

DeSaH

# Local wastewater treatment



Desah supplies a modular approach to treat source separated wastewater locally. This source separated wastewater consists of two streams, a highly concentrated black water stream from vacuum toilets + kitchen waste, and a diluted grey water stream. From black water energy and fertilizer can be recovered. From grey water heat can be recovered and the treated water can be reused.



## Local wastewater treatment

The Desah concept has several advantages compared to conventional, centralized wastewater and green waste treatment systems. Such as, lower water consumption due to water saving toilets/vacuum toilets (1-liter flush), lower energy consumption due to heat recovery from the wastewater treatment process, the possibility to recycle water on a neighborhood level, the recovery of valuable fertilizer, and an overall decrease in dependency of central power and water grids. This approach to wastewater treatment at the district level is also known as "New Sanitation".

### New Sanitation

For the New Sanitation system of Desah, domestic/residential wastewater/sewage is separated at the source into grey and black domestic wastewater and rainwater streams. Grey and black water remain separate throughout the process and are transported to a compact decentral treatment facility in the neighborhood. After the treatment the water can be reused or released to surface water.

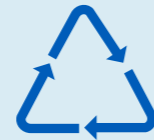
The Desah concept is suitable for new neighborhoods, high-rise buildings, hotels and remote settlements and has the following advantages



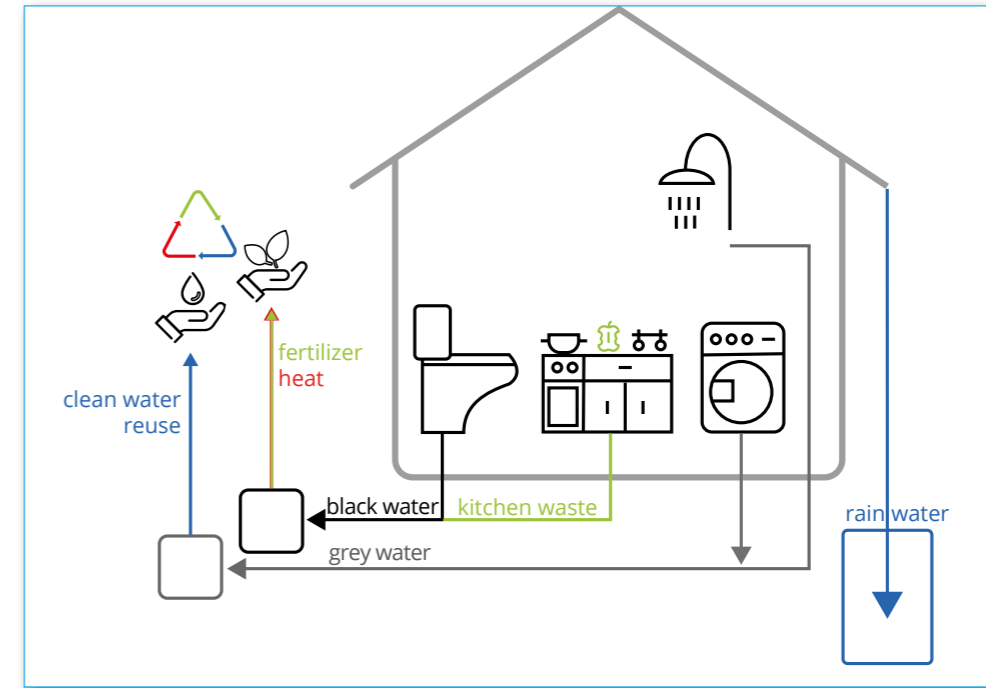
- >90% flushing water saved by vacuum toilets
- extra potable water saved by non-potable water reuse
- non-potable water for irrigation; quality better than rain water



- recovered nutrients can be used as fertilizer
- effective removal of micropollutants: medicine, microplastics, heavy metals, PFOA, bacteria and viruses



- energy positive wastewater treatment process
- supplies 10-30% of energy needed for heating of residential buildings



Lemmerweg-Oost, Sneek (NL), wastewater treatment for 32 houses realized in 2005



Noorderhoek, Sneek, (NL) "Waterschoon" project, local wastewater treatment for 207 houses



wastewater treatment plant for City of Helsingborg, RecoLab, Sweden, 2100 persons



installation of black water reactor for a government office building in The Hague, NL

# Over 250 years of experience in water handling and treatment

From water intake systems to water cooling, from water management to wastewater treatment, hydropower, pump installations, and award-winning innovations in decentralized wastewater treatment; DeSaH, Hubert, and Landustrie have joined forces. Based in Sneek, Friesland, our craftsmen develop and manufacture future-proof solutions with an above-average lifespan.

Pieter Zeemanstraat 6  
PO Box 199, 8600 AD Sneek, The Netherlands  
Tel. +31 (0)515 486 888 | [info@desah.nl](mailto:info@desah.nl)  
**desah.nl**

