

NEXSTEP FACTSHEET DECOMMISSIONING IN THE NETHERLANDS

status December 31, 2020

Nexstep, the National Platform for Re-use and Decommissioning, was established in October 2017 by EBN (owned by the Dutch state) and NOGEPa (representing the Dutch oil and gas E&P industry) to facilitate and stimulate the safe and efficient decommissioning of oil and gas infrastructure in the Netherlands while environmental interests are safeguarded. The aim is to reach a 30% cost reduction. In addition, Nexstep stimulates securing crucial infrastructure for re-use or repurposing, in order to accelerate the energy transition.

Nexstep members: Dana Petroleum, NAM, Neptune Energy, ONE-Dyas, Petrogas, Spirit Energy, TAQA, Total E&P Nederland, Tulip Oil, Vermilion Energy, Wintershall Noordzee and EBN.

Operational infrastructure offshore

Gas platforms	Oil platforms	Subsea installations	Wells	Pipelines (km)
114	11	18	475	3324

Suspended infrastructure offshore

Gas platforms	Oil platforms	Subsea installations	Wells	Pipelines (km)
24	3	3	210	634

Decommissioned infrastructure offshore

Gas platforms	Oil platforms	Subsea installations	Wells	Pipelines (km)
26	6	10	697	532

Operational infrastructure onshore

Well locations	Processing locations	Other locations	Wells	Pipelines (km)
239	34	95	693	1622

Suspended infrastructure onshore

Well locations	Processing locations	Other locations	Wells	Pipelines (km)
81	1	22	345	507

Decommissioned infrastructure onshore

Well locations	Processing locations	Other locations	Wells	Pipelines (km)
37	6	19	1404	-

Decommissioned infrastructure offshore in 2020

Gas platforms	Oil platforms	Subsea installations	Wells	Pipelines (km)
3	-	-	1	25

Decommissioned infrastructure onshore in 2020

Well locations	Processing locations	Other locations	Wells	Pipelines (km)
-	-	-	-	-

Offshore infrastructure forecasted to be decommissioned 2021-2030

Gas platforms	Oil platforms	Subsea installations	Wells	Pipelines (km)
88	10	18	528	2158

Onshore infrastructure forecasted to be decommissioned 2021-2030

Well locations	Processing locations	Other locations	Wells	Pipelines (km)
135	10	63	472	605

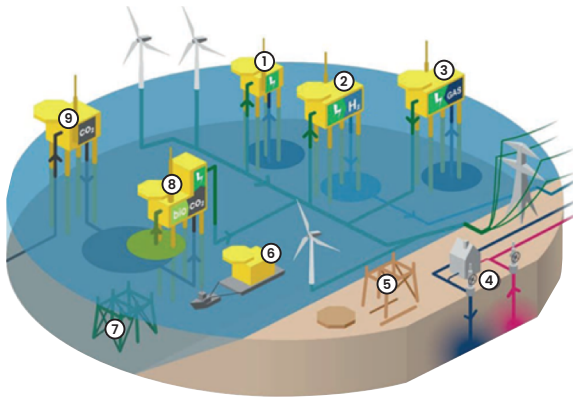
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RE-USING / REPURPOSING OIL & GAS INFRASTRUCTURE

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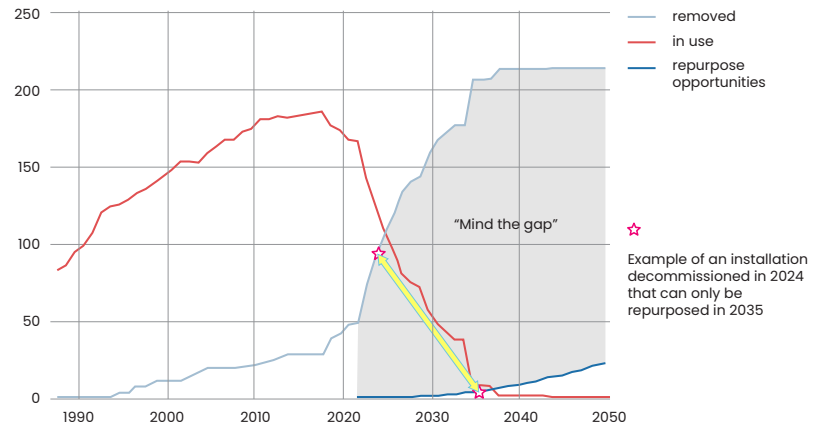
The Netherlands is facing an ambitious challenge to meet the targets of reducing its CO₂ footprint and to transition towards a sustainable energy system. In some instances there will be opportunities to re-use or repurpose existing oil and gas infrastructure to accelerate the energy transition. In practice, the decommissioning of the infrastructure would be earlier than the demand for re-use or repurpose. Approximately half of the infrastructure offshore is scheduled to be decommissioned in the next decade. It is important now to determine which infrastructure can contribute to the energy transition and to ensure that this infrastructure is not decommissioned prematurely, preventing unnecessary future investments.

Investigated options for re-use/repurposing of infrastructure:



- 1 offshore electrification
- 2 production and storage of hydrogen
- 3 gas to wire
- 4 geothermal
- 5 recycling
- 6 relocation
- 7 rigs to reef
- 8 biomass production
- 9 CO₂ storage

The gap between decommissioning and repurposing of infrastructure:



Of the 34 platforms that have been removed, 15 were re-used for hydrocarbon production:

Platform	Installation year	Operator	Re-use year	Re-used for
E18-A	2009	Wintershall Noordzee B.V.	2019	D12-B
K10-C	1981	Wintershall Noordzee B.V.	1997	Q04-A
K10-V	1993	Wintershall Noordzee B.V.	2005	L05-C
K11-B	1995	Neptune Energy Netherlands B.V.	2005	G14-A
K12-A	1983	Neptune Energy Netherlands B.V.	2006	K12-K
K12-E	1986	Neptune Energy Netherlands B.V.	2005	G16a-A
K13-D	1978	Wintershall Noordzee B.V.	1987	L08-H
L10-G	1984	Neptune Energy Netherlands B.V.	1988	L10-L
L10-K	1984	Neptune Energy Netherlands B.V.	2000	L10-M
L11a-A	1990	Neptune Energy Netherlands B.V.	1999	K09ab-B
P02-NE	1996	Wintershall Noordzee B.V.	2001	Q04-B
P02-SE	1997	Wintershall Noordzee B.V.	2002	P06-D
P06-S	1997	Wintershall Noordzee B.V.	2013	Q01-D
P14-A	1993	Wintershall Noordzee B.V.	2008	E18a-A
Q01-Helder-B	1986	Petrogas E&P Netherlands B.V.	1989	Q01-Haven-A

In addition to re-using oil and gas platforms on other locations for the same purpose, infrastructure may be repurposed. It is estimated that some 10% of the infrastructure may be re-used/repurposed.

Current repurposing projects:

PosHYdon pilot	Production and transportation of green hydrogen on Neptune Energy's Q13a-A platform
Storage of CO ₂	Porthos, Athos and Aramis
GZI Next	NAM's repurposing of onshore gas treatment installation to new energy hub in Emmen