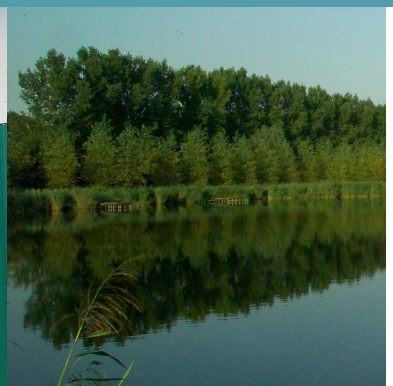
RENOVATION OF WASTEWATER TREATMENT PLANT - VION



Producing clean water and renewable energy with UASB and NAS® anammox technology







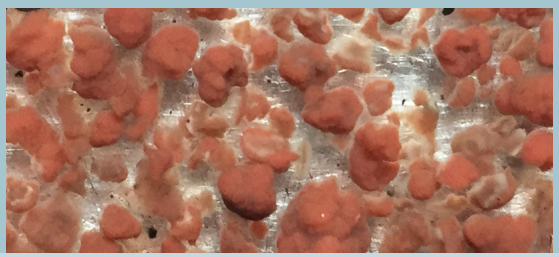
Colsen

water, energy & environment

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Project description

Vion, a slaughterhouse in Boxtel, used to process large quantities of wastewater with a physico-chemical water treatment system. A traditional, high-cost technique. Because water treatment is not one of the company's core businesses and because it was unable to invest in a new treatment system for prudential reasons, Vion opted to outsource the new wastewater treatment. Colsen designed and constructed the entire plant with their in-house developed technologies for energy production and water treatment.
The new system has a greater treatment capacity, is entirely organic and boasts improved performance in terms of odour and noise. As such, the new system does not only supply sustainable energy, but is also entirely in line with VION's emphasis on Corporate Social Responsibility.







Key figures

Year of construction	2015
UASB volume	2.200 m^3
Capacity	3.000 m^3/day
Biogas production	1 million Nm^3/year
Removal efficiency	85% TN, 80% $PO4^{3-}$
H2s removal	1,500 ppm to <40 ppm

Applied technology

The following technologies contributed to this technically and economically feasible wastewater treatment system:

- Conversion of organic pollutants into biogas with UASB technology
- Nitrogen removal and organic matter removal with NAS-MBR® anammox technology
- Biogas treatment (BIDOX®) and biogas conditioning

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