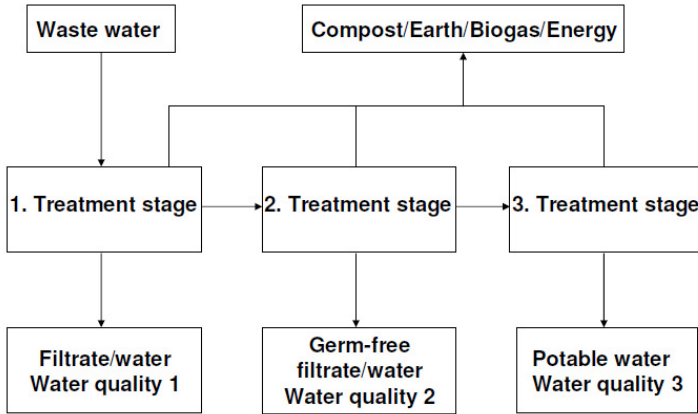
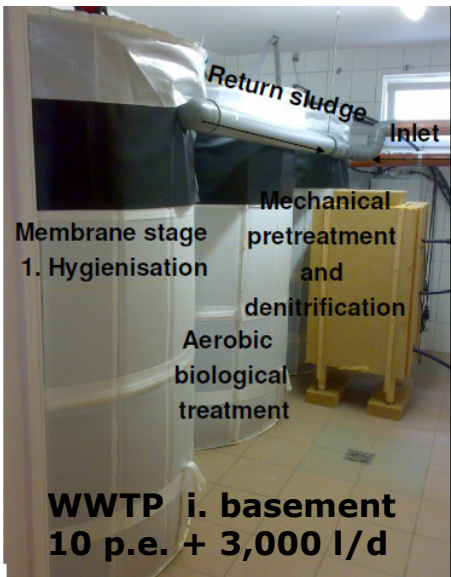


## Is waste water the most abundant fresh water resource in the world?



### SCAUT-Process

	SBR plant	Trickling filter plant	Planted bed system	Membran plant	SCAUT process	Sewer Treatment plant size 4
<b>Waste water parameters</b>						
COD [mg/l]	< 90	< 150	< 150	< 90	< 5	< 90 (<40)
BOD [mg/l]	< 25	< 40	< 40	< 25	< 5	< 20 (< 8)
Ammonium [mg/l]	< 10	(< 10)	(< 10)	< 10	< 2	< 10 (2-3)
N <sub>inorg</sub> [mg/l]	(< 25)			(< 25)	(< 6)	< 18 (< 1)
P <sub>total</sub> [mg/l]	(< 2)	(< 2)			(< 0.02)	< 2 (< 1)
Faecal coli form germs in 100 ml	> 1 million	> 1 million	> 1 million	< 100	0	> 1 million
Filterable substances	50.0	75.0	75.0	0	0	< 20
<b>Bacteriological potable water parameters</b>						
Coliform bacteria in 100 ml	n. a.	n. a.	n. a.	n. a.	0	n. a.
E. coli in 100 ml	n. a.	n. a.	n. a.	n. a.	0	n. a.
Enterococci in 100 ml	n. a.	n. a.	n. a.	n. a.	0	n. a.
Colony count 20° C in 1 ml	n. a.	n. a.	n. a.	n. a.	< 100	n. a.
Colony count 36° C in 1 ml	n. a.	n. a.	n. a.	n. a.	< 20	n. a.
Clostridium perfringens (including spores) in 100 ml	n. a.	n. a.	n. a.	n. a.	0	n. a.
Pseudomonas aeruginosa in 100 ml	n. a.	n. a.	n. a.	n. a.	0	n. a.
Salmonella spp.	n. a.	n. a.	n. a.	n. a.	0	n. a.



This paper presents the successful use of state-of-the-art membrane filtration and basic biological processes. This advanced treatment of organic matter containing waste water is used for the production of water fit for human consumption.

The reuse of water within households, hotels or food production plants requires save and efficient treatment of waste water to meet drinking water regulations. In order to apply the process all around the world it has to be easy to handle whilst meeting the requirements of health and safety regulations. The installations can therefore be deployed without heavy machinery. Thus, there are simple solutions for many production facilities as well as for many households. The latter may also be the case in both permafrost and arid regions. In both cases, there are also considerable energy-related advantages (use of solar power, recycling warm water into excellent quality for human consumption, etc.).

### Costs of several wwt-processes within 50 a

