

# Basingstoke

## Thames Water

The Basingstoke sludge treatment centre upgraded its processes from 12.9 tDS/day to 53 t DS/day using a Cambi Thermal Hydrolysis Process (CambiTHP) followed by anaerobic digestion. The capacity of the plant is 70 tDS/day to treat any backlogs or for treating the sludge on shutdown of the process due to routine maintenance purposes.

Sludge from several nearby towns (Basingstoke, Farnham, Fleet, Guilford and Newbury) is brought to a centralised sludge centre. The sludge coming from different locations is too thick to feed the THP directly and the use of screened liquid sludge to dilute pre-dewatered sludge down to 20% dry solids before going to the THP feed silo has been provided. This saves on polymer usage in the pre-dewatering process.

Employing the THP pre-treats sludge and results in faster discharge from the digester, which is then stored in digested sludge collection tower. The sludge centre also has a liquor collection and treatment facility on dewatering of the sludge after anaerobic digestion. A dual fuel boiler can be operated both on biogas or diesel is being incorporated.

The biogas generated is used for Combined Heat and Power (CHP) production and electricity production is used internally by the sewage treatment works. Excess is exported to the local grid.

<b>Cambi solution</b>	CambiTHP® - B6
<b>Number of reactors</b>	4
<b>Status</b>	In Operation
<b>Year of commissioning</b>	2018
<b>Feedstock type</b>	Mixed sludge 60:40 primary and secondary sludge
<b>Population served</b>	500 000 p.e.
<b>Plant design capacity</b>	16 500 tDS/yr
<b>Digester capacity</b>	9 000 m <sup>3</sup>
<b>Biogas utilization</b>	Electric power generation
<b>Disposal method</b>	Land application
<b>Services</b>	Installation, commissioning, training

