

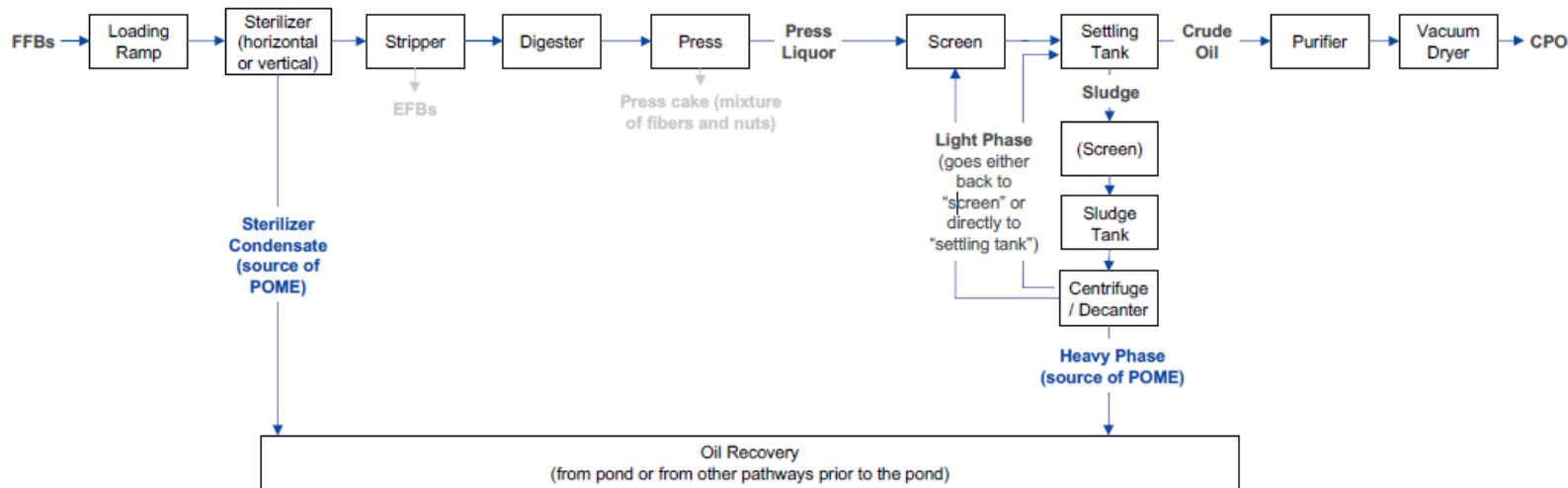
Challenges

1. Integrity challenge
2. Technical challenge
3. Logistic challenge
4. Audit challenge
5. Market challenge

Benefits

1. Clear definition of waste and residue, process description and range of recovered POME oil
2. Clear audit process and requirements
3. Support circular economy as enabler to sustainability
4. Supporting higher quality CPO production
5. The palm oil industry fuels and lights the world

Palm Oil Mill Process Diagram: Oil from Palm Oil Mill Effluent (POME) (process and figures may vary in the individual case)



Palm Oil Mill with Horizontal Sterilizer (approximate figures)	
Oil content of sterilizer condensate	0.5 kg/ton FFB ¹ – 2.1 kg/ton FFB ²
Oil content of heavy phase	1.6 kg/ton FFB ² – 5.5 kg/ton FFB ³
Total POME oil content	2.1 kg/ton FFB – 7.6 kg/ton FFB

Palm Oil Mill with Vertical Sterilizer (approximate figures)	
Oil content of sterilizer condensate	0.5 kg/ton FFB ¹ – 17.4 kg/ton FFB ²
Oil content of heavy phase	5.5 kg/ton FFB ³ – 11.4 kg/ton FFB ²
Total POME oil content	6 kg/ton FFB – 28.8 kg/ton FFB

Sources:

¹ Environmental Management Guideline for the Palm Oil Industry. Sep 1997. Note: No differentiation between horizontal and vertical sterilizer.

² Averages calculated based on actual company data for a sample of 17 palm oil mills (10 with horizontal sterilizer, 7 with vertical sterilizer)

³ Allfaval Presentation POMEVap technology. Oct 2020