WASTEred

Waste reduction and process optimisation in the European meat and dairy industry

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www.wastered.eu

More info about the WASTEred promotional events available in the web of the project.
The WASTEred project comes up to launch the LODOred product into the European market as an ECO-Innovative solution to reduce the waste generated during the wastewater treatment in the meat and dairy industries, since these sectors are two of the highest sludge generators within the food industry and the sludge management accounts for 50% of the operating costs and for 65% of the environmental impact of waste treatment. Moreover, the quantity of sludge generated in Europe is increasing substantially but environmental policies are becoming more stringent and fewer acceptable disposal routes are available, what enhances the LODOred value.

ENVIRONMENTAL OBJECTIVES

- Waste reduction in the targeted food industry sectors (~35% surplus sludge)
- Improving water quality of receiving water bodies by improving the treatment performance
- Facilitating access of SMEs to innovative “green” knowledge, increasing awareness and promoting networking by bringing a new ecolinnovative product on the market

ECONOMICAL OBJECTIVES FOR THE WWTPs

- Reduction of sludge disposal costs (~35%)
- Reduced polymers consumption for sludge dewatering (~30%)
- Reduction of energy costs (~25%)
- Reduction of pollution fees (~20%)
- Stabilization of treatment processes

CASE STUDY RESULTS

- More than 10 factories have participated in the project WASTEred as case studies
- Up to 35% sludge reduction was obtained in the case studies
- Up to 30% reduction of polymers in the dewatering process
- LODOred stabilizes the biological treatment process (buffer)

- Biomass purification efficiency enhancement
- Substantial surplus sludge reduction
- Biological process stabilisation
- Biodegradable
- No hazardous components
- Exhaustive quality control
- Designed for biological WWTPs without anaerobic digestion
- Municipal and industrial wastewater plants
- The product improves the floe structure, inducing a change in biomass metabolism, in particular promoting organic matter degradation (catabolism) while new cell biosynthesis (anabolism) is slowed down

METABOLISM

CATABOLISM

Organic matter degradation

Energy production

ANABOLISM

Cell biosynthesis

Biomass production

LODOred