the form of the construction of plants for the recovery and energy enhancement of the wet fractions of urban, agro-industrial, agricultural and livestock waste, fully financed through New-Company, specifically set up together with local stakeholders.

It is obtained only by involving the seven production sectors and the distributors of food products, namely:

- the agricultural sector of herbaceous, cereal and horticultural crops
- the animal feed industry
- the intensive animal breeding sector
- the agricultural sector of tree crops (viticulture, fruit growing and olive growing)
- the industrial, agri-food and slaughterhouses sectors
- the large organized distribution sector
- the made in Italy catering sector that is confronted every day with Italian artistic, cultural and environmental tourism.

Mission of the BEBSSS® project

Contribute to the creation of a cycle environmentally and economically aimed at decarbonization, virtuous in the clean management of biomass (from cities to bioagriculture with humus and back, with healthy food products);

- Promote the healthy living of citizens and operators;
- Making cities autonomous in the disposal of the wet fraction;
- Producing alternative fuels to fossils (biomethane LNG) and CSS (Secondary Solid Fuel)



With the BEBSSS, we have the ambition to mitigate climate change, producing recyclable materials, biomethane, renewable energy, humus for organic farming that will contribute to the growing demand for "HEALTHY" food, enhancing the good biomass that are the emerging resources from the largest free-pit mines, such as urban agglomerations and agricultural / livestock / agri-food companies.



The "BEBSSS!! [®] **ZERO WASTE PROJECT"** as well as being among the protagonists of decarbonization, (Italy with the Integrated Energy and Climate Plan "PNIEC" is committed to reducing fossil CO2 by 55% in 10 years) does so in the context of circular economic supply chains which determine a great economic recovery by contributing to a clean management of biomass that passes «from cities to bio-agriculture e returns to cities with healthy food products ", becoming a fundamental action the healthy living of citizens, operators and tourists.



Each BEBSSS!! [®] plant will produce approx. 16,800 t/y of soil improver produced by 60,000t/y of organic waste together with a biological quantity of selected animal waste and with special inoculations in composting and ripening phase, as well as approx. 24,000 t / y of structuring greenery.

From these approx. 85,000 t / y of biomass will produce approx. 16,800 t / y of soil improver, which will be specialized for various extensive-intensive crops (cereals and fodder), approx. 3,360 Ha / year with 500 gr / m2, whose soils are those with the highest risk of sterility.

In addition to Biomethane and Humus, with the secondary derivatives the plant produces:

- From CO2 the technical CO2;
- Microalgae are grown from CO2;
- From the inert waste calculated from 4 to 12% we produce products for green building, CSS, soundproof and thermal panels for construction (Marcopolo's Know How), plastic granule for produce pallets or other useful ones, cellulose for draining asphalts.

THE NUMBERS

BEBSSS plants are designed with four quantitative entities of treated biomass:

- **60,000** TON of Organic Waste + **10,000** TON of manure + **10,000** TON of by-products;
- 120,000 TON of Organic Waste + 20,000 TON of manure + 20,000 TON of byproducts;
- 240,000 TON of Organic Waste + 40,000 TON of manure + 40,000 TON of byproducts;

• DRY-WET MIX WASTE:

120,000 TON DRY (plastic-paper-fabrics) + **120,000** Organic Waste + **20,000** di dejections + **20,000** by-products.

