WASTE: 100% SUCCESS IN TEST ON THE USE OF BIODEGRADABLE CARRIER BAGS IN ANAEROBIC DIGESTION PLANTS IN GERMANY

Novara, 3 May 2017 – Novamont commissioned IGlux Witzenhausen GmbH and Witzenhausen-Institut GmbH to conduct a scientific study into the behaviour of biodegradable carrier bags made from MATER-BI – the bioplastic made by Novamont – in German anaerobic digestion plants.

The use of biodegradable bags made from MATER-BI was tested in a procedure which encompassed the entire process using equipment made by four different companies: Kompogas, Thoeni, Bekon and WTT.

The bags were monitored during pre-treatment, anaerobic digestion, post-composting and maturation at each plant. The percentage by weight of MATER-BI in the input material was between 3.5% and 3.8%. Degradation began during the anaerobic stage and was completed during composting. In total the process took between five and ten weeks, depending on the plant. No MATER-BI residue was found in any of the samples examined at the end of the test, demonstrating that it had completely degraded in all four plants.

The test was commissioned in Germany, where organic waste plays a significant role in the national renewable energy plan and is increasingly used to produce biogas. Efficient interception of this type of waste is therefore crucial for recovering the most energy-rich component, namely kitchen waste. At present, however, even where separate collection of organic waste is in place, studies show that a significant percentage of organic waste is still sent to landfill. This explains increased usage of carrier bags made from compostable bioplastic, with users convinced of their practicality and hygiene.

The test was entirely successful, with complete degradation of MATER-BI carrier bags within the time normally taken for the process at all four plants, which are representative of the majority of anaerobic digestion facilities employed to process organic waste in Germany, eliminating any reservations about use of the bags.

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The Novamont Group is a leader in the development and production of bioplastics and biochemicals, with 600 staff, a turnover of €170 million in 2015 and constant investments in R&D (6.4% of turnover in 2015, 20% of dedicated staff). It holds around 1,000 patents and operates in Germany, Benelux, Scandinavia, Denmark, the United Kingdom, France, the United States, Canada, Australia, New Zealand, China and Japan.

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