

An Innovative Technology to Effectively Utilize and Recycle Sewage Sludge

ABSTRACT:

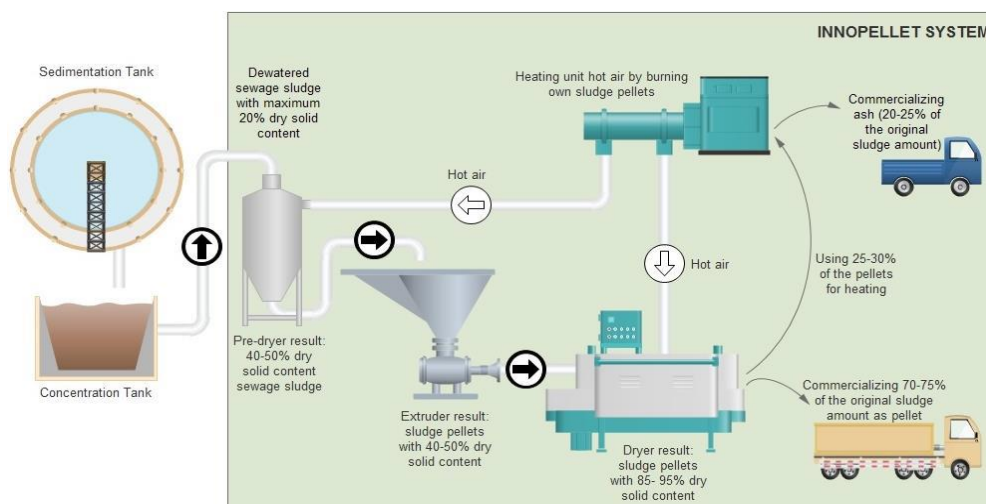
Our partner, a Hungarian company developed a patented technology that provides a solution for transforming municipal sewage sludge into solid fuel (Solid Recovered Fuel - SRF), which also enables sewage plants to achieve significant cost savings. The company is looking for potential licensing partners in the field of sewage plant construction and operation.

BACKGROUND:

There is currently a huge number of small and medium sized sewage plants in and out of the European Union that cannot pass over urban sewage sludge for agricultural use in sufficient proportion. These sewage plants are usually disposing the communal sludge in disused mines or dumps. Since disposal/landfilling regularly causes pollution of natural water resources it is more beneficial to utilise this material. Other available technologies such as biogas development, solar technology based drying and then burning in power plants are investment-intensive and are estimated to pay off in 15 to 20 years.

TECHNOLOGY SPECIFICATIONS:

The company developed and launched a technology for treating communal sewage sludge that is economical in case of small scale production too. This technology is a self-supporting technology for drying and pelleting sewage sludge without external need of fossil fuel or any other additional material. Consequently, the most reasonable utilization of pellets is not retail utilization, but meeting the heating and hot water needs of properties owned or operated by municipalities that operate waste water treatment plants. The pellets generated have a heating value equivalent of the brown coal heating value. It uses a negligible external energy input by reusing 30-50% of the generated pellets in the process to run the drying unit. The technology fits into the 'energy from waste' policy of the European Union. It enables wastewater plants to meet the strict EU environmental regulations and at the same time, reduce their sewage sludge treatment costs with 50-75%.



ADVANTAGES:

- Four-five year payback period which is quite impressive in the energy sector.
- TÜV certified burning material pellet.
- The technology is also generating 3-4 workplaces per units.
- The finalised system offers an economical solution of sewage sludge treatment for wastewater companies.
- Unique Dewatering: Using the end product to run the drying unit / Quick dewatering as compared to the others / Processing sewage sludge locally
- Small size of units: 2t/day unit fits to 2pcs. 20 feet containers / less land demand (comparing with solar systems) / less costs of investment per unit / less transport costs

CUSTOMER BENEFITS:

1. Municipalities can address the problem of sewage sludge disposal at their plants for good.
2. The waste heat from the equipment will significantly reduce heat energy costs and thereby the operating costs of the wastewater plant.
3. The technology can provide heating and hot water services based on renewable energy generation for municipal buildings.

MARKET TRENDS:

Currently the most preferred and known energetic utilization of sewage sludge is biogas production, which system requires long implementation time and more millions of Euros investment. That system can improve the energy balance of the waste water plant, but the residual sludge of digesting process still needs to be treated furthermore, by significant cost.

If you are interested, please respond to:

Ákos MURÁNYI
Innovation Manager
LC Innoconsult International

innovacio@lcinnconsult.com
www.lcinnconsult.com

