Aasta Hansteen is a deep water gas development in the Norwegian Sea operated by Equinor. It comprises a floating spar moored to the seabed with a topside gas processing facility and a condensate storage tank below sea level. The condensate will be offloaded to shuttle tankers at the field and transported to the market. The gas will be transported via the 482 km long Polarled pipeline and treated at the gas processing plant in Nyhamna, Norway.

INVESTMENT
EUR 657 mn (net to OMV)
EUR 4 bn (total)

PRODUCT
Dry, sweet gas with low CO₂ content
Ideal for blending with gas from other fields

604.4 bn kWh
Gas production is equal to Austria’s total electricity consumption for the next 10 years.

480 km
Polarled pipeline

300 km
from shore

26,900 km
Transportation of the topside and substructure from South Korea to Norway

24,000 t
Topside: living quarters for 98 people

46,000 t
Substructure: 198 m long, 48 m diameter, 177 m submerged

3,000 m
Reservoir depth

1,270 m
Water depth

NORWAY

Nyhamna

Aasta Hansteen

The energy for a better life.
Aasta Hansteen
Field Development, Norway
Largest spar ever built

Milestones

- Field discovery
- OMV acquired 15% share in Aasta Hansteen
- Start of construction
- Polarled pipeline completed
- Substructure and Topside arrived in Norway
- Spar mating completed
- Mooring and hook-up completed
- Planned start of operation

Value

- Norway is a safe country that enables reliable gas supply to markets across Europe
- Norway is one of OMV’s focus areas and core regions
- Predictable gas supply is key to the Norwegian government
- Equinor is the largest and most experienced operator in the region
- Future hub for third-party subsea tie-backs will increase life of field and use of Aasta Hansteen’s infrastructure
- High upside potential for exploration and farm-ins
- Synergies between Up-, Mid- and Downstream
- Revenue for OMV – tax income to Norwegian state

Project challenges

- Deep-water
- Far from shore
- The field is subject to rough weather conditions
- Need for condensate storage and offloading
- Short installation season due to harsh environment
- Lack of infrastructure
- Sub-zero temperatures in winter
- Complexity of engineering and construction

Technology used

- Block construction
  Block construction is a fast and cost-efficient shipbuilding method on land which involves the assembly of prefabricated modules. The pre-built blocks are transported to the shipyard and hoisted into position and attached to other modules.

- Reel-lay pipeline installation
  Reel-lay is a safe, cost-effective and 10 times faster subsea pipe laying method compared to conventional methods. Long pipe sections are welded, tested, coated and spooled onto large reels onshore. The reel-lay vessel unspools, straightens, and lowers the pipe to the seabed as it moves forward.

- Steel catenary risers (SCR)
  SCRs are connecting a subsea pipeline to a platform. The risers are used to transfer hydrocarbon fluids or injection water. SCRs are simple in design, easy to install, economically attractive and highly resistant to pressure.

- Mooring with polyester lines
  The offshore mooring line or anchor rode is connecting the anchor on the seabed to a large ship or floating platform at the sea level. Polyester lines have lighter weight than steel chains, superb fatigue performance and smaller vessel drift-off due to shorter lines.

Contact

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