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

- Animal fat from food industry waste
- Fish fat from fish processing waste
- Vegetable oil processing waste and residues (e.g. PFAD, PES, SBEO)
- Technical corn oil
- Used cooking oil
- Crude palm oil
- Rapeseed oil
- Soybean oil
- Camelina oil
- Jatropha oil

80%

20%
Total emissions of CPO based renewable diesel

Conventional CPO

CPO = Crude Palm Oil
GHG = greenhouse gas
HVO = Hydrotreated Vegetable Oil = Renewable Diesel
Total emissions of CPO based renewable diesel

CPO = Crude Palm Oil
GHG = greenhouse gas
HVO = Hydrotreated Vegetable Oil = Renewable Diesel
Climate friendly palm oil? Case: Reducing methane emissions at the mill
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

- Open pond without solid separation: 100%
- Open pond with belt press: 46%
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