

# Use of Thermal Ammonia Recovery in Advanced Anaerobic Digesters (AAD)

Wednesday, 3 May 2023

2pm (NZ Time),  
12noon (AEST), 10am (AWST), 11.30am (ACST)

**With only minor modification, existing operating municipal digesters can reduce waste going to landfill with biogas and nutrient concentrate capture.**

An options review for modifying existing WWTP digester assets in New Zealand to add co-digestion of trade waste shows a number of facilities which can be modified before 2030. By 2050, this solution could process 70 % of all WWTP biosolids and divert up to 650,000 t/annum waste from landfill (biosolids, grease trap, industrial waste, selected food waste).

The commercial drivers for the digester upgrades are better utilization of existing assets; recovery of nutrient concentrates and gaseous biofuel; WWTP operating cost offsets; PLUS deferred CAPEX investment for the asset owners.

Organics has recently developed a process which facilitates the recovery of ammonia from wastewater and digestates from municipal sludge, trade waste and primary industry residues. Pilot plants are currently being trialed at two UK facilities (Severn Trent Water and Northumbrian Water).

The presentation will center around ammonia recovery and its technical/commercial potential.

## Robert Eden

Managing Director, Organics  
(Thailand)



Organics currently maintains offices in Thailand, Malaysia and Indonesia.

Organics has completed since 1988 more than 200 successful biogas projects (fabrication, installation) of biogas flares, H<sub>2</sub>S bio-scrubbers, thermal ammonia recovery systems (digestate, wastewater, leachates) and complete AD systems. Organics has recently developed a process which facilitates the recovery of ammonia from wastewater.

Pilot plants are currently being trialed at two wastewater treatment facilities by Severn Trent Water and Northumbrian Water in the UK

## Jürgen Thiele

Leader – AD Advisory, Conhur  
(New Zealand)



Jurgen has lead the inception and digester process design of regional Waste to Energy facilities in New Zealand, Australia and Asia, including:

- the Earth-power food waste digester in Sydney, SEW and WW
- municipal sludge digesters in VIC,
- thermophilic digesters start-up at the Christchurch WWTP,
- the WWTP digester plant capacity upgrades in Palmerston North and Hamilton (NZ) and
- the start-up and process advice for a new dairy factory digester in the Waikato (plus many more).

## How to register for the webinar

Please use the following details to register for this webinar

- <https://us06web.zoom.us/meeting/register/tZwrD-uvqj0tGtUNgcZoWBQ8gLPuyuFHvQ37>
- Meeting ID: 886 0274 6701 | Passcode: 798161

**Continuing Professional Development (CPD):** - The Bioenergy Association supports members by providing opportunities such as this webinar that contribute towards CPD and maintaining registration as a biogas adviser. [Email the Executive Officer](#) for more details.