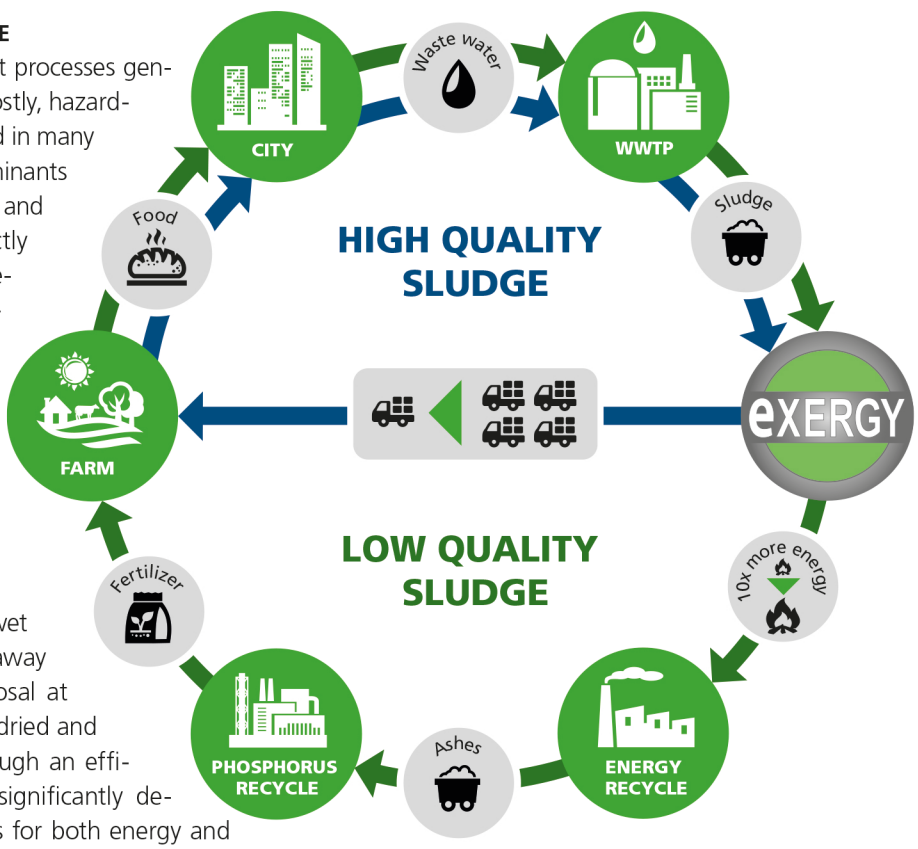
We invented the Exergy steam drying technology in late seventies and have over 35 years' experience in designing and delivering drying plants using our technologies integrated with other processes. We strongly believe in long term trust based relationship with our clients, partners and suppliers. Our drying solutions reinforces your process.

CIRCULAR ECONOMY WITH SLUDGE

SLUDGE = IMPORTANT RENEWABLE RESOURCE

Municipal and industrial wastewater treatment processes generate large amounts of sludge. Land-filling is costly, hazardous for environment and is increasingly banned in many countries. High quality sludge without contaminants contains valuable nutrients like phosphorus and humus. These nutrients can be recycled directly after sterilisation as fertiliser and soil improvement agents. Low quality sludge with contaminants like heavy metals, chemicals, micro plastics, drug residues and harmful micro-organisms is toxic for humans and environment. Low quality sludge can be dried and sterilised for energy production where phosphorous recovery can be made from ash.



INCREASING VALUE

The sludge contains up to 80% water. The wet sludge is often transported long distances away from waste water treatment plants for disposal at 4 times higher transport cost as compared to dried and sterilised sludge. By removing the water through an efficient drying process, the sludge weight is significantly decreased and the value of the sludge increases for both energy and agricultural use. Circular economy of phosphorus is achieved by either direct use of sludge as fertilizer or through recovery from ashes obtained from sludge combustion plants.

ExergyPSSD® sludge dryer gives the waste water treatment plant flexibility to shift sludge disposal route depending on sludge quality and possible new legislation.

WATER REMOVAL

- Increased energy – fuel value 10x higher
- 75% volume reduction
- Reduced transport costs

ENVIRONMENT, HEALTH & SAFETY

- 100% sterilized – killing of all living organism in the sludge is guaranteed
- Reduced CO_2 emissions from transport
- Odour free process and end product

FLEXIBILITY

- Easy to store and transport
- Suitable for both energy and agricultural use
- Inert sludge thus can be stored for long time without issue of smell or rotting
- Friable end product that can be spread easily without any addition of bark or earth
- Sludge can be converted into pellets or briquettes and sold as RDF

ECONOMY

- ExergyPSSD is the only process that gives energy surplus even for digested sludge
- Return on investment is very short
- Energy cost for drying sludge is reduced significantly by energy recycle
- Clean sludge becomes high value fertiliser
- Disposal cost is significantly reduced