



## *Pasteurisation of industrial input materials*

Planning

Construction

Start-up

Operation

Service



## Usage

Biogas plants can be operated using a very wide variety of input materials. If, for example, a biogas plant also uses industrial waste from the food industry – i.e. using “co-fermentation” – such waste will often first need to

be pasteurised. The requirements of this pasteurisation process are governed by the EU Hygiene Regulation 1774/2002 of the European Parliament.



- ① Double-pipe heat exchangers
- ② Pasteurisation tanks

## The process

Pasteurisation takes place in high-quality, sealed, stainless steel tanks fitted with heat insulation and plate cladding. During the process, the materials are heated to over 70°C for at least an hour to kill off bacteria and micro-organisms. Double-pipe heat exchangers are used for this purpose, heating the materials with hot water using a countercurrent exchange mechanism. The hot water required is provided by the biogas combined heat and power unit. Once the target value of 70°C has been reached, the material is held

in the tank for a minimum of one hour. Afterwards, the pasteurised material is pumped into substrate storage tanks and the mixing system. The quantities and mixing intervals can be controlled centrally from the control panel. EnviTec Biogas supplies and installs the complete pasteurisation unit and connects it to existing control systems, so that the current state of every stage of pasteurisation can be monitored at all times.