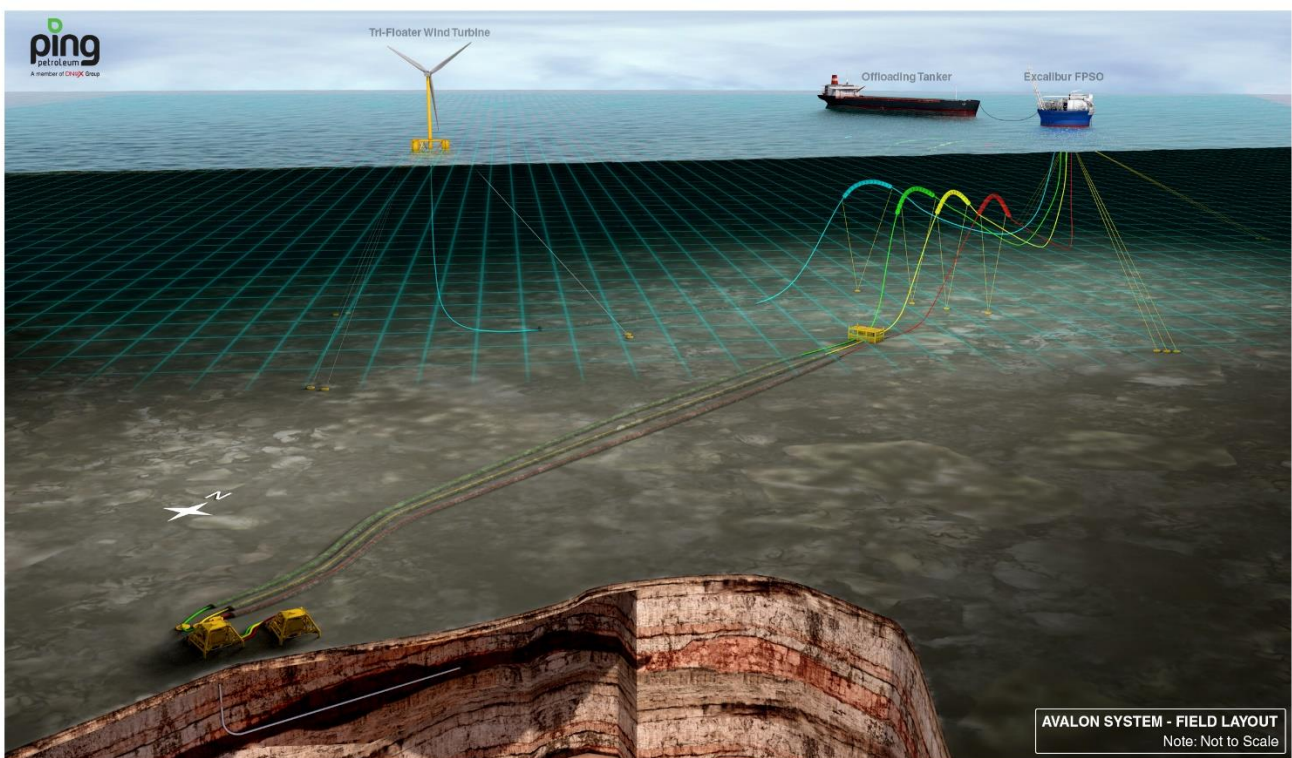


Avalon Field Development

UKCS Block 21/6b

Environmental Impact Assessment (EIA)

Project Summary



ES/2022/005

ENVIRONMENTAL STATEMENT – PROJECT SUMMARY

**THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING AND
STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2020**

Ping Petroleum UK PLC ('PPUK')
Avalon Field Development
Environmental Statement 7th November 2022
ES/2022/005
7th November 2022

Proposed Location of the Project

Ping Petroleum UK PLC (PPUK) propose to develop the Avalon field located within United Kingdom Continental Shelf (UKCS) block 21/06b. The Avalon field lies approximately 65 km east of the Aberdeenshire coast and approximately 79 km west of the UK/Norway transboundary line. The Norwegian coastline lies 310 km to the east.

The proposed Avalon Field Development area is situated in water depths ranging from approximately 112 m to 133 m.

Proposed Activities

The proposed Avalon Field Development is a new development which will comprise two production wells (Well 21/6b-J and Well 21/6b-K) and associated subsea infrastructure which will be tied-back to a Floating Production Storage and Offloading (FPSO) vessel, the Excalibur FPSO. Export of the Avalon hydrocarbons will be via shuttle tanker which will transport the offloaded hydrocarbons from the Excalibur FPSO to shore. A potential floating offshore wind turbine (OWT) may be installed at the Avalon field at a later date.

In addition to the FPSO, the Avalon Field Development will also comprise the following subsea infrastructure:

- Two subsea production wells completed with a single Xmas tree per well and covered with a fishing friendly protection structure;
- A Subsea Distribution Unit (SDU) Structure installed on the seafloor, which will house equipment for controlling the production and gas lift lines, including an umbilical termination assembly (UTA);
- A Riser Base Structure (RBS), housing a SDU, UTA and subsea isolation valve (SSIV), connecting to the dynamic risers/umbilical with buoyancy modules;
- A 3 km pipe in pipe oil production pipeline, which will be trenched and buried, between the Avalon drill centre and RBS;
- A 3 km gas lift line, which will be trenched and buried, between the Avalon drill centre and RBS;
- A 3 km control umbilical, which will be trenched and buried, between the Avalon drill centre and RBS;
- A power cable up to 25 km in length, trenched and buried, between the floating OWT and the FPSO; and
- Anchored mooring systems for the FPSO and offshore wind turbine; and

Although the Avalon development base case is to use all produced gas for power generation; and offshore wind power when the field becomes gas deficient, the option of providing a gas import/export pipeline route is still currently being evaluated. If it is established to be part of the optimal field development solution, it will either be a 5 km pipeline to the Britannia pipeline end manifold (PLEM) or a 40 km pipeline to the Ettrick PLEM. The exact route of the pipeline will be confirmed after a pipeline route survey, however it is anticipated that it may pass through some UKCS blocks including 20/02, 20/03, 20/04, 20/05, 20/08, 20/09, 20/10, 21/1, 21/2, 21/6 or 21/7.

The proposed development will use all Avalon produced gas for FPSO power generation. When the FPSO becomes gas deficient, the use of Floating Offshore Wind, as an alternative to additional diesel

consumption, is currently being evaluated. As part of this evaluation, a Crown Estate Scotland Innovation and Targeted Oil & Gas (INTOG) application is presently underway to permit placement of a floating OWT at the Avalon site. If the floating OWT is sanctioned, a power cable between the floating OWT and the FPSO will be installed and may be up to 25 km in length depending on the final location of the floating OWT.

Proposed Timeline for Activities

A summary of the principal project stages are provided below:

- Drilling operations proposed to commence in Q3 of 2023;
- Subsea infrastructure installation proposed to commence in Q1 2024;
- FPSO hook up and commissioning proposed to commence in Q1 2025;
- First oil is anticipated in Q3 2025; and
- Installation of potential floating OWT tower proposed to commence in Q2 2026.