



# Annual statement of reserves 2022





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# 1 Introduction

The report provides the status of hydrocarbon reserves and contingent resources for Vår Energi ASA as of 31 December 2022. The reserves and resources reported herein are those quantities represented as the internal estimates of Vår Energi ASA. International petroleum consultants DeGolyer and MacNaughton (D&M) have carried out an independent assessment of the reserves, and the results have been compared to the estimates of Vår Energi ASA in this report.

This Annual Statement of Reserves (ASR) has been prepared in accordance with Oslo Stock Exchange listing and disclosure requirements, Circular No. 1/2013 ("Circular 1/2013").

## 2 Assumptions and methodology

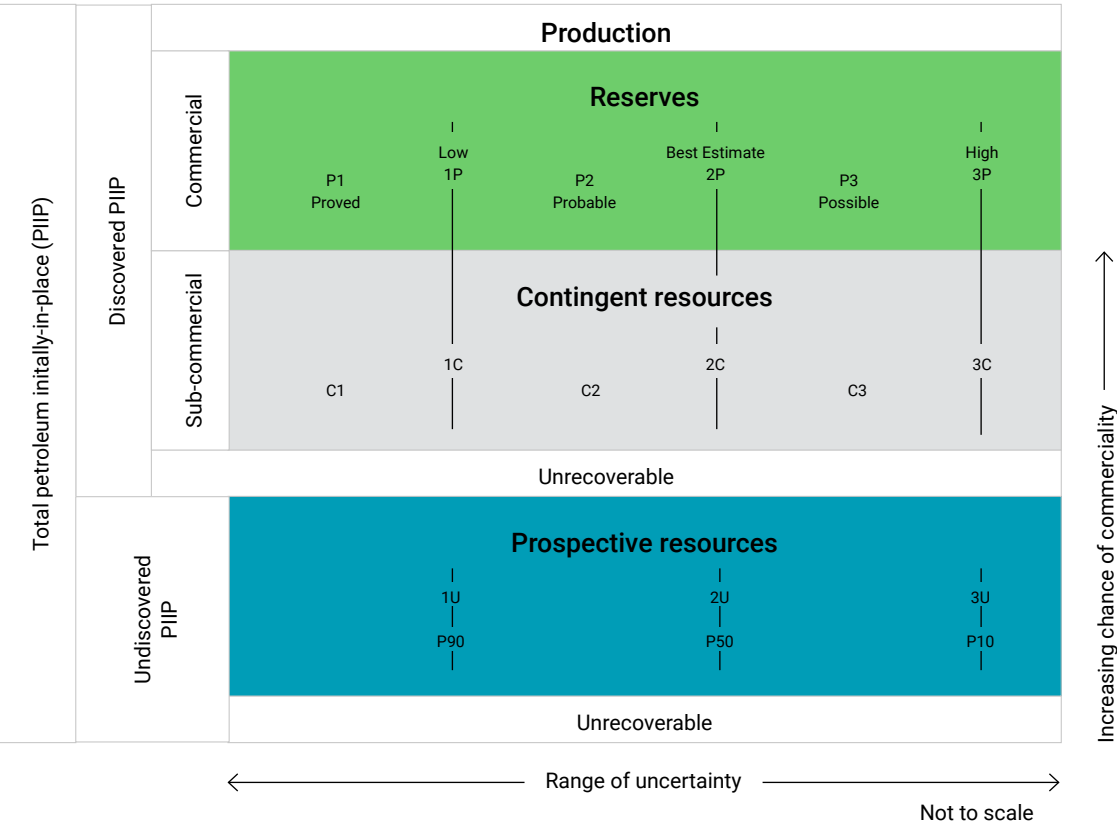
Estimates of reserves and contingent resources herein have been prepared in accordance with the Petroleum Resources Management System (PRMS) approved in March 2007 and revised in June 2018 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, the Society of Petroleum Evaluation Engineers, the Society of Exploration Geophysicists, the Society of Petrophysicists and Well Log Analysts, and the European Association of Geoscientists & Engineers.

Figure 1 illustrates the PRMS classification framework. It is a graphical representation of the SPE-PRMS 2018 resources classification system.

Reserves are those quantities of petroleum anticipated to be commercially recoverable from known accumulations from a given date forward under defined conditions. Reserves must be discovered, recoverable, commercial, and remaining as of the evaluation’s effective date. Further, reserves are categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by development and production status.

Contingent resources are those quantities of petroleum that are estimated, on a given date, to be potentially recoverable from known accumulations, but not currently considered to be commercially recoverable due to one or more contingencies.

Figure 1  
SPE-PRMS 2018 - Resources Classification Framework



### 3 Overview of Reserves

Vår Energi is one of the largest independent oil and gas producers in Norway, measured by production and reserves, and operates exclusively on the Norwegian Continental Shelf with a diverse mix of assets in the North Sea, Norwegian Sea and Barents Sea.

As of 31 December 2022, Vår Energi has a working interest in 45 fields containing reserves. Out of these fields, 36 are currently on production with developed reserves, 1 field has developed reserves but is temporarily shut-in and 8 fields contain undeveloped reserves only. Several of the producing fields also have undeveloped reserves related to new drilling programs or projects.

Vår Energi’s portfolio of operated and partner-operated assets are located in four major Areas: the Balder Area, the Barents Sea Area, the Norwegian Sea Area and the North Sea Area, as shown in Figure 2. The full list of the fields and Vår Energi’s working interest is shown in Table 1.

Figure 2  
Vår energi key areas

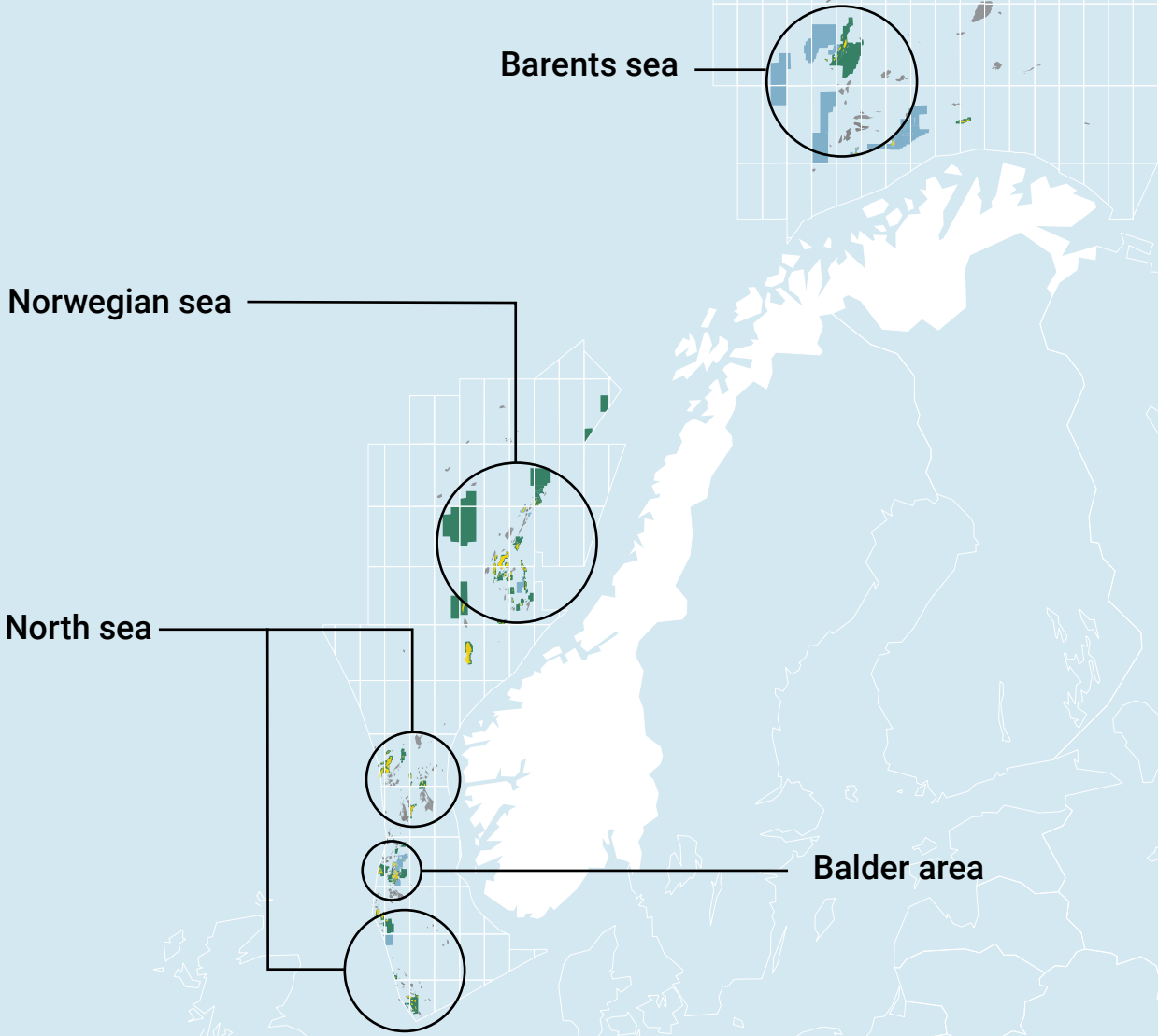


Table 1: Vår Energi's fields with reserves as of 31 December 2022

Area	Field/Project	Operator	Working interest	Field/Asset Status	Area	Field/Project	Operator	Working interest	Field/Asset Status
Balder	Balder	Vår Energi ASA	90.0%	On production	Norwegian Sea	Tyrihans	Equinor Energy ASA	18.0%	On production
Balder	Breidablikk	Equinor Energy ASA	34.4%	Development	Norwegian Sea	Urd	Equinor Energy ASA	11.5%	On production
Balder	Grane	Equinor Energy ASA	28.3%	On production	Norwegian Sea	Verdande	Equinor Energy ASA	10.5%	Development
Balder	Ringhorne Øst	Vår Energi ASA	70.0%	On production	North Sea	Bøyla	Aker BP ASA	20.0%	On production
Balder	Svalin	Equinor Energy ASA	13.0%	On production	North Sea	Brage	OKEA ASA	12.3%	On production
Barents Sea	Goliat	Vår Energi ASA	65.0%	On production	North Sea	Ekofisk	ConocoPhillips AS	12.4%	On production
Barents Sea	Johan Castberg	Equinor Energy ASA	30.0%	Development	North Sea	Eldfisk	ConocoPhillips AS	12.4%	On production
Norwegian Sea	Åsgard	Equinor Energy ASA	22.7%	On production	North Sea	Embla	ConocoPhillips AS	12.4%	On production
Norwegian Sea	Bauge	Equinor Energy ASA	17.5%	Development	North Sea	Fram	Equinor Energy ASA	25.0%	On production
Norwegian Sea	Fenja	Neptune Energy AS	45.0%	Development	North Sea	Frosk	Aker BP ASA	20.0%	On production
Norwegian Sea	Halten Øst	Equinor Energy ASA	24.6%	Development	North Sea	Gungne	Equinor Energy ASA	13.0%	On production
Norwegian Sea	Heidrun	Equinor Energy ASA	5.2%	On production	North Sea	Sigyn	Equinor Energy ASA	40.0%	On production
Norwegian Sea	Hyme	Equinor Energy ASA	17.5%	On production	North Sea	Sleipner Øst	Equinor Energy ASA	15.4%	On production
Norwegian Sea	Kristin	Equinor Energy ASA	16.7%	On production	North Sea	Sleipner Vest	Equinor Energy ASA	17.2%	On production
Norwegian Sea	Lavrans	Equinor Energy ASA	16.7%	Development	North Sea	Snorre	Equinor Energy ASA	18.6%	On production
Norwegian Sea	Marulk	Vår Energi ASA	20.0%	On production	North Sea	Statfjord	Equinor Energy ASA	21.4%	On production
Norwegian Sea	Mikkel	Equinor Energy ASA	48.4%	On production	North Sea	Statfjord Nord	Equinor Energy ASA	25.0%	On production
Norwegian Sea	Morvin	Equinor Energy ASA	30.0%	On production	North Sea	Statfjord Øst	Equinor Energy ASA	20.6%	On production
Norwegian Sea	Norne	Equinor Energy ASA	6.9%	On production	North Sea	Sygna	Equinor Energy ASA	21.0%	On production
Norwegian Sea	Ormen Lange	A/S Norske Shell	6.3%	On production	North Sea	Tommeliten Alpha	ConocoPhillips AS	9.1%	Development
Norwegian Sea	Skuld	Equinor Energy ASA	11.5%	On production	North Sea	Tor	ConocoPhillips AS	10.8%	On production
Norwegian Sea	Trestakk	Equinor Energy ASA	40.9%	On production	North Sea	Tordis	Equinor Energy ASA	16.1%	On production
					North Sea	Vigdis	Equinor Energy ASA	16.1%	On production



As of 31 December 2022, Vår Energi’s total net proved (1P) reserves were estimated to 673 million barrels of oil equivalents. Total net proved plus probable (2P) reserves were estimated to 1 070 million barrels of oil equivalents. Further details of the reserves by asset groups and products are provided in Table 2.

The standard conversion factors published by the Norwegian Petroleum Directorate have been applied for estimates of reserves and resources in this report: (i) 6.29 barrels of oil to 1 Sm³ of oil, and (ii) 1000 Sm³ of gas to 1 Sm³ of oil equivalents (oe).

Table 2: Vår Energi’s reserves as of 31 December 2022

Total Reserves		1P (P90 / low estimate)				2P (P50 / best estimate)			
Area	Asset Group	Net Oil mmboe	Net NGL mmboe	Net Gas mmboe	Net Total mmboe	Net Oil mmboe	Net NGL mmboe	Net Gas mmboe	Net Total mmboe
Balder	Balder Area	121	-	10	131	197	-	16	212
Balder	Grane Area	57	-	3	60	95	-	5	100
Barents Sea	Goliat	39	-	-	39	59	-	-	59
Barents Sea	Johan Castberg	118	-	6	124	167	-	6	174
Norwegian Sea	Åsgard Area	13	14	43	70	23	26	77	126
Norwegian Sea	Kristin Area	2	4	14	20	5	7	24	36
Norwegian Sea	Ormen Lange	1	-	27	28	1	-	38	39
Norwegian Sea	Fenja Area	19	2	6	28	27	4	10	40
North Sea	Snorre Area	59	0	3	63	91	0	3	95
North Sea	Statfjord Area	8	3	8	19	14	5	13	32
North Sea	Greater Ekofisk Area	39	2	12	53	68	4	21	92
North Sea	Fram Area	3	1	9	13	4	2	15	21
Norwegian/ North Sea	Others	11	4	10	25	20	7	16	44
Total		489	31	153	673	771	55	243	1 070

Developed and undeveloped reserves per asset group and product are shown in Table 3 and Table 4, respectively.

Table 3: Vår Energi’s developed reserves as of 31 December 2022

Total Reserves		1P (P90 / low estimate)				2P (P50 / best estimate)			
Area	Asset Group	Net Oil mmboe	Net NGL mmboe	Net Gas mmboe	Net Total mmboe	Net Oil mmboe	Net NGL mmboe	Net Gas mmboe	Net Total mmboe
Balder	Balder Area	31	-	1	31	36	-	1	37
Balder	Grane Area	18	-	3	21	27	-	3	30
Barents Sea	Goliat	38	-	-	38	54	-	-	54
Barents Sea	Johan Castberg	-	-	-	-	-	-	-	-
Norwegian Sea	Åsgard Area	8	9	28	45	12	13	43	68
Norwegian Sea	Kristin Area	2	3	13	18	3	4	19	26
Norwegian Sea	Ormen Lange	1	-	16	16	1	-	19	20
Norwegian Sea	Fenja Area	1	0	0	1	1	0	1	3
North Sea	Snorre Area	54	0	3	57	79	0	3	83
North Sea	Statfjord Area	6	2	7	16	11	4	12	26
North Sea	Greater Ekofisk Area	30	1	6	37	43	2	9	54
North Sea	Fram Area	3	1	9	13	4	2	15	20
Norwegian/North Sea	Others	7	3	9	19	11	5	14	30
Total Developed		197	20	95	312	281	32	137	450



Table 4: Vår Energi’s undeveloped reserves as of 31 December 2022

Total Reserves		1P (P90 / low estimate)				2P (P50 / best estimate)			
Area	Asset Group	Net Oil mmboe	Net NGL mmboe	Net Gas mmboe	Net Total mmboe	Net Oil mmboe	Net NGL mmboe	Net Gas mmboe	Net Total mmboe
Balder	Balder Area	90	-	9	99	161	-	15	175
Balder	Grane Area	39	-	-	39	67	-	2	69
Barents Sea	Goliat	1	-	-	1	5	-	-	5
Barents Sea	Johan Castberg	118	-	6	124	167	-	6	174
Norwegian Sea	Åsgard Area	4	6	16	26	11	13	34	58
Norwegian Sea	Kristin Area	1	0	1	2	2	2	5	9
Norwegian Sea	Ormen Lange	0	-	11	12	1	-	19	19
Norwegian Sea	Fenja Area	18	2	6	26	25	3	9	38
North Sea	Snorre Area	5	-	-	5	12	-	-	12
North Sea	Statfjord Area	2	0	1	4	4	1	2	6
North Sea	Greater Ekofisk Area	9	1	7	16	25	2	12	39
North Sea	Fram Area	1	-	-	1	1	-	-	1
Norwegian/North Sea	Others	4	1	1	6	10	2	3	14
Total Undeveloped		292	10	59	361	490	23	106	620

Changes from the Annual Statement of Reserves 2021 are summarized in Table 5. The main reasons for increased net reserves estimates (i.e. disregarding produced 2022 volumes) are:

- Final Investment Decisions (FID) to develop the Blåbjørn accumulation in the Åsgard field and the Verdande field development.
- Increased Vår Energi equity in Åsgard Unit from 22.1 to 22.7% following inclusion of Blåbjørn.
- Initiatives to increase recovery from producing fields, primarily in the Statfjord area.
- Field performance exceeding expectations resulting in positive 1P/P90 revisions.
- Base field production revision in Åsgard following the latest reservoir analysis.
- Fram field production extended to 2040, in line with extension of production license 090.
- General positive revision due to revised long-term price scenario compared to last year’s assumptions.

Main downward revisions were in Balder and Snorre fields due to Balder base performance as well as post-drill revisions at Balder and Snorre Expansion Project.

Table 5: Vår Energi’s reserves changes compared to Annual Statement of Reserves 2021

Net attributable mmboe	Developed		Undeveloped		Total	
	1P/P90	2P/P50	1P/P90	2P/P50	1P/P90	2P/P50
Balance as of 31.12.2021	361	480	353	654	714	1133
Production	(81)	(81)	-	-	(81)	(81)
Acquisitions/disposals	0	1	1	2	1	2
Extensions/discoveries	-	-	3	7	3	7
New developments	-		2	3	2	3
Revisions	32	50	2	(45)	34	6
Balance as of 31.12.2022	312	450	361	620	673	1070

Note that the production numbers are approximate, based on actual production estimates made in November 2022. Final actuals may differ slightly.



## 4 Description of Reserves

This section includes a brief description of the fields within the asset groups presented in Tables 2-4 in the previous section. A brief description of the field development is provided together with a description of the status of ongoing or planned project or drilling activities. The field descriptions are to a large extent extractions from [www.norskipetroleum.no](http://www.norskipetroleum.no), a website run in cooperation by the Ministry of Petroleum and Energy and the Norwegian Petroleum Directorate.

### 4.1 Balder Area

#### 4.1.1 Balder

The Balder Asset Group consists of the Balder/Ringhorne and Ringhorne East fields.

Balder is a field in the central part of the North Sea, just west of the Grane field. The water depth is 125 metres. Balder was discovered in 1967, and the initial plan for development and operation (PDO) was approved in 1996. Production started in 1999. The field has been developed with subsea wells tied-back to the Balder production, storage and offloading vessel (FPSO). The Ringhorne field, located nine kilometres north of the Balder FPSO, is included in the Balder complex. Ringhorne is developed with a combined accommodation, drilling and pre-processing facility with a steel jacket, tied back to the Balder FPSO for final processing, crude oil storage and gas export.

The nearby Ringhorne Øst field is also tied-back to Balder via the Ringhorne platform. Ringhorne Øst was discovered in 2003, and the plan for development and operation (PDO) was approved in 2005. The

field is developed with four production wells drilled from the Ringhorne platform. Production started in 2006.

A PDO amendment for Balder and Ringhorne was approved in 2020. The development plan includes lifetime extension and relocation of the Jotun FPSO, and drilling of new subsea wells. The Jotun FPSO is currently at a shipyard undergoing maintenance and upgrades. It is scheduled to be back on the field in 2024. Ringhorne Øst will also benefit from the amended Balder and Ringhorne PDO. Field lifetime will be prolonged, and production can benefit from increased capacity in the area.

#### 4.1.2 Grane Area

The Grane Area consists of the Grane, Svalin and Breidablikk fields.

Grane is a field in the central part of the North Sea, just east of the Balder field. The water depth is 130 metres. Grane was discovered in 1991, and the PDO was approved in 2000. The field has been developed with an integrated accommodation, drilling and processing





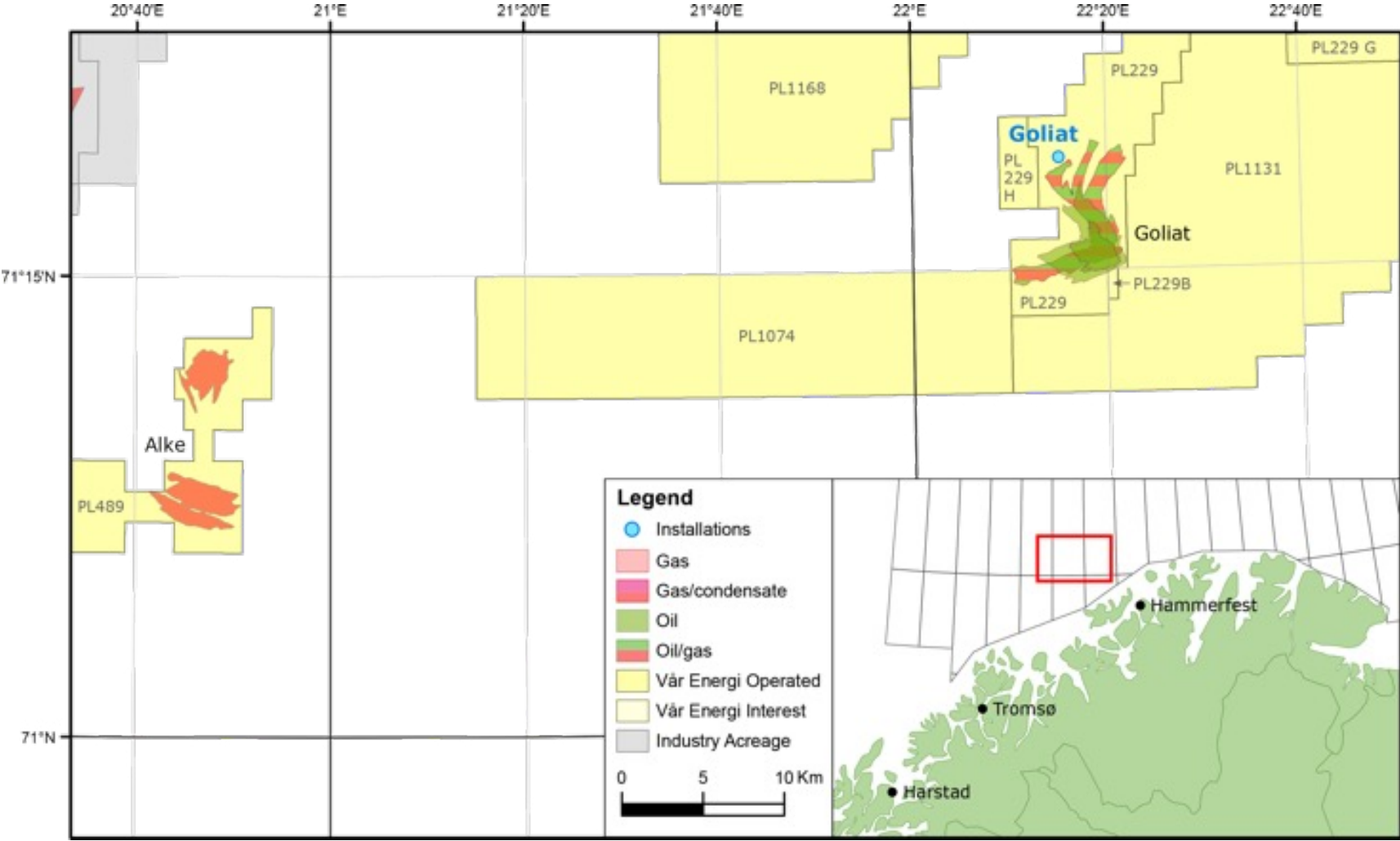


Figure 4: Goliat and Alke location map

4.2.2 Johan Castberg

Johan Castberg is a field in the Barents Sea, 100 kilometres northwest of the Snøhvit field. The water depth is 370 metres. Johan Castberg consists of the Skrugard, Havis and Drivis accumulations, discovered between 2011 and 2013. The discoveries will be developed together, and the PDO was approved in June 2018. The development concept is a production, storage and offloading vessel (FPSO) with additional subsea solutions including 18 horizontal production wells and 12 injection wells. The field is currently under development, and production is scheduled to start in 2024.

4.3 Norwegian Sea

4.3.1 Åsgard Area

The Åsgard Area consists of the Åsgard, Mikkell, Trestakk, Morvin and Halten Øst fields.

Åsgard is a field in the central part of the Norwegian Sea. The water depth is 240-300 metres. Åsgard was discovered in 1981, and the plan for development and operation (PDO) was approved in 1996. The Åsgard field includes the Smørbukk, Smørbukk Sør, Midgard accumulations and Smørbukk Nord, where a development plan was submitted in 2022. The Åsgard field has been developed with subsea wells tied-back to a production, storage and offloading vessel (FPSO), Åsgard A. The development also includes Åsgard B, a floating, semi-submersible facility for gas and condensate processing. Åsgard B is connected to a floating storage and offloading vessel for condensate, Åsgard C. Production from Åsgard A started in 1999 and gas export started in 2000.

The Åsgard facilities are an important part of the Norwegian Sea infrastructure. The Mikkell and Morvin fields are tied to Åsgard B for processing, and gas from Åsgard B is sent to the Tyrihans field for gas

lift. The PDO for a subsea gas compression facility at Midgard was approved in 2012 and started operations in 2015. The Trestakk field is tied back to Åsgard A. In 2023, a well, Blåbjørn, will be drilled in the Cretaceous accumulation. The planned well will be the first producer from the Lysing formation in the Åsgard area and will provide production experience from this reservoir.

Work is ongoing to increase the recovery from the Åsgard field, while third party tie-ins to Åsgard will prolong the lifetime of the facilities. Smørbukk Nord and Blåbjørn FIDs were achieved in October and December 2022, respectively.

The Mikkel field is located in the eastern part of the Norwegian Sea. It was discovered in 1987, and the PDO was approved in 2001. The field is developed with two subsea templates tied-back to the Åsgard B facility. Production started in 2003.

Trestakk is located 20 kilometres south of the Åsgard field. Trestakk was discovered in 1986 and the PDO was approved in 2017. The development concept consists of one subsea template with four well slots and an additional satellite well. The subsea development is tied-back to the Åsgard A facility for processing and gas injection. Production started in 2019.

Morvin is located 15 kilometres west of the Åsgard field. Morvin was discovered in 2001, and the PDO was approved in 2008. The field is developed with two 4-slot subsea templates, tied to the Åsgard B facility. Production started in 2010.

Halten Øst includes six discoveries (Flyndretind, Gamma, Harepus, Nona, Natalia and Sigrid) located east of the Åsgard field. The water depth is 240-300 metres. The gas-condensate discoveries will be

developed as a subsea tie-back to the Åsgard B facility via the Midgard subsea system. The PDO was submitted in May 2022.

4.3.2 Kristin Area

The Kristin Area consists of the Kristin, Tyrihans and Lavrans fields.

Kristin is located a few kilometres southwest of the Åsgard field. The water depth is 370 metres. Kristin was discovered in 1997, and the PDO was approved in 2001. The field is developed with four 4-slot subsea templates tied-back to a semi-submersible facility for processing. Production started in 2005. An amended PDO was approved in 2007. The Tyrihans and Maria fields are tied back to the Kristin facility.

The Tyrihans field was discovered in 1983 and the PDO was approved in 2005. The field is developed with five subsea templates tied-back to the Kristin platform, four templates for production and gas injection and one template for seawater injection. Gas lift is supplied from the Åsgard B platform. Production started in 2009.

A PDO for Kristin South, including development of the Kristin-Q area and Lavrans, was delivered to the authorities in July 2021 and approved in February 2022. Kristin South will be developed as a subsea tie back to the Kristin facility for processing and export.

4.3.3 Ormen Lange

Ormen Lange is a field in the southern part of the Norwegian Sea, 120 kilometres west-northwest of the Nyhamna processing plant. The water depth varies from 800 to more than 1.100 metres. Ormen Lange was discovered in 1997, and the PDO was approved in 2004. The field has been developed in several phases. The development is comprised of four 8-slot subsea templates with a total of 24 gas production wells.

Production started in 2007 from two subsea templates in the central part of the field tied back to Nyhamna. In 2009 and 2011, two additional templates were installed in the southern and northern parts of the field, respectively.

Onshore gas compression at the Nyhamna terminal started operation in 2017, and a PDO for subsea gas compression was submitted to the authorities in 2021. Two new infill wells were drilled in 2022.

4.3.4 Fenja Area

The Fenja Area consists of the Fenja, Bauge and Hyme fields.

The Fenja field is located in the Norwegian Sea, 35 kilometres southwest of the Njord field. The water depth is 325 metres. Fenja was discovered in 2014, and the PDO was approved in 2018. The field is being developed with two subsea templates with up to six wells, tied-back to the third-party Njord A facility. Production from Fenja is planned to start in early 2023.

Bauge is located 15 kilometres east of the Njord field. The water depth is 280 metres. Bauge was discovered in 2013, and the PDO was approved in June 2017. The field will be developed with two production wells tied-back to the Njord A facility. The field is under development and the production is planned to start in early 2023.

Hyme is located 19 kilometres northeast of the Njord field. The water depth is 250 metres. Hyme was discovered in 2009, and the PDO was approved in 2011. The field is developed with a subsea template including one production well and one water injection well, tied back to the Njord A facility. Production started in 2013, however, was temporarily stopped in 2016 when the Njord A facility was shut down and towed



to land for maintenance and upgrades. Hyme is expected to resume production in early 2023, following restart of production from Njord.

4.4 North Sea

4.4.1 Snorre Area

The Snorre Area consists of the Snorre, Vigdis and Tordis fields.

Snorre is a field in the Tampen area in the northern part of the North Sea. The water depth is 300-350 metres. Snorre was discovered in 1979, and the plan for development and operation (PDO) was approved in 1988. The field is developed with the Snorre A, located in the southern part of the field, and Snorre B in the northern part. Snorre A is a floating tension-leg platform for accommodation, drilling and processing, and Snorre B is a semi-submersible integrated drilling, processing and accommodation facility.

In 2018, an amended PDO for the Snorre Expansion Project was approved. It includes six subsea templates, each with four wells tied-back to Snorre A. Production started in 2020. Several measures to increase oil recovery from Snorre are being considered. Possible third party tie-ins may lead to further development of the field.

In 2020, an amended PDO for the development of the Hywind Tampen wind farm was approved. The wind farm will consist of 11 floating turbines which will supply part of the electricity needed for the Snorre and Gullfaks fields, the first platforms in the world to receive power from a floating wind farm. The Hywind Tampen wind farm started up in Q4 2022.

Vigdis is located in the Tampen area between the Snorre, Statfjord and Gullfaks fields. The water depth is 280 metres. Vigdis was discovered in 1986, and the PDO was approved in 1994. The field is developed

with seven subsea templates and two satellite wells connected to the Snorre A facility. Production started in 1997. Oil from Vigdis is processed in a dedicated processing module on Snorre A.

Tordis is located in the Tampen area between the Statfjord and Gullfaks fields. The water depth is 150-220 metres. Tordis was discovered in 1987, and the PDO was approved in 1991. The field has been developed with a central subsea manifold tied-back to the Gullfaks C facility, which also supplies water for injection. Two 4-slots subsea templates and seven single-well satellites are tied-back to the manifold. Production started in 1994.

4.4.2 Statfjord Area

The Statfjord Area consists of the Statfjord Unit, Statfjord Nord, Statfjord Øst and Sygna fields.

Statfjord is a field in the Tampen area, and is located in both the Norwegian and UK sectors. The Norwegian share of the field is 85.47 per cent. The water depth is 150 metres. Statfjord was discovered in 1974, and the PDO was approved in 1976. The field has been developed with three fully integrated concrete platforms: Statfjord A, Statfjord B and Statfjord C. Statfjord A, centrally located on the field, came on stream in 1979. Statfjord B, in the southern part of the field, in 1982, and Statfjord C, in the northern part, in 1985. The subsea satellite fields Statfjord Øst, Statfjord Nord and Sygna have a dedicated inlet separator on Statfjord C. A PDO for Statfjord Late Life was approved in 2005.

Statfjord Nord is located 17 kilometres north of the Statfjord field. The water depth is 250-290 metres. Statfjord Nord was discovered in 1977, and the PDO was approved in 1990. The field has been developed with

two subsea production templates and one water injection template tied-back to the Statfjord C facility. Production started in 1995.

Statfjord Øst is located seven kilometres northeast of the Statfjord field. The water depth is 150-190 metres. Statfjord Øst was discovered in 1976, and the PDO was approved in 1990. The field has been developed with two subsea production templates and one water injection template, tied-back to the Statfjord C platform. In addition, two production wells have been drilled from Statfjord C. Production started in 1994. A PDO amendment was approved in 2021; four new wells will be drilled from the existing subsea templates in 2023. The project also includes modifications on Statfjord C and a new pipeline for gas lift.

Work is ongoing to extend the lifetime of the Statfjord field and tie-backs, including drilling of several new wells in the years to come. Satellite fields tied-back to Statfjord as well as nearby discoveries will benefit from the lifetime extension.

4.4.3 Greater Ekofisk Area

The Greater Ekofisk Area consists of the Ekofisk, Eldfisk and Embla fields, while the adjacent Tor and Tommeliten Alpha fields are also included in this asset group.

Ekofisk and Eldfisk are oil fields in the southern part of the Norwegian sector in the North Sea. The water depth is approximately 70 metres. Ekofisk was discovered in 1969, and the initial plan for development and operation (PDO) was approved in 1972. Eldfisk was discovered in 1970, and the PDO was approved in 1975. The Embla field is located just south of the Eldfisk field. Embla was discovered in 1988, and the PDO was approved in 1990. The field has been developed with an

unmanned wellhead facility, which is remotely controlled from Eldfisk. Production started in 1993.

Production from Ekofisk and Eldfisk is maintained through continuous water injection, drilling of production and injection wells, and well interventions. Infill drilling is expected to continue throughout the lifetime of the fields.

A PDO for the Eldfisk North project was approved in December 2022. The Eldfisk North is a subsea development and includes 14 wells, where nine are producers and five are water injectors. Eldfisk North will be tied back to the Eldfisk Complex in the North Sea.

The Tor field is located 13 kilometres northeast of the Ekofisk field. The water depth is 70 metres. Tor was discovered in 1970, and the PDO was approved in 1973. The field was shut down in 2015. A new PDO for the redevelopment of Tor was approved in 2019. The development includes two subsea templates with eight horizontal production wells, tied-back to the Ekofisk Centre. Production started again in 2020.

The Tommeliten Alpha development concept includes ten horizontal producers, two 6-slot Subsea Production Station templates, a direct electric heated flowline back to the Ekofisk Complex and an umbilical. Tie-in and de-bottlenecking modifications will be performed at the Ekofisk Complex including a new processing module. The field will produce by pressure depletion. The field is under development with PDO approved in July 2022 and production planned to start in 2024.

4.4.4 Fram Area

Fram is a field in the northern part of the North Sea, 20 kilometres north of the Troll field. The water depth is 350 metres. Fram was discovered in 1990 and is comprised of two main structures, Fram Vest and Fram Øst. The PDO for Fram Vest was approved in 2001, and production started in 2003. The PDO for Fram Øst was approved in 2005, and production started in 2006. Both structures are developed with two subsea templates each, tied-back to the Troll C platform. A PDO exemption for Fram C-Øst was approved in 2016; the development included a long oil producer drilled from the B2-template on Fram Øst. Another PDO exemption was granted in 2018 for two wells in the Fram-Øst Brent reservoir, drilled from one of the existing templates on Fram Øst.

A Fram dedicated gas module was installed on the Troll C platform and started operation in 2020. Two successful exploration wells in the Fram area have recently been drilled and a development plan is being matured.

## 5 Contingent Resources

Almost 60 per cent of Vår Energi ASA's contingent resources as of 31 December 2022 are associated with new development projects in the vicinity of existing fields. The main projects being matured towards an investment decision are King & Prince (Balder Area) as well as additional infill drilling in the Balder Area, the development of Goliat gas resources, and the development of discoveries and drilling in the Fram area. The remaining contingent resources are linked to discoveries such as Alke, Garantiana and several discoveries in the Barents Sea near the Johan Castberg field, including Snøfonn Nord and Skavl Stø, both discovered in 2022.

This section includes a brief description of the main contingent resources within the Vår Energi's portfolio.

### Balder Area (including King & Prince)

There are significant remaining resources to be targeted in the Balder and Ringhorne fields through future infill drilling programs. In addition, the 2021 exploration campaign delivered a significant resource addition through the King & Prince discoveries. The development concept for King & Prince is currently being evaluated.

### Goliat

Contingent resources in Goliat are associated with the development of the gas resources in the field. Solutions for gas export are being evaluated. The resources also include future plans for infill drilling, to be matured during the next years.

### Alke

The Alke gas discovery is operated by Vår Energi in PL489 in the Hammerfest Basin, about 54 kilometers south of the Snohvit field in a water depth of 160 meters. The planning of a possible development of the Alke field is ongoing. Decision Gate 1 (DG1) was passed Q2 2019.

### Johan Castberg Area

Contingent resources are related to nearby discoveries, including two 2022 discoveries, within subsea tie-in distance to the Johan Castberg FPSO, i.e. Isflak, Iskrystall, Kayak, Kramsnø, Nunatak, Skavl (Tubåen and Stø), Skruis and Snøfonn Nord. The planned gas blowdown at the end of the field life is also included in contingent resources.

### Grane

Grane field contingent resources include new infill drilling being matured that also will contribute to extend field life.

### Mikkel

Contingent resources are related to the Ultra Low Pressure Project (subsea boosting).

### Statfjord Area

Contingent resources consist of new activities aimed to increase field reserves related to the Statfjord Life Extension Project.

### Garantiana

Garantiana is a discovery in the northern North Sea, 15 kilometres north of the Visund field. The water depth is 380 metres. The discovery was proven in 2012 and delineated in 2014. In 2021, a new discovery was made in a separate structure just west of Garantiana. An exploration well south of the Garantiana discovery is planned to be drilled in early 2023 to prove additional resources in the area.

### Fram Area development

Contingent resources are related to future infill drilling in Fram, and for the recent Echino South and Blasto discoveries. The development project for these two discoveries passed Decision Gate 1 (DG1) in June 2022.



## 6 Management Discussion and Analysis

Vår Energi ASA's reserves and resources estimates are based on standard industry practices and methodologies. The evaluations and assessments have been performed by experienced professionals in Vår Energi ASA with extensive industry experience, and the methodology and results have been quality controlled as part of the company's internal reserves estimation procedures.

A third-party independent assessment has been performed by international petroleum consultants DeGolyer and MacNaughton (D&M) on all Vår Energi ASA's fields that have remaining hydrocarbon volumes classified as reserves or contingent resources. The assessment was based on input data provided by Vår Energi ASA, as well as publicly available data about the fields. The results of the independent assessment indicate, when compared on an aggregate basis, no material difference compared to the reserves presented herein.

The 2P reserves estimates represents the expected outcome for the fields based on the performance observed to date, planned activities in the licenses and reasonable assumptions about future economic and fiscal conditions. The Company has applied a long-term oil price assumption of 70 USD/bbl (real 2022 terms), a long-term gas price of €30/MWH (real 2022 terms), long-term inflation assumption of 2.0% and a long-term exchange rate assumption of 9.0 NOK/USD in the economic evaluation of its reserves in the economic evaluation of its reserves.

The estimation of recoverable volumes is associated with geological and economic uncertainties. The 1P reserves reflect the Company's estimate of volumes with reasonable certainty to be recovered, however there is remaining risk that actual results may be lower than the 1P estimates. Lower and higher oil prices may also shorten or extend the economic life of fields, resulting in lower or higher recoverable volumes than what is assumed.

The report, including this Management's Discussion and Analysis (MD&A), contains and was prepared on the basis of forward-looking information and statements. Such information and statements are based on management's current assumptions, expectations, estimates and projections and are therefore subject to risks and uncertainties that could cause actual results, performance or events to differ materially. Vår Energi ASA can give no assurance that those assumptions, expectations, estimates and projections will occur or be realized and readers should not place undue reliance on forward-looking statements.

  
Torger Rød  
CEO, Vår Energi ASA



