European Commission

WIND ENERGY

INNOVATION FUND

Deployment of net-zero and innovative technologies

NAWEP: Norse Airborne Wind Energy Project

The Innovation Fund is 100% funded by the EU Emissions Trading System

| Project Factsheet

The project, known as the Norse Airborne Wind Energy Project (NAWEP), will see KML As build and operate one of the World's first Airborne Wind Energy (AWE) Arrays to be located in Norway. AWE is a new form of wind energy that has moved from nascent academic research through from the mid 1980s through to significant demonstration of viable commercial demonstration systems at TRL7 in the last five years, seeing major investment in the sector from utilities and oil and gas majors.

KML propose to build and operate an onshore array of at least 12 off the 100kW KM2 devices generating a combined 1.2MW. Whilst this array is producing significantly less than the typical 3MW to 5MW rating of a single commercial onshore Horizontal Axis Wind Turbine (HAWT), the project is a significant step forward for the sector.

The project will allow KML to accrue 500,000

COORDINATOR
KITEMILL AS

LOCATION
Norway

CATEGORY
Renewable Energy (RES)

SECTOR
Wind energy

AMOUNT OF INNOVATION FUND GRANT
EUR 3,350,473

EXPECTED GHG EMISSIONS AVOIDANCE
8,135 tonnes CO2 equivalent

STARTING DATE
01 January, 2022

ENTRY INTO OPERATION DATE
30 June, 2025

FINANCIAL CLOSE DATE
30 June, 2024

Updated on 18 June 2024

operating hours of AWE technology within 5 years to demonstrate real world reliability and maintainability. In this period the array will be operated on a commercial basis generating revenue. This is an essential objective to allow AWE to compete on an investment risk basis with HAWT technology for full scale commercial deployment.

KML has spent several months selecting an appropriate site with minimal impact on the natural and human environment and in a location that will have minimal impact on aviation navigation. The selected site falls within an EU recognised and funded drone development corridor known as Green Fly Way (www.greenflyway.se) that crosses the border between Norway and Sweden. AWE operates at higher altitudes than HAWT, and typically has to comply with EASA aviation regulations for UAVs and have minimal impact on aircraft navigation. This site selection overcomes these hurdles for an early demonstration project.

Building on the success of this project, KML will continue to scale the technology to ultimately compete with HAWT offering a product with a cost of energy circa 50% lower than HAWT and a carbon footprint which is 80% lower.

| Beneficiaries

KITEMILL AS	Norway
NFH 210887 AS	Norway