POMETHANE®

Wastewater Treatment Solutions for the Palm Oil Industry
The waste from a palm oil mill is a valuable source of biomass. Treating it properly with Veolia’s POMETHANE® plant technologies will reduce the pollution, enable the production of energy and generate a liquid & fiber fertilizer with high commercial, making POMETHANE a highly environmentally friendly solution.

POMETHANE® is an anaerobic mesophilic and thermophilic digestion process which maximizes the yield of biogas production and offers an attractive solution for the treatment of high concentrated and hot effluent streams.

Main benefits include:

- Diversity and security of the plant’s electricity supply
- Reliability and robustness
- Lower Operational Costs than a membrane based solution
- Dramatically improved environmental performance:
  - reduced emissions of greenhouse gases
  - lower risks of river and soil pollution
  - improved land, forest and ecosystem conservation
- Reuse of water for irrigation
- Application of surplus biomass as fertilizer
- Sulfate removal and possibility to re-use it for industrial purposes

Veolia also has proven that POMETHANE®, combined with an aerobic polishing plant, is able to achieve a final effluent discharge quality of BOD < 20ppm. ●
The POME is transferred from the equalization tank to the anaerobic digester. In the digester, the anaerobic bacteria will convert the organic pollutants to end product, i.e. biogas (mainly methane, carbon dioxide and hydrogen sulfide) and surplus sludge. The anaerobic mixed liquor suspended solids from anaerobic digester are then transferred to the dewatering press system to separate sludge from partially treated POME, which then flow to the downstream wastewater treatment plant for further treatment.
Resourcing the world