

FACT SHEET WASTE TO ETHANOL DEMONSTRATION



Mobile containerised demonstration plant

Multifunctional: Suitable for various microbial bioprocesses

Bioreactor volume: 1 000-litre, jacketed & steriliser

Self-sufficient with process utilities

Installation: Plug & play, requires only water, electricity, effluent connection

**Technology
Demonstration**



Current feedstock:

Paper sludge waste, 70% moisture

Operation: Fed-batch fermentation

Ethanol performance:

Minimise ethanol production cost

Fermenting organism: Commercial *Saccharomyces cerevisiae* (brewer's yeast)

Yeast enhancements:

Xylose consumption, cellulase secretion

**Commercial
Application**



**Sustainable
aviation fuel**



**Renewable
fuel**



**Platform
chemicals**



**Ethanol
cook stoves**