BIOGAS AND ORGANIC FERTILIZER FROM FISH SLUDGE



The **sludge** from a fish farm is very much a **resource** and not a waste stream.

At Sterner, we have developed advanced technology for sludge treatment, which unlocks the energy and nutrients in the sludge, enabling the development of a circular economic practice through **biogas** and **organic fertilizer** production.



TECHNOLOGY FOR CLEAN WATER



A unique drying process Biogas production from that keeps important nutrients

Sterner's process for dewatering and drying the sludge is developed to specifically treat the sludge fraction from wastewater filtration in aquaculture. The process provides a storable sludge with a dry matter content of > 90%. This automatic process not only produces a very stable sludge but has a low energy demand and requires low maintenance.

The system is scalable and can be easily expanded if the fish farm increases in size.

The process treats sludge from RAS as well as from flowthrough systems, and we assist in documenting discharge legislation compliance with system integration.

The process ensures that the dried product retains its vital nutrients, in particular nitrogen and phosphorous, which makes this attractive as an agricultural fertilizer.

fish sludge

Sterner's process for biogas production is developed to produce biogas from aquaculture wastewater sludge as the only raw material and combines wastewater treatment with energy production. This makes it highly relevant for plants with larger volumes of sludge production, turning the sludge into a significant energy source.

The process creates biogas from sludge with a high nitrogen content. The novel system is also very compact due to our innovative reactor design.

The energy generated is used to run the biogas plant, and excess energy is returned to the fish farm.

The final sludge from the system is dewatered and dried through our sludge treatment system, with the dried nutrient-rich fish sludge being incorporated into agricultural fertilizer.



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