

bluemethane

Chloe

Methane capture for post-digested sludge

Designed for UK water companies

Residual methane in post-digested sludge is a known issue: it represents lost energy that could have been harnessed, contributes to damaging atmospheric emissions, and introduces safety concerns further along the process. **Chloe** prevents this methane from escaping, capturing it and transforming it into a valuable resource. By doing so, it significantly reduces greenhouse gas emissions.

Chloe is **Bluemethane's** methane-capture system for post-digested sludge.

Compact, modular and built in the UK, **Chloe** recovers methane at the point it is easiest and most practical to capture.



Why **Chloe** matters



Capture methane before it escapes

Chloe removes dissolved and entrained methane from sludge, using controlled pressure variation, agitation and cascading flow.

Recover usable energy

Captured gas can be returned to a combined heat and power plant or biomethane upgrading, improving site-level energy performance.

Protect downstream operations

Degassed sludge is easier and safer to store, transfer and dewater.

Drop-in installation

A 20-ft containerised or skid-based system designed to integrate with existing UK bioresources infrastructure.

WIMES-compliant and ATEX-certified, with minimal on-site disruption.

Proven in practice

We don't just test **Chloe** in controlled environments.

She has been operating on real sludge, with real constraints, on real UK sites.

Here are three 'holiday snapshots' from **Chloe's** travels to UK based plants:



Isle of Wight



Anglian Water, Cotton Valley



Thames Water, East Hyde



How **Chloe** works

Chloe applies controlled pressure variation, turbulence and gravity-driven separation to remove methane from sludge.

She has been demonstrated in real UK sludge environments since 2024.

Chloe connects into:

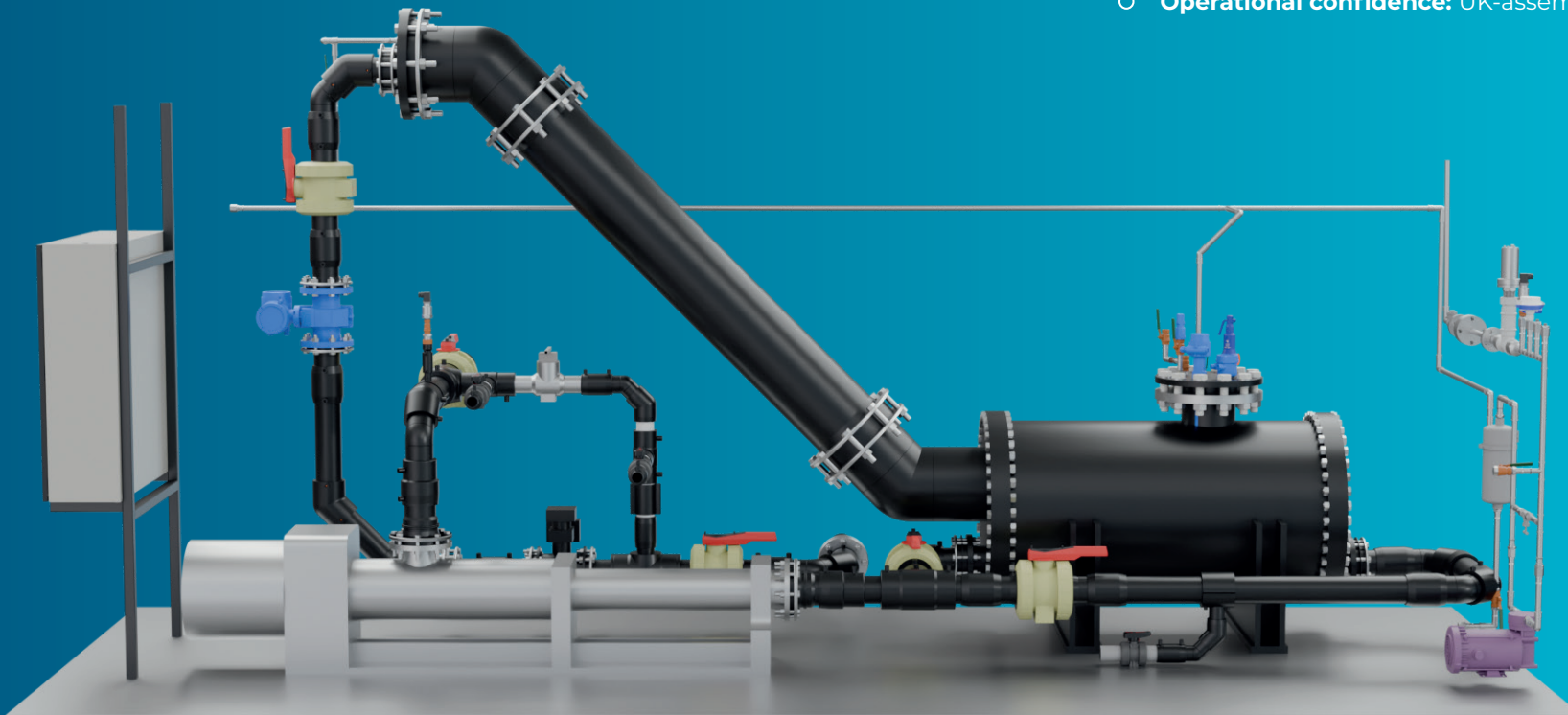
- Digestate lines
- Sludge handling
- High-strength industrial sludge flows

No additional process steps. No major civil works. Just methane degassed and captured before it escapes.



Benefits for operators

- **Lower methane emissions:** Capture methane that would otherwise pass downstream or vent during handling
- **Recover usable biogas:** Captured gas improves site-level energy performance
- **Safer, more stable sludge operations:** Degassed sludge reduces handling risks
- **Minimal disruption:** Containerised or skid-based, modular and designed for phased roll-out
- **Operational confidence:** UK-assembled, UK-supported

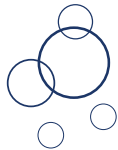


Technical snapshot

Parameter	Value
Liquid Processing Capacity	100–3,000 m ³ /day
Power Requirement	<11 kW (UK 3-phase supply)
Configuration	Inline or recirculation
Telemetry	SCADA integration, ISO 27001 compliant
Maintenance	Low, periodic checks only

What **Chloe** enables

- Capture methane at source
- Reduce emissions without adding process complexity
- Improve sludge handling and plant stability
- Produce more energy
- Support compliance with Net Zero goals and the EU Industrial Emissions Directive



bluemethane

We develop practical technologies that help operators reduce methane emissions from liquid waste streams — simply, reliably, and at scale.

Contact us: info@bluemethane.com or **07853 614 423**

Bluemethane product family

Emily measures methane in digestate

Chloe captures methane from liquids

Brutus prevents further methane formation



bluemethane.co.uk