

Sustainable sludge utilisation. Source of energy and valuable raw materials



> Sludge utilisation

Material flow management in water management – sewage treatment plants as valuable suppliers of raw materials

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Sewage treatment plants as an important supplier of raw materials

From water extraction to waste water disposal, our environmental goal is to protect natural resources through optimal material flow management. The experts at REMONDIS Aqua are environmentally and economically driven and develop concepts that reduce costs and help the environment in times of scarcity of raw materials. We view the waste materials such as screenings, grit chambers, grease and sludge produced in sewage treatment plants as resources. We make use of the energy and raw material potential and return it into the economic cycle using a sophisticated material flow management system.

> Overview of our range of services

- Development of integrated concepts for material or energy recovery of waste materials
- Support with approval procedures and in dealing with authorities
- Drawing up of required disposal certificates
- Handling of notification procedures for international disposal
- Logistics concepts via lorries, inland shipping and rail
- Organisation of collection, dewatering and conditioning
- Phosphorus recycling procedures

See our web page for more information. You can also contact us via email or telephone for further information

Cycles are only possible by looking at the big picture

Sludge is a versatile resource produced in the treatment of waste water. Containing an essential element of nature in phosphorus, as well as nutrients and organic substances, this reusable material is of particular value. In dried form, sludge also has an energy content corresponding to lignite. As a market leader, we create sustainable cycles. Through thermal energy generation, regional soil-related utilisation and recycling of phosphorus, we return valuable resources back into the cycle.

Energetic utilisation

In energetic utilisation, the fuel value of sludge is used for energy generation, while pollutants are eliminated. This use as a secondary fuel in power plants and sewage-sludge incineration plants represents intelligent and CO₂-neutral energy generation, which helps to save fossil fuels. The phosphorus recycling procedures developed by REMONDIS Aqua also make a valuable contribution to sustainable environmental protection.

Agricultural utilisation

Fertilisation with sludge in the agricultural industry corresponds to a sustainable circular economy, as 60% of phosphate consumption in Germany is used purely for fertilisation purposes in agriculture. A further 20% is used for feed production. Sludge is a very important source of nutrients and humus and helps to preserve natural resources.

Composting

The biological treatment of sludge and organic support structures produces high-quality composts and soil substrates, which can be used in gardening and landscaping as well as for recultivation initiatives.