

THESIS PROJECT

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Title: **Gas flow paths in soft soil under offshore foundations**

Brief description

The aim of the thesis is to study gas flow paths under offshore foundations exposed to various states of loading. It is of particular interest to see how gas migration affects the stability of the foundation.

Laboratory simulations using plane strain models are a major part of the work. The synthetic and transparent clay-like material Laponite is used to simulate a soft soil. Gas migration for tensional and pressure load as well as dynamic load on the foundation will be examined. Analysis performed by the finite element method will be used to study the stress field dependency of the gas flow paths.

