TWMA OFFSHORE PROCESSING REDUCES C02 EMISSIONS BY 50%.

Environmental study shows TWMA drill cuttings offshore processing solution reduces carbon emissions by 50% compared to skip and ship.

LOCATION
UKCS

PRODUCTS/SERVICES
TCC RotoMill

PURPOSE.

The key aim of this project was to establish the comparative carbon footprint for an offshore TCC RotoMill drill cuttings treatment unit on a standard offshore installation versus that of a typical skip and ship to shore operation whereby cuttings are transported and treated at an onshore treatment facility.

SCOPE.

- Investigate the carbon footprinting process and interpret recognised guidance before setting system boundaries and emission scopes;
- Calculate the carbon footprint associated with each method of treatment;
- Develop a carbon calculator to establish a carbon footprint comparison for any well within the North Sea.

The Life Cycle Analysis for the processing of cuttings on an offshore installation included the transportation involved in commissioning and decommissioning a TCC RotoMill unit; and any direct emissions associated with the processing of cuttings. The Life Cycle Analysis for a skip and ship to shore operation includes the transportation of empty cuttings skips to the offshore installation; the transportation of full cuttings skips back to the onshore processing site at Peterhead; any direct emissions associated with the treatment of cuttings; the transportation of all wastes and any emissions associated with the further processing of water and oil.

RESULTS.

50%
Reduction in CO_2 generated by processing at source.

$3M
Worth base oil recovered through offshore processing.

28,000MT
Recovered solids diverted from landfill.

Results reveal the carbon footprint of the current skip and ship operation was two times that of a TCC RotoMill processing offshore, at source.

Furthermore, and based on the lower estimate of drill cuttings produced on the UKCS, additional benefits include the diversion of 28,000 tonnes of recovered solids from landfill; 37,740bbl oil recovered for re-use in the offshore drilling system and 6000m^3 of water that required no further wastewater treatment.

For full study visit www.twma.com