


Methane Measurements, Potential for GHG Reductions and Impact for Palm Oil Mills

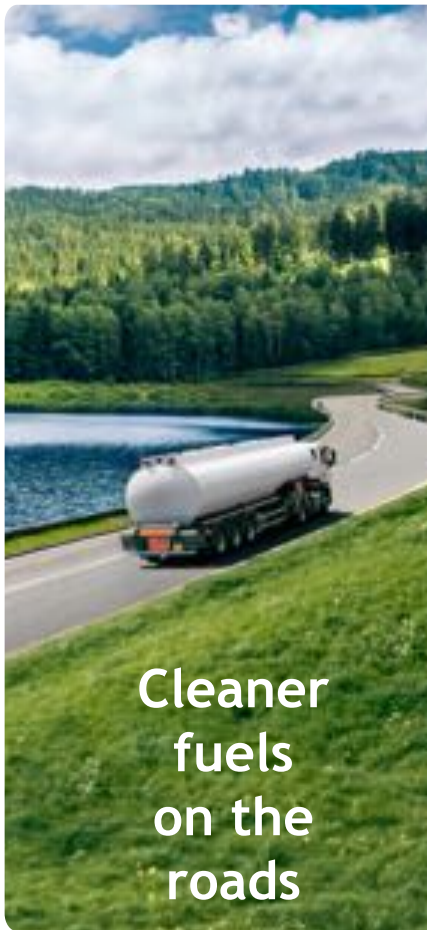
20.02.2018, Brussels

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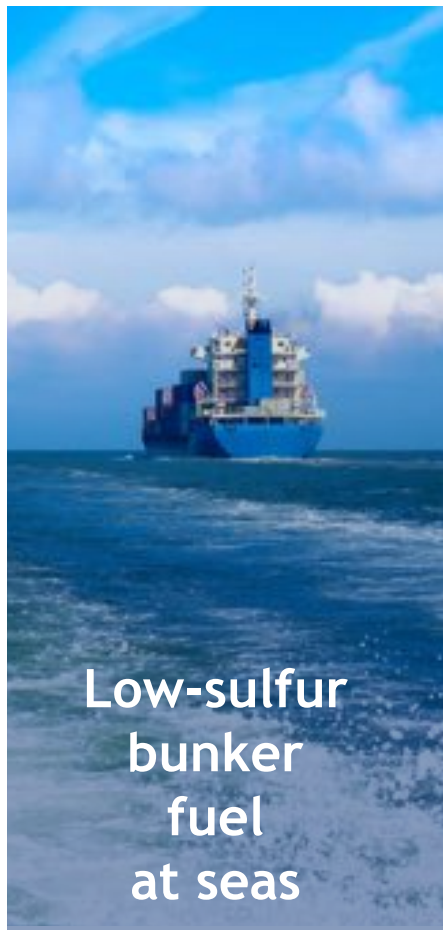


OUR VISION:

 We create
responsible choices
every day.



Cleaner
fuels
on the
roads



Low-sulfur
bunker
fuel
at seas



Renewable
solutions
for
chemicals
industry



Renewable
jet fuel in
the air

Broad range of renewable raw materials

80%



Animal fat from food industry waste



Fish fat from fish processing waste



Vegetable oil processing waste and residues (e.g. PFAD, PES, SBEO)



Used cooking oil



Technical corn oil

20%



Crude palm oil



Rapeseed oil



Soybean oil



Camelina oil



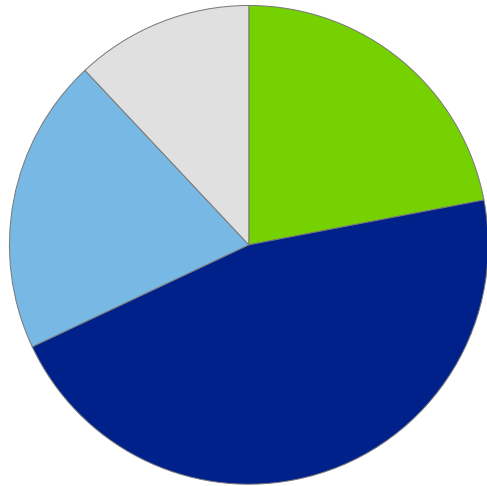
Jatropha oil

Total emissions of CPO based renewable diesel

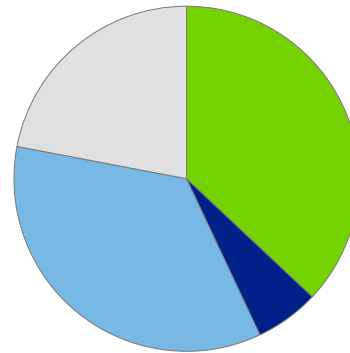


Conventional CPO

Total emissions of CPO based renewable diesel



Conventional CPO



CPO with methane capture

- Cultivation
- CPO Mill
- HVO Plant
- Transportation



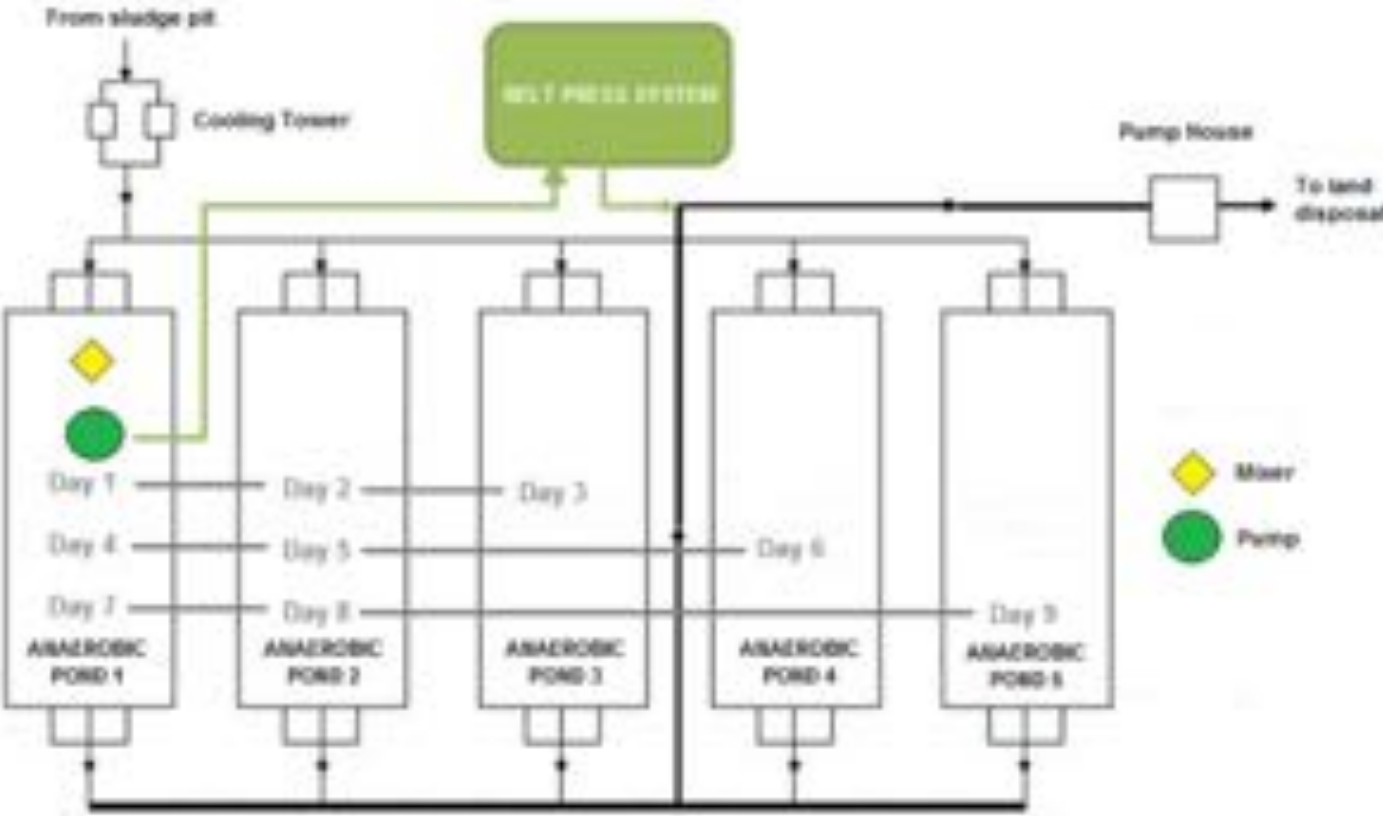
Climate friendly palm oil? Case: Reducing methane emissions at the mill



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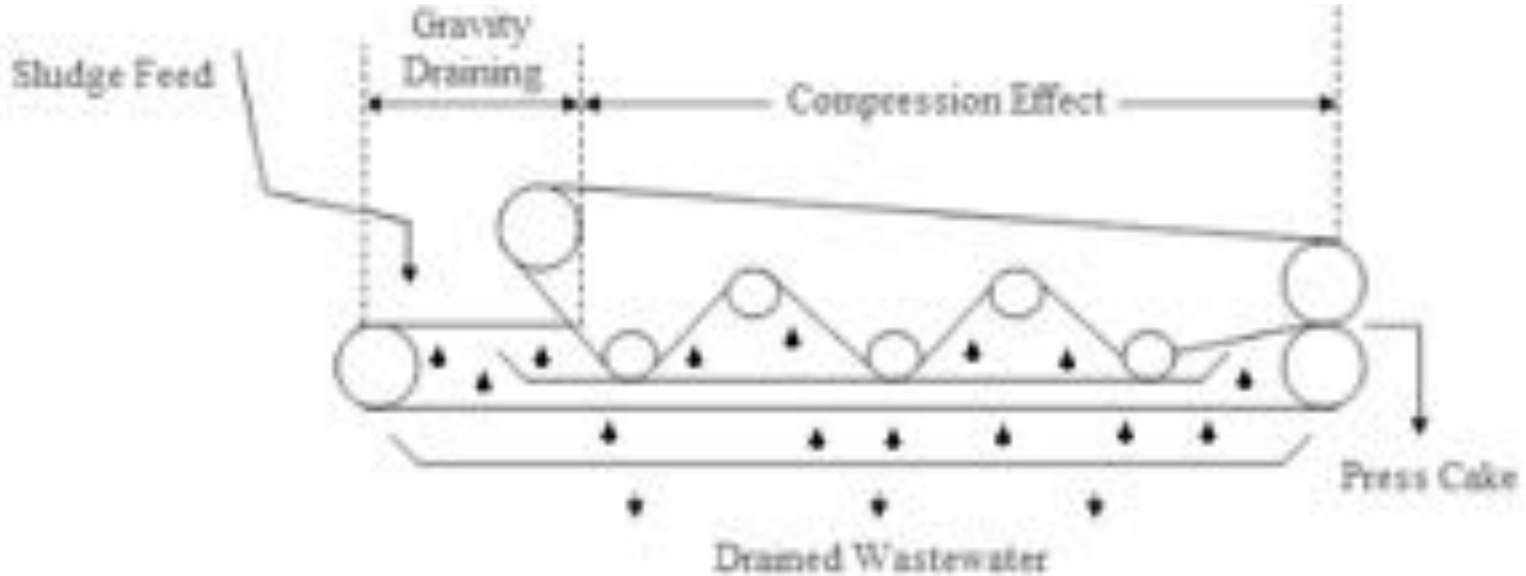


POME treatment plant layout of the case study mill



Belt filter press system

- Solid-liquid separation
- Obtained by passing a pair of filtering cloth belts through a system of rollers

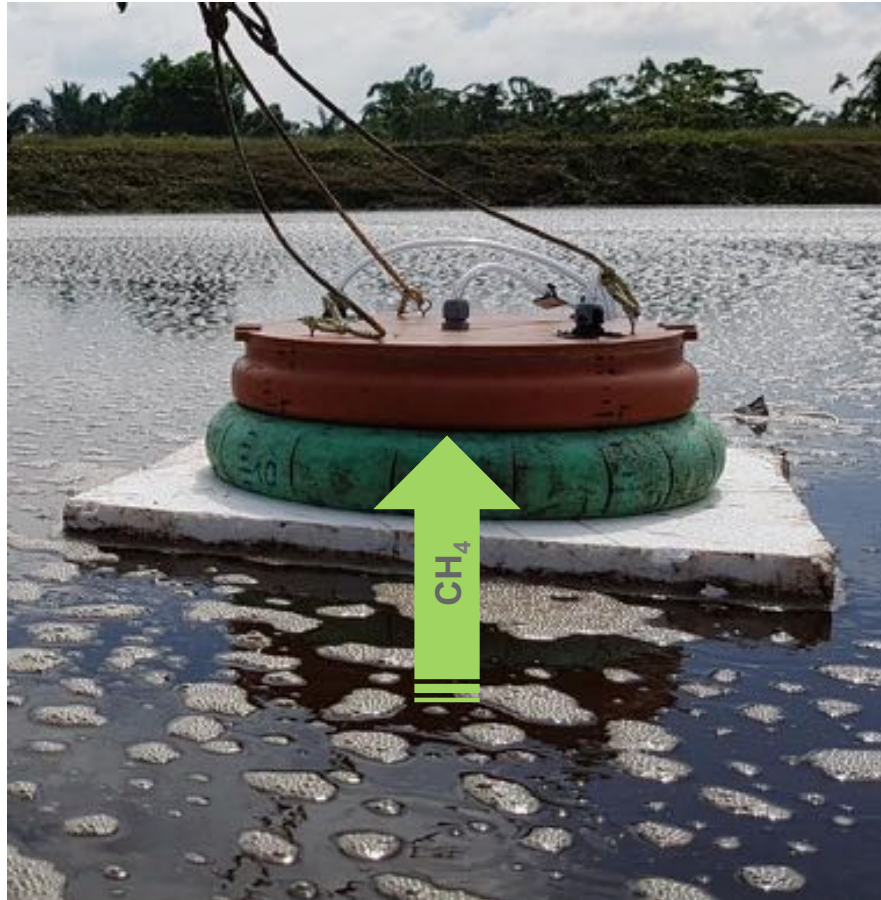


Belt filter press system



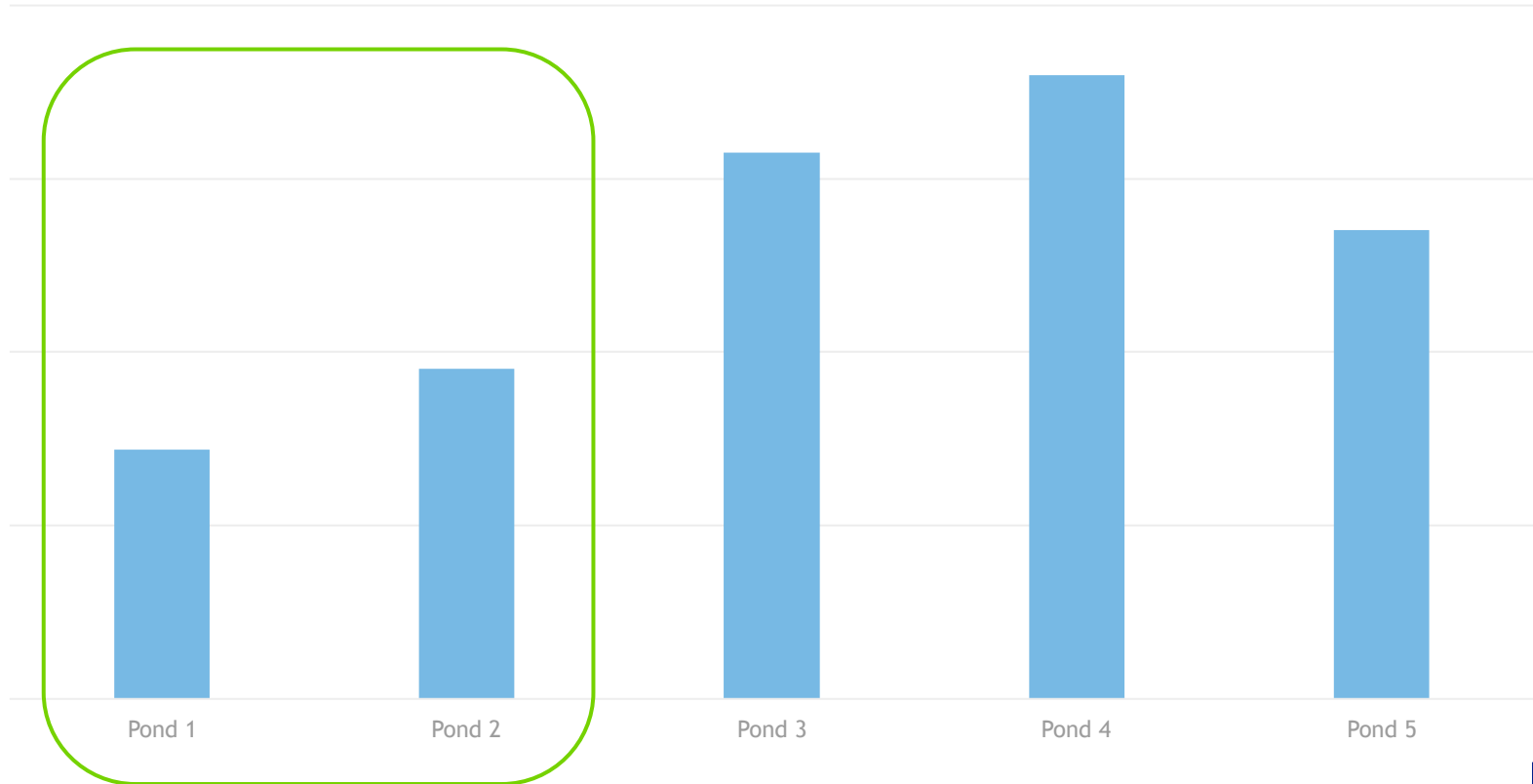


On-site gas measurements

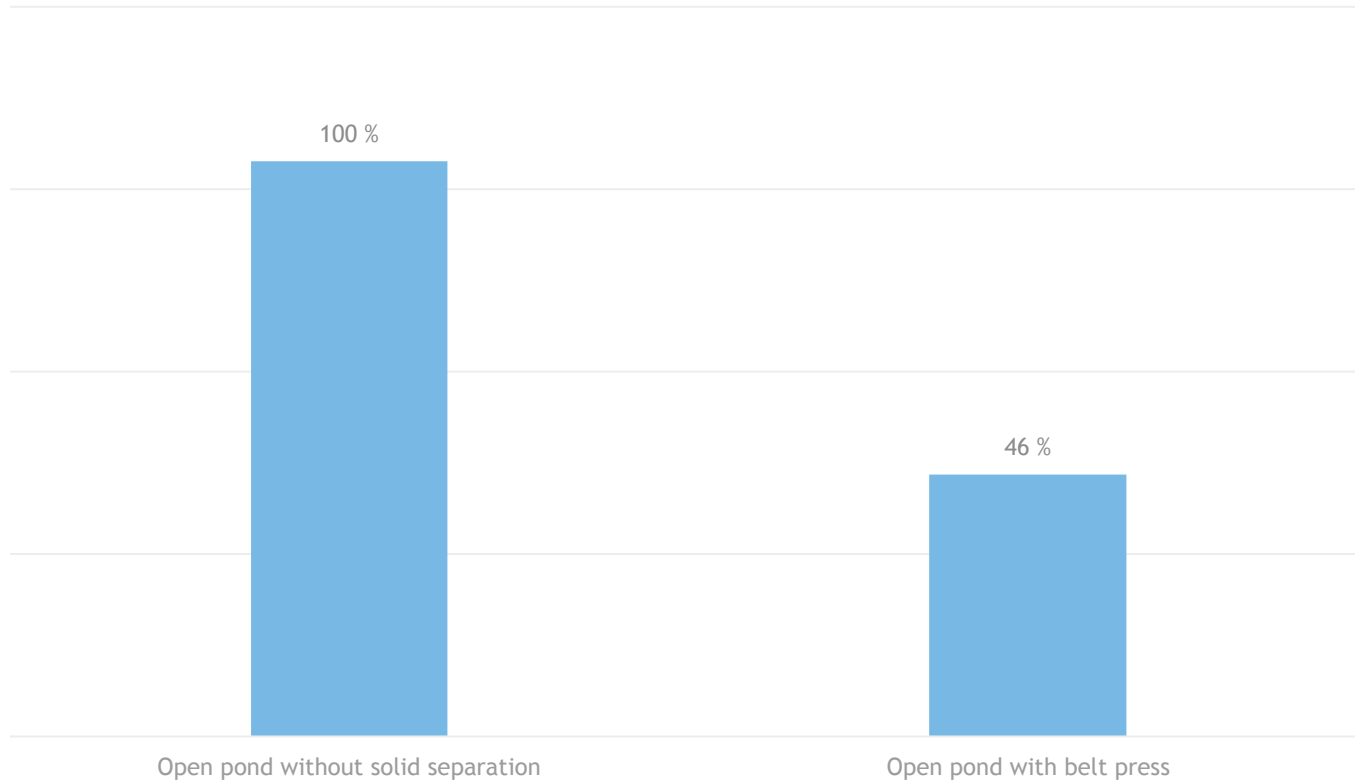


Photos: Michael Giebels, Meo Carbon Solutions

Measurement results over the pond system



Methane reduction in one pond



Further Information

Presentation given at the ISCC Regional Stakeholder Committee Southeast Asia, 25.10.2017

<https://www.iscc-system.org/event/meeting-of-the-iscc-technical-committee-tc-sea/>



Thank you.

Timo Haatainen

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