

Media Release, June 6th, 2016

Europe's Largest Dry Anaerobic Digestion Plant to Use Kompogas®

Hitachi Zosen Inova (HZI) delivers its Kompogas® technology for Europe's largest biogas plant for dry anaerobic digestion. The facility, built in the north of Italy, will process approximately 100,000 tonnes of organic municipal solid waste per year. The region around Bologna will benefit from the products generated by this process.

Europe's largest biowaste dry anaerobic digestion plant is to be constructed under the lead of the established Italian company Cesaro Mac. Import. As the exclusive partner of Kompogas® in Italy, Cesaro Mac. Import will be using the tried-and-trusted dry fermentation technology provided by Hitachi Zosen Inova (HZI). The core module comprising horizontal plug-flow digesters, feed, and discharger, coupled with a process monitoring system and maintenance services, has already proven its worth several times over in collaboration between the two companies: "Given that we already successfully use the Kompogas® technology at the plants in Faedo (TN), Novi Ligure (AL), and Nera Montoro (TR), there was no question about using this technology on this key project as well," said Pietro Cesaro, Sales General Manager of Cesaro Mac. Import. In the future, HERAmbiente SpA, the largest waste treatment company in Italy, will operate the plant. HERAmbiente SpA was looking for the most efficient and most economical solution for treating and processing the organic fraction of collected household waste in the plant of Sant'Agata Bolognese. For this reason, it invited a very selective tender, in which Cesaro Mac. Import and HZI's Kompogas® technology offered the most convincing proposal, both technologically and economically.

Precise planning

A total of four PF1800 steel digesters are to be erected on the site of the existing composting facility of Nuova Geovis SpA. For HZI, this delivery for a project for one of the leading waste treatment companies in Italy marks a new milestone. "We see the realization of this project together with Cesaro Mac. Import as a vote of confidence in HZI's positioning in the market as a supplier of the first-class Kompogas® technology," said Hitachi Zosen Inova CEO Franz-Josef Mengede. He added that the planning phase centered also on determining the most effective means of construction to achieve the ideal placement of the digesters in the limited space available on the site. "Together we managed to address both the local circumstances and the specific needs of the client," said Pietro Cesaro, Cesaro Mac. Import's Commercial Director, about the successful collaboration.

Adding value for the region

The four Kompogas® steel digesters will in future process 100,000 tonnes of biowaste (FORSU) per year, so producing biogas and high-quality compost. 14,287,000 Nm³/a of biogas or 710,500 MWh/a net will be fed into the grid. This will benefit, among others, the surrounding municipalities and also Bologna's public transport company, which will use the generated biogas to fuel its fleet. By way of comparison, the volumes produced will thus be sufficient for a car to drive around the earth 1,996 times or to heat some 5,000 households. Meanwhile the 30,000 tonnes of quality compost produced in the presswater-free plant will be sold to farms and garden centers in the region.

After receiving all the building permits required, the initial building work is set to begin in summer 2016, with the construction for the core module delivered by HZI scheduled to start in fall 2016.

Factsheet

End Client	HERAmbiente SpA, Bologna Share capital	75 % Gruppo HERA EUR 271,148,000
HZI Client	CESARO MAC. IMPORT SpA, Eraclea	100% family owned
Input Material	- Organic fraction of municipal solid waste collected separately (OFMSW)	100,000 t/a
	- Structure material	12,000 t/a
Digester	- 4x PF1800	Steel digester
Capacity	- OFMSW and structure material	102,000 t/a
Yields	- Biogas	14,287,000 Nm ³ /a
	- Energy content in biogas	71.5 GWh/a
	- Compost	30,000 t/a

About Cesaro Mac. Import

Cesaro Mac. Import is a family company based in the northeast of Italy, close to Venice. The core business of Cesaro Mac. Import is the environment. The customers of Cesaro Mac. Import are waste management companies, composting and/or AD facilities and companies involved in the recycling business. Cesaro Mac. Import provides a wide range of tailored solutions to its customers, from single machinery to complete turnkey plants. Thanks to its well established team Cesaro Mac. Import assists its customers in each phase, from designing to post-sales. Through its highly qualified technical team Cesaro Mac Import can provide its customers: 24/7 telephone assistance, maintenance in its workshop or at the customer site, using its 11 service vans and service partners in Italy and abroad. Cesaro Mac Import has been playing a key role in the waste field in Italy since 1985. Thanks to the cooperation with HZI, Cesaro Mac Import can now offer a very high quality product to its customers for transforming waste to energy.

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About Hitachi Zosen Inova

Zurich-based Hitachi Zosen Inova (HZI) is a global leader in energy from waste (EfW), operating as part of the Hitachi Zosen Corporation Group. Formed from the former Von Roll Inova, HZI acts as an engineering, procurement and construction (EPC) contractor delivering complete turnkey plants and system solutions for thermal and biological EfW recovery. Its solutions are based on efficient and environmentally sound technology, are thoroughly tested, can be flexibly adapted to user requirements, and cover the entire plant life cycle. The company's customers range from experienced waste management companies to up-and-coming partners in new markets worldwide. HZI's innovative and reliable waste and flue gas treatment solutions have been part of over 600 reference projects delivered since 1933. To find out more about HZI, please visit www.hz-inova.com

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