Water : Energy Nexus

## ..is needed to generate Energy

..is needed to generate WATER
$\cdots$

## Energy used to:

Supply 1 million litres of water 586 kWh Treat 1 million litres of sewage 634 kWh 2-3\% of UK total consumption

6-18\% of a city's energy demand is used to produce, treat and transport water

## Emission of greenhouse gas:

Supply 1 MI of water Treat 1 MI of sewage 0.289 tonnes . 406 tonnes
$0.5 \%$ of individuals annual footprint wuwcranfiedocouk

## UK uses $\mathrm{A}^{-1}$, Dtonnes of

 chemicals to tretar nking water and sewage each year


## Sewage as a resource?

## This session speakers:

## Keynote Speaker:

Jörgen Ejlertsson, Scandinavian, Biogas Fuels AB Maximising biogas production in South Korea using Swedish biogas technology
-Francesco Ometto, Cranfield University
Integrated
process for biogas production from algal biomass

- Yolanda Aguilera, Cranfield University

Low Carbon anaerobic wastewater treatment
-Beatrice Smyth, Northern Ireland Water Carbon management system for NI Water

