



# Visión del mundo Offshore en Noruega

Jornada "Oportunidades para el sector naval en Noruega"  
(Soledad Somoza)



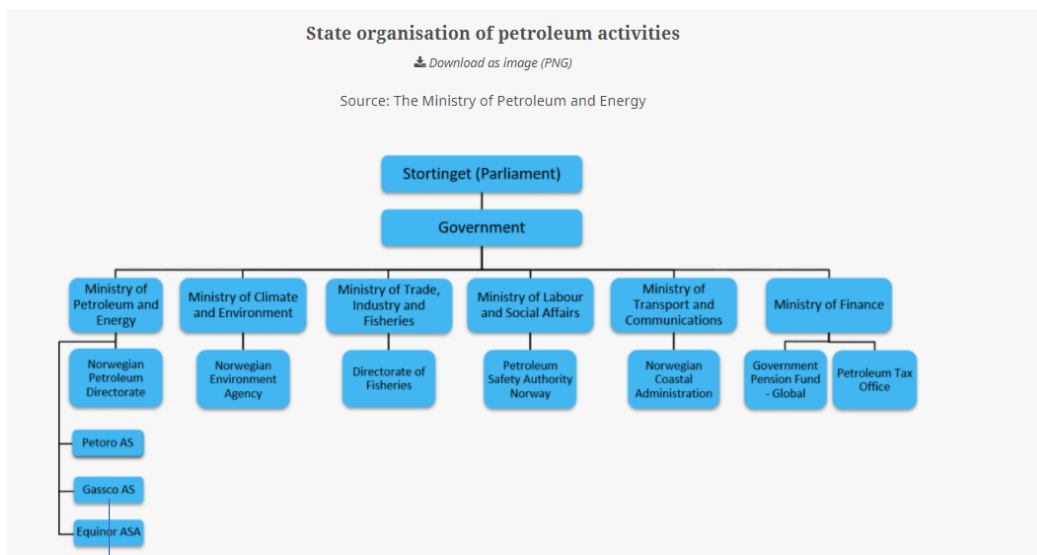
Plan  
Internacional  
de Promoción



Cámara  
de Comercio de España

Cámara  
Comercio, Vigo  
Vilaguet de Armas

# NORWEGIAN PETROLEUM DIRECTORATE (NPD)



## LICENCIA EXPLOTACION (PDO)

Operator
<a href="#">A/S Norske Shell &gt;</a>
<a href="#">Aker BP ASA &gt;</a>
<a href="#">ConocoPhillips Skandinavia AS &gt;</a>
<a href="#">DNO Norge AS &gt;</a>
<a href="#">Equinor Energy AS &gt;</a>
<a href="#">Lundin Energy Norway AS &gt;</a>
<a href="#">Neptune Energy Norge AS &gt;</a>
<a href="#">OKEA ASA &gt;</a>
<a href="#">Repsol Norge AS &gt;</a>
<a href="#">Spirit Energy Norway AS &gt;</a>
<a href="#">Total E&amp;P Norge AS &gt;</a>
<a href="#">Vår Energi AS &gt;</a>
<a href="#">Wintershall Dea Norge AS &gt;</a>



[The Norwegian Petroleum Directorate](#) is a subordinate agency of the Ministry of Petroleum and Energy. It plays a key role in petroleum management and is an important advisory body for the Ministry.

The Directorate exercises administrative authority over petroleum exploration and production on the Norwegian continental shelf, and has powers to adopt regulations and make decisions under the petroleum legislation.

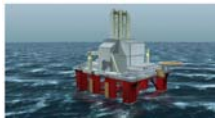


# -MAIN ACTIVITIES -CYCLE- OIL AND GAS

## Multi-Hull

MOSS MARITIME

AKER



GVA



HUISMAN



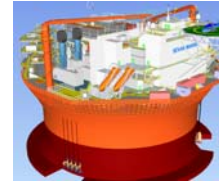
Ramform Atlas



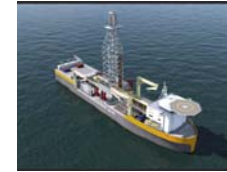
## Mono-Hull



## FPSO/FSO



SEVANDrilling



inocean

A NAUTICAL MILE AHEAD



AHT/ PSV/SUBSEA/  
RRV/Multipurpose



ODFJELL DRILLING



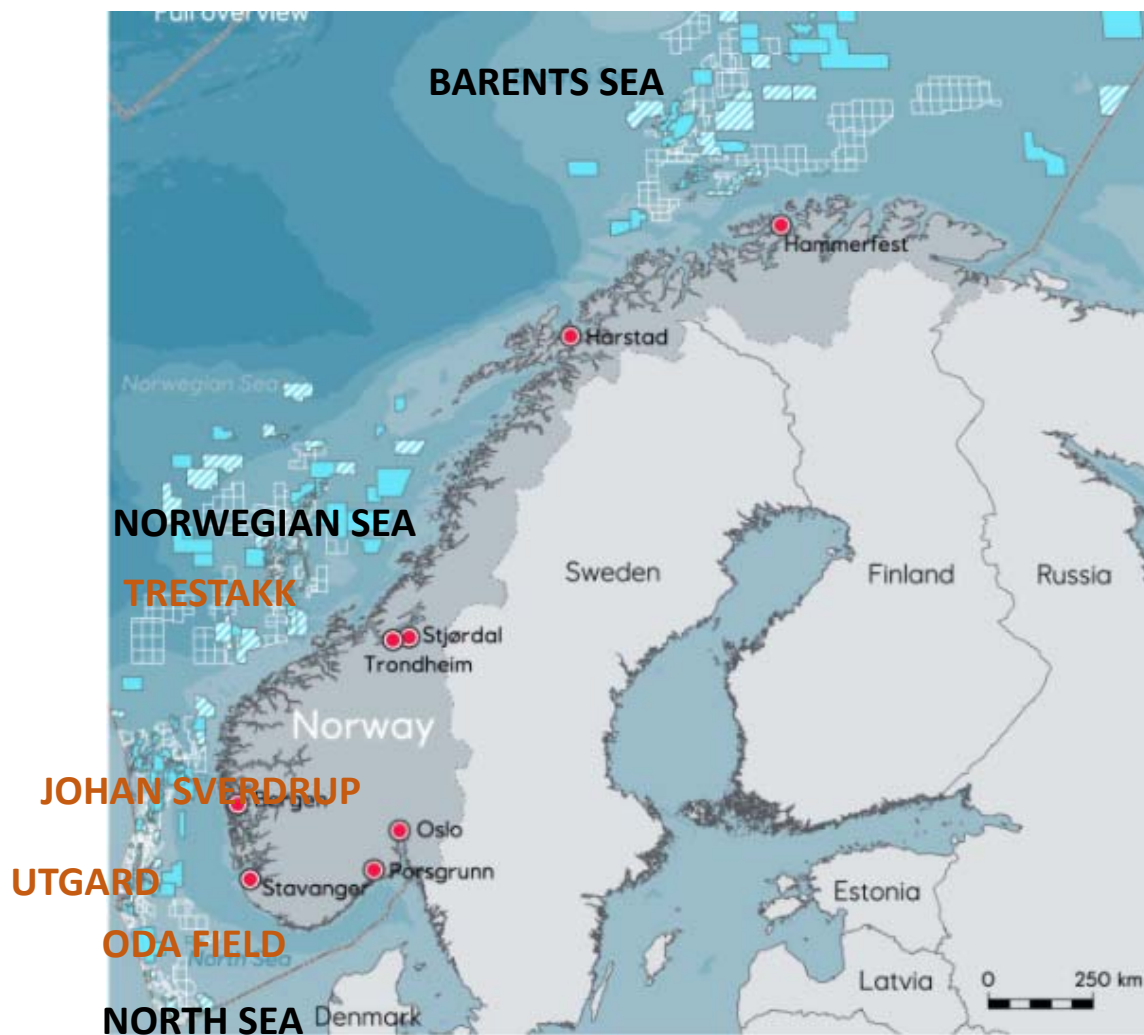
subsea 7



SOLSTAD/OFFSHORE



## NORWEGIAN CONTINENTAL SHELF ( NCS)



- 112 fields on the Norwegian shelf.
- 31-12-2019, Fields in production= 87
  - North Sea= 66
  - Norwegian Sea= 19
  - Barents= 2

Norwegian Sea : gas revenues play an important role in activity, the Barents Sea, value creation has been lower,

Four new fields started producing in 2019:

- Oda
- Utgard
- Trestakk
- Johan Sverdrup.

2020: 30 exploration Wells ( Half of 2019)

# NORWEGIAN CONTINENTAL SHELF ( NCS)- NORTH SEA

## TROLL

- Gas
- Norway's largest gas field
- Owners: (Equinor Energy 30%, Petoro AS ( 56%, Total Norge AS (3%), Conoco Skandinavia ) (Expected life until 2060)



## JOHAN SVERDRUP

- (Oil) 2010 / Lundin Energy ( 20%) .Equinor Operator
- started production in October 2019.
- Oil production reached a level of about 350,000 barrels per day and a further increase is expected in 2020.
- 1/4 Norwegian Oil Production

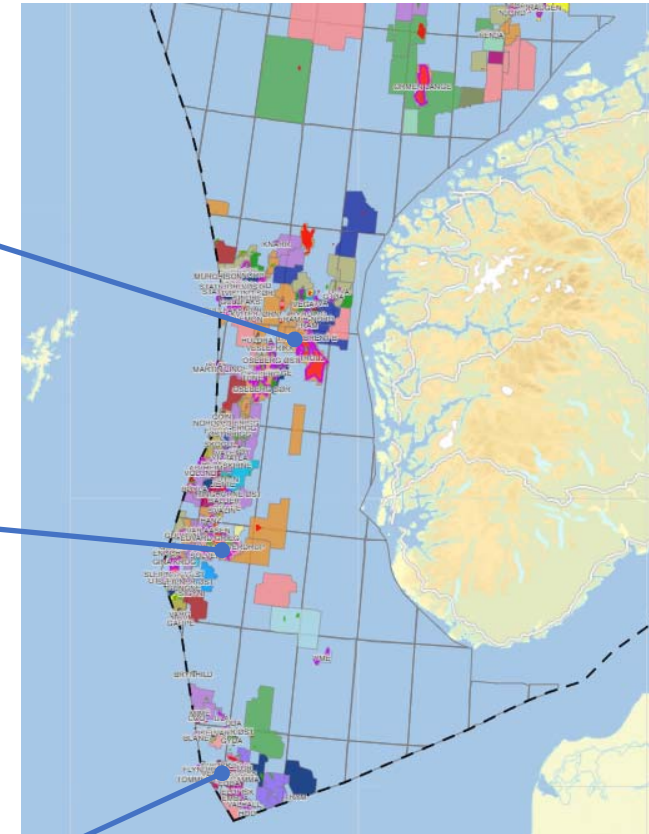


## EKOFISK

- 1969, ConocoPhillips Skandinavia AS
- 70 m
- Production from Ekofisk is maintained at a high level through continuous water injection, drilling of new production and injection wells, and well interventions.



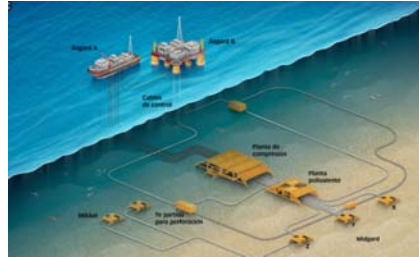
Alexander L. Kielland



# NORWEGIAN CONTINENTAL SHELF ( NCS)- NORWEGIAN SEA

## ÅSGARD

- 1981/240-300 metres
- Work is ongoing to increase the recovery from the field.
- innovación: new wells were drilled ( compresor de gas en el yacimiento)



## HEIDRUN

- water depth is 350 metres..
- Production High Level
- Improve Recovery ( infill Wells, new drilling , etc)



## FENJA FIELD

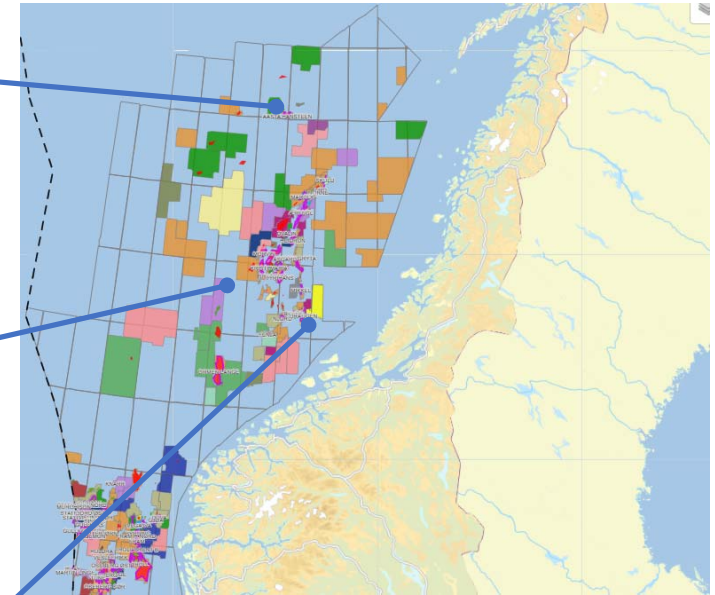
2014/ 325 metres  
Oil and Gas  
Production is planned to start in 202

## Neptune Energy makes discovery near Fenja field

Published by Nicholas Woodroof, Assistant Editor  
Oilfield Technology, Wednesday, 28 October 2020 09:00

[Save to read list](#)

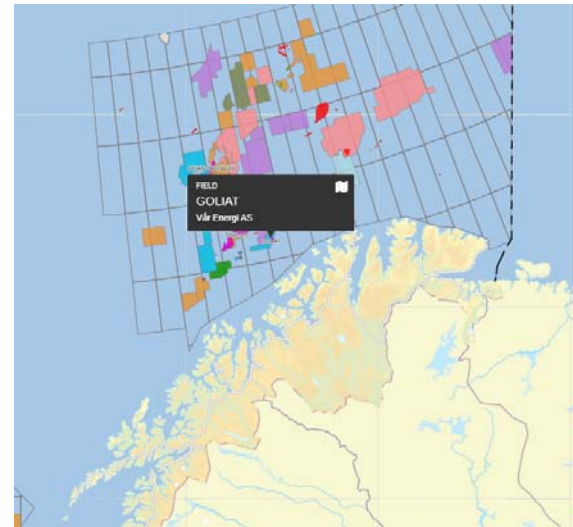
Neptune Energy Norge AS, operator of production licence 586, is the process of concluding the drilling of wildcat well 6406/12-G-1 H, which is an extension of an observation well for the 6406/12-3 A (Bue) oil discovery.



# NORWEGIAN CONTINENTAL SHELF ( NCS)- BARENTS SEA



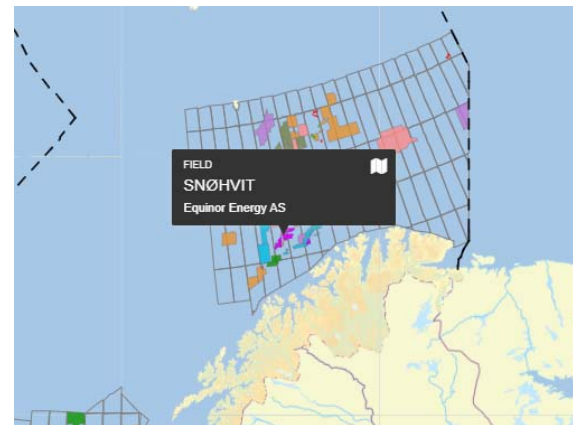
- Vår Energi AS and Equinor
- 2000; 360-420 m
- (Sevan 1000 FPSO).  
cylindrical hull
- harsh weather and cold-climate conditions ( winterization ) extreme low temperature methodology



**GOLIAT**

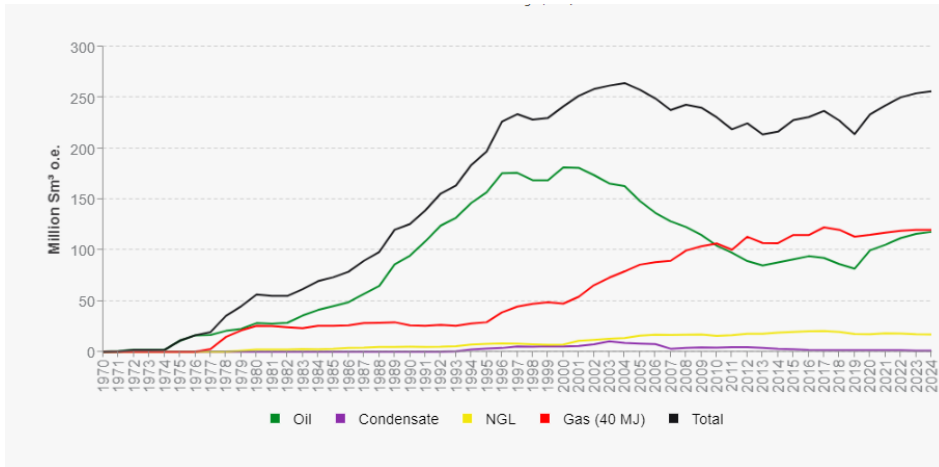


- plateau pase
- 1984/ PDO (2002) ; 310-340 metres
- Equinor (36%) Petoro AS (30%) Total (18%)  
Neptune Norge (12%) Wintershall (2%)
- Gas/Condensate
- LNG processing facility at Melkøya



**SNØHVIT**

# OIL AND GAS PRODUCTION



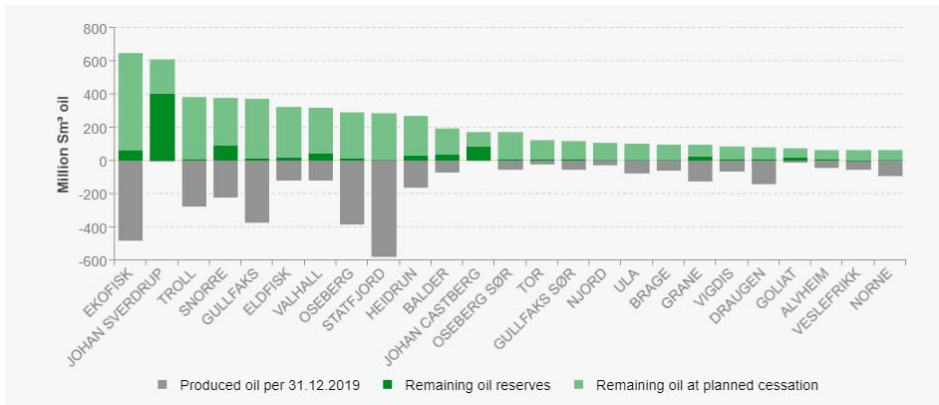
Year 2004; 264.2 mill (Sm3)

Year 2018; 227.3 mill (Sm3)

Year 2019 ; 214 mill (Sm3)

## OIL RECOVERY

The major oilfields in the country are reaching their maturity, and as a result, since 2016, the oil production of Norway has declined significantly. During 2016-2018, the oil production of the country had declined by about 8%, and is expected to further decline by another 4.7% during 2018-2019.



As a result of these investments, from 2020, the oil production of Norway is expected to reverse the trend and register significant growth. Some of the major fields that are expected to attract investments during the forecast period are the Johan Sverdrup oilfield, Martin Linge, Aasta Hansteen gas field and Johan Carstberg.

-IMPROVED RECOVERY (The average oil recovery rate for oil fields on the Norwegian shelf is currently about 47 %)  
"Enhanced Oil Recovery" (EOR),





# FORECAST

Average unit costs for discoveries in 2000-2019 were around \$25/bbl

with an assumption that the oil price will climb gradually to \$50/bbl in 2030.

**future exploration will be profitable even with low oil**

-IMPROVED RECOVERY "**Enhanced Oil Recovery**" (EOR),  
(The average oil recovery rate for oil fields on the Norwegian shelf is currently about 47 %)

## Lofoten islands

Around 1-3 billion barrel of crude oil is estimated to be present beneath the island.

## Barents Sea

around two-third of Norway's undiscovered resources, especially gas, is estimated to lie in the Barents Sea.

## Equinor Energy gets drilling permit for well in PL 960 in North Sea

By NS Energy Staff Writer 26 Oct 2020

OIL & GAS UPSTREAM DRILLING

The well is located approximately 100km southwest of the Snohvit field in the southern Barents Sea, off Norway



The Gullst platform was brought north in 2015 and became Norway's first oil production field in the Barents Sea. Photo: Thomas Nilsen

## Norway proposes to open 125 new oil exploration blocks in the Barents Sea

The heat is on: While record Arctic heat in Siberia makes worldwide headlines, the Norwegian government presents massive oil drilling plans north in the Barents Sea.

# NEW OPPORTUNITIES FOR OFFSHORE

## WIND ENERGY

### Går sammen om offshore vind

Publisert: 17.09.2020 kl. 11:48 | Oppdatert: 01.10.2020 kl. 18:58



### Aker Offshore Wind vil satse på «den neste revolusjonen»

Akers vindsatsing mener det neste havvind-eventyret ligger på dypt vann. De kommende ti årene vil kostnadene falle dramatisk, venter selskapets toppsjef.



Aker Offshore Wind og Nord Skarsten Offshore prosjekter selskapet for ansvaret på landbruken hos nærliggende vann- og vind- og solenergi.

### Vil bygge over 120 giga-vindmøller utenfor norskekysten

Vindmøllene Aker Offshore Wind skal installere kan bli like høye som Eiffeltårnet.



SATSER: Kjell Inge Røkke er største eier i Aker Offshore Wind via Aker.

**400**  
Norges rikste

Se hele listen

Jan Haudemann-Andersen  
Aker Offshore Wind

Johan Johannsson  
Aker Offshore Wind

KARRIERE VELKOMMEN

## AQUACULTURE.



### OFFSHORE FISH FARMING

### DESS Aquaculture bestiller to nye brønnbåter

Publisert: 01.10.2020 kl. 14:32 | Oppdatert: 01.10.2020 kl. 18:18



Brønnbåtene får en kapasitet på mer enn 6000 kubikk. Illustrasjon: Salt Ship Design

### ORDRELISTE FOR NORSKE VERFT

BNR.	VERFT	STED	NAVN	REDERI	TYPE	DIVERSE	LEV.
2	Barents Solutions	Utsalvik	Freyhav	Freyhav	Point Aqu@ 15-8 FB		2020
299	Brødrene Aa	Høyen	TBN	Foshan SSGPT	300 pax/last Hurtigrått	Skrog for Snowy	10.2020
303	Brødrene Aa	Høyen	TBN	Troms og Finnmark Fylkeskommune	73 pax/last Hurtigrått		01.06.2021
304	Brødrene Aa	Høyen	Fredrikke Tønder-Olsen	Nordland Fylkeskommune	193 pax/last Hurtigrått		09.2020
305	Brødrene Aa	Høyen	Liv Grønnes	Nordland Fylkeskommune	97 pax/last Hurtigrått		01.12.2020
306	Brødrene Aa	Høyen	Sigrid Sigurdsson	Nordland Fylkeskommune	97 pax/last Hurtigrått		01.03.2021
307	Brødrene Aa	Høyen	Fyger TBN	Radiw Ambulans	Ambulans		01.04.2021
56	Bik og Motorservice	Rærvik	TBN	Princo	Fiskebåt	10,98m	05.2021
57	Bik og Motorservice	Rærvik	TBN	TBN	Fiskebåt	10,98m	01.2021
44	Fjor Mek. Verksted	Fjor	Hordagut	Hordalaks Holding	HPMV LFC 4700 Hordalaks		09.2020
46	Fjor Mek. Verksted	Fjor	Vikingsbank	Cetus	Tråler		09.2020
47	Fjor Mek. Verksted	Fjor	OV Haldøgen	Kystverket	HPMV MF Kystverket		09.2020





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