

Supplementary Information

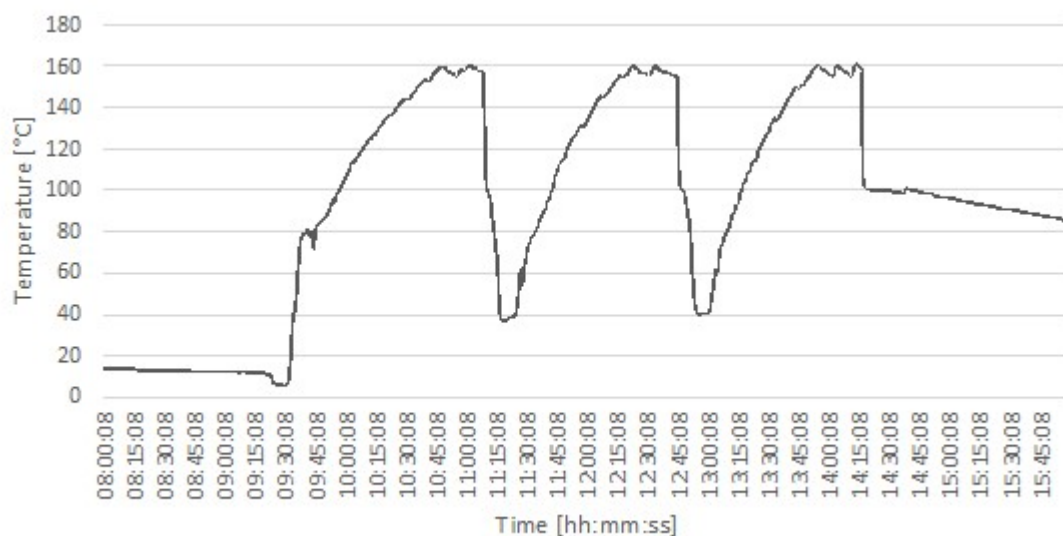


Figure S 1 Temperature ramp of one thermal hydrolysis process, including three runs.

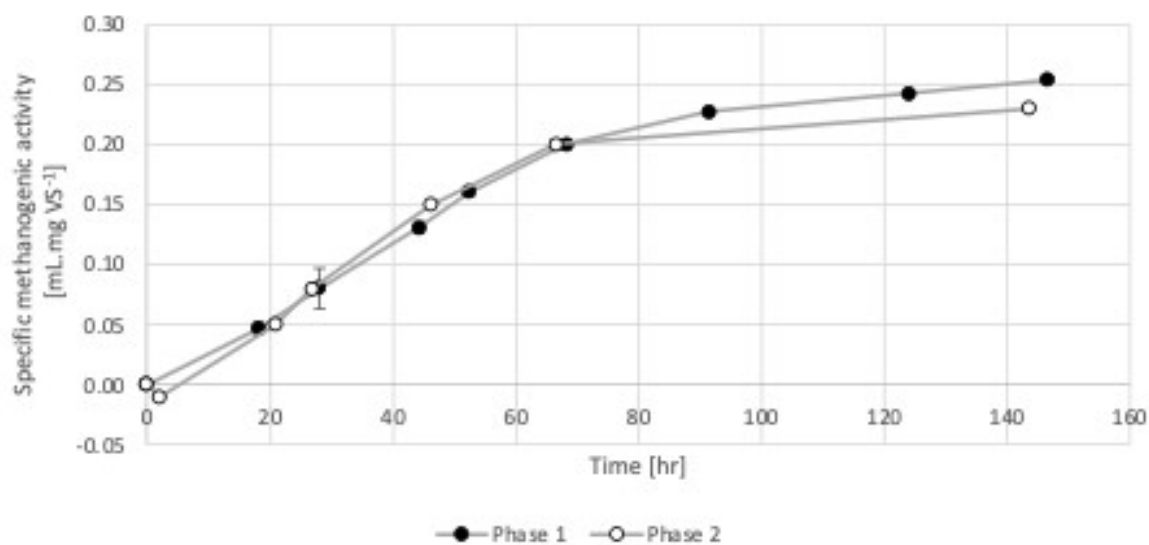


Figure S 2 Specific methanogenic activity of inoculum 3 sampled during phase 1 (filled markers) and inoculum 4 sampled during phase 2 (unfilled markers) tested in specific methanogenic tests.

Table S 1 Assays and sequences of primers used for absolute quantification with gBlock SLD in Resistomap.

Assay	Gene	Target antibiotics (major)	Forward Primer	Reverse Primer
AY10	<i>aadA_1</i>	Aminoglycoside	GTTGTGCACGACGACATCATT	GGCTCGAAGATACCTGCAAGAA
AY120	<i>blaOXA1-blaOXA30</i>	Beta Lactam	CGGATGGTTTGAAGGGTTTATTAT	TCTTGGCTTTTATGCTTGATGTTAA
AY129	<i>blaVIM</i>	Beta Lactam	GCACTTCTCGCGGAGATTG	CGACGGTGATGCGTACGTT
AY228	<i>mexE</i>	MDR	GGTCAGCACCGACAAGGTCTAC	AGCTCGACGTACTTGAGGAACAC
AY24	<i>strB</i>	Aminoglycoside	GCTCGGTCGTGAGAACAATCT	CAATTCGGTCGCCTGGTAGT
AY245	<i>sul1_2</i>	Sulfonamide	GCCGATGAGATCAGACGTATTG	CGCATAGCGCTGGGTTTC
AY289	<i>intI1_2</i>	Integrans	CGAAGTCGAGGCATTTCTGTC	GCCTTCCAGAAAACCGAGGA
AY35	<i>cmlA_2</i>	Phenicol	TAGGAAGCATCGGAACGTTGAT	CAGACCGAGCACGACTGTTG
AY533	<i>ermB_2</i>	MLSB	GAACACTAGGGTTGTTCTTGCA	CTGGAACATCTGTGGTATGGC
AY551	<i>mefB</i>	MLSB	CCGATAGGCTTACTTGTTGCAG	AGTCCACTTGCGGTTTCATTG
AY574	<i>tetM</i>	Tetracycline	GGAGCGATTACAGAATTAGGAAGC	TCCATATGTCCTGGCGTGTC
AY600	<i>16S rRNA</i>	16S rRNA	CCTACGGGAGGCAGCAG	ATTACCGCGGCTGCTGGC

Table S 2 Results from a pathogen removal efficiency sampling campaign. Cultivation tests compare the concentration expressed as colony forming unit (CFU) or presence of coliform bacteria (TCOLI), Enterococci (ECOLI), and Salmonella (SAL) in sludge with (HMRS1) and without (MRS1) THP pretreatment and of digested sludge with (Digested sludge 1) and without thermal pretreatment (Digested sludge 2).

Sample	TCOLI		ECOLI		ENTERO		SAL 1
	CFU·g ⁻¹ sample	CFU·g ⁻¹ TS	CFU·g ⁻¹ sample	CFU·g ⁻¹ TS	CFU·g ⁻¹ sample	CFU·g ⁻¹ TS	
Phase 1							
MRS1	3.20E+05	6.00E+05	5.50E+04	1.03E+05	1.50E+04	2.81E+04	YES
HMRS1	0	0	0	0	0	0	NO
Digested sludge 1	0	0	0	0	0	0	NO
Phase 2							
MRS2	3.75E+05	1.81E+04	1.10E+05	5.31E+03	1.10E+04	5.31E+02	YES
Digested sludge 2	0	0	0	0	0	0	NO

¹ Presence in 50 g of sample