

The production of biogas in accordance with the circular principle



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The 14th Austrian Biogas Congress 'biogas 18' took place in Linz on 11 and 12 December and showcased the latest technical developments in the biogas sector, their wide application potentials and the role biogas plays in the changing energy landscape. Dr Guntram Bock, Managing Director of the Austrian environmental technology start-up PÖTTINGER Fermenter, gave a talk on the process of dry fermentation as a complementary approach for biogas production as well as the ecologically and economically viable utilisation of organic raw materials with regard to a sustainable recycling infrastructure.

"We are delighted to have the opportunity to present our vision of a sustainable recycling infrastructure to the specialist audience at the Biogas Congress '18. We truly believe in the potential of dry fermentation for alternative energy production – from the viewpoint of ensuring both climate protection and economic goals," says Dr Guntram Bock.

Effective use of the potential of organic residues

Under the title 'The production of biogas in accordance with the circulation principle', Dr Guntram Bock explained how energy and raw compost can be produced in a climate-neutral way within three weeks from biogenic waste with a high dry content – such as green waste, organic and municipal waste or agriculture waste – in a fermenter container using the 3A-Procedure. The energy can be used in the form of biogas, heat and green electricity, as well as biofuel (LNG). Any remaining material from the fermenters can then be fully processed and made into high-quality compost and used as a humus fertiliser for soil application – thereby completing the cycle of materials in a sustainable manner.

The modular, container-based fermentation system from PÖTTINGER, boasting an annual throughput of between 1,000 and 5,000 t, is individually scalable and can be adapted to a wide range of demands. Its integration into existing wet fermentation plants is also possible and makes sense wherever sufficient dry material is generated.

Biogas – a key topic for the future

As every year, the industry meeting organised by the Compost and Biogas Association Austria in early December attracted top-level guests. In addition to PÖTTINGER and other industry speakers, numerous representatives of political and scientific bodies were present, including the Federal Ministry for Sustainability and Tourism, the Upper Austrian Chamber of Commerce and Agriculture, the Austrian Energy Agency and two universities. The event focussed on professional exchange regarding key aspects of biogas: What role should biogas and biometane play in the changing energy landscape and in the restructuring of the energy market in the near future? Which scenarios are realistic by 2030 and 2050? And: What research and development needs to be done in the biogas sector?

The enormous interest of everyone at the Biogas Congress is explained against a background of climate change and the search for alternatives to fossil fuels. Since biogas is a highly efficient energy source that can be converted directly into green electricity, heat or other forms of energy and is, therefore, playing an increasingly important role in the energy market.