



Annual Report  
2024



# FORCE annual report 2024

## Opening remarks from FORCE MC Chairman

As we embark on another year, let us revisit the core mission of FORCE: to play a pivotal role in future value creation on the Norwegian Continental Shelf by fostering collaboration between industry, research institutions, and authorities. In a world with ever increasing geopolitical tension, energy security, affordability and climate challenges the need for collaboration is greater than ever. We are pleased to see high engagement levels in our meetings and events.

Reflecting on 2024, the downward trend in number of participants we have observed since the covid peak years (where online seminars were an extra welcome opportunity to connect), has continued and it is somewhat concerning to see that we are now below the pre-covid activity levels. Nevertheless, the quality of our seminars, webinars and lunch & learn events has remained very high and in total we have had 1084 participants in 24 events of which the majority has been in-person. With high activity levels on the NCS and an increasing amount of company mergers this might become our new reality, but we keep encouraging our network groups to be creative and find topics that interest a broad audience.

It has been inspiring to see new formats and topics such as a 2-day seminar on subsurface uncertainty and decisions, the Cake & Discuss sessions with uncertainty case studies and a very well attended seminar on pressure interaction between CO2 storage sites. Additionally, we hosted the bi-annual “Joining Forces” 1-day seminar, aimed at strengthening collaboration between academia, research institutes and industry. On initiative of the Sustainable Recovery group a Subsurface Managers Forum was created, with the intention to incorporate this Forum in Offshore Norge.

Our secretariat has been proactive as always in promoting and organizing events, ensuring the FORCE website, social media and administration are up to date. The introduction of regular FORCE Newsletters has kept our community informed and engaged, while our presence on LinkedIn and YouTube continues to grow, with nearly 2500 followers.

Looking ahead, the 2025 FORCE program is already taking shape with many planned events and the fieldtrip to Corinth from 5-9 May!

We will also review our Cooperation Agreement during 2025 as part of the regular 3-yearly review cycle, providing an opportunity to review our link to the technology focus areas of the new Energi2050 strategy.

The dedication and commitment of our committee members, network participants, and secretariat have been truly inspiring. Your efforts, alongside your professional and personal responsibilities, have made FORCE a vibrant and collaborative community. Thank you for your hard work in 2024, and here’s to another successful year ahead!

On behalf of the Management Committee,  
Claire Richardson-Dissel, Technical Manager A/S Norske Shell

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## About FORCE

FORCE is a cooperating forum for Sustainable Recovery (SR), Improved exploration (IE) and Energy efficiency & environment (EEE) conducted by licensees on the NCS and the Norwegian authorities. Our ambition is to play a significant role in the future value creation on the Norwegian Continental Shelf, through facilitating cooperation between industry, research institutions and authorities.

The basic idea of the forum is to improve collaboration by sharing knowledge through network groups and by enabling the establishment of cross licensees /company piloting projects within exploration and enhanced oil recovery through project groups.

	<b>Role/task</b>	<b>Participants</b>	<b>Meetings</b>
<b>General assembly</b>	<ul style="list-style-type: none"> <li>• Decide budget</li> <li>• Select members for committees</li> </ul>	<ul style="list-style-type: none"> <li>• All member companies</li> </ul>	<ul style="list-style-type: none"> <li>• Yearly</li> </ul>
<b>Selection committee</b>	<ul style="list-style-type: none"> <li>• Propose members for committees</li> </ul>	<ul style="list-style-type: none"> <li>• 3 members</li> </ul>	<ul style="list-style-type: none"> <li>• Biennial</li> </ul>
<b>Management committee</b>	<ul style="list-style-type: none"> <li>• (Re-) allocate budget</li> <li>• Synergies between technical groups</li> <li>• External communication</li> <li>• Monitor activities</li> </ul>	<ul style="list-style-type: none"> <li>• Max 8 members</li> </ul>	<ul style="list-style-type: none"> <li>• Quarterly</li> </ul>
<b>Secretariat</b>	<ul style="list-style-type: none"> <li>• Arrange meetings</li> <li>• Support activities</li> <li>• Administration</li> </ul>	<ul style="list-style-type: none"> <li>• Sodor</li> </ul>	<ul style="list-style-type: none"> <li>• As required</li> </ul>
<b>Technical committees</b>	<ul style="list-style-type: none"> <li>• Select project proposals</li> <li>• Facilitate project initiation</li> <li>• Manage pre-projects</li> </ul>	<ul style="list-style-type: none"> <li>• Max 8 members</li> <li>• Whereof 3 asset managers</li> </ul>	<ul style="list-style-type: none"> <li>• Quarterly</li> </ul>
<b>Network groups</b>	<ul style="list-style-type: none"> <li>• Share information through workshops</li> <li>• Generate ideas for new projects</li> </ul>	<ul style="list-style-type: none"> <li>• All member companies</li> </ul>	<ul style="list-style-type: none"> <li>• As required</li> </ul>

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## Members

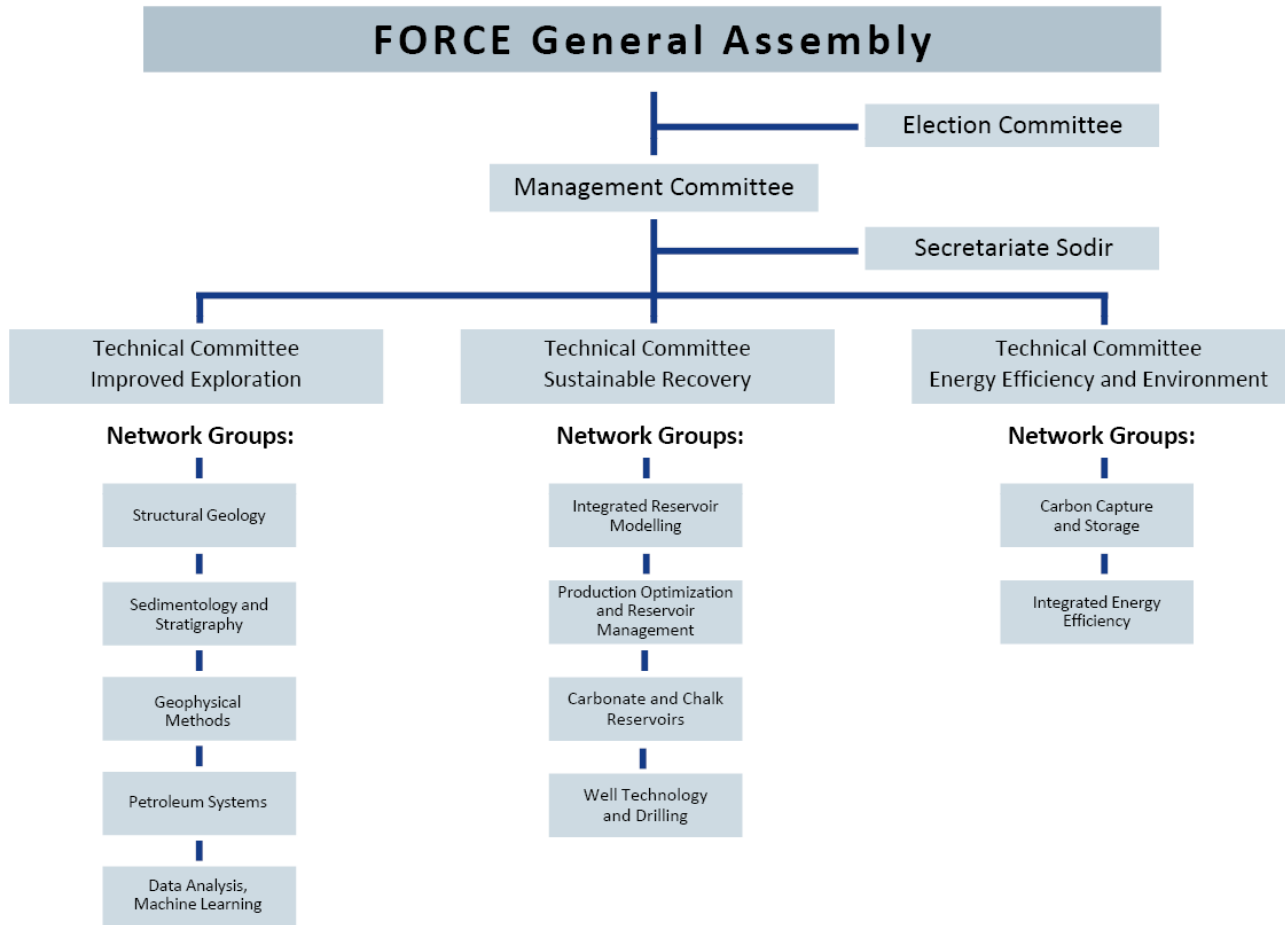
All oil and gas companies qualified as licensees in Norway can become FORCE members. In addition, the Norwegian Offshore Directorate is a member of FORCE. Interested parties can apply for membership by contacting the Secretariat. The Management committee, consisting of 8 members, will be consulted.

New companies must sign the FORCE Cooperation Agreement. The cost is a given amount divided equally among all members. For 2024 this was NOK 133 333, -. This number was a calculation error, and the companies will get a reduction on the 2025 membership invoice. By the end of 2024, the number of members had decreased from 24 to 22 members. The reduction in members were mostly because of company mergers.

These companies were members during 2024 (this is according to invoicing).

AS Norske Shell	Petrolia NOCO AS
Aker BP ASA	PGNiG Upstream International AS
Concedo AS	Petoro AS
DNO Norge AS	Repsol Norge AS
Equinor Energy AS	Stella Maris CCS AS
Harbour Energy	Source Energy
INPEX Idemitsu Norge	Sval Energi
LIME Petroleum	TOTAL E&P Norge AS
Norwegian Offshore Directorate	Vår Energi AS
OKEA ASA	Wellesley Petroleum AS
OMV (Norge) AS	Wintershall Dea Norge ASA
Orlen	
Pandion Energy AS	

## Organization



## FORCE annual report 2024

<b>Management Committee</b>	
Kent Høgseth	DNO
Helen Haneferd	ConocoPhillips
Grete Block Vagle	Aker BP
Pierre Yves Raya	Harbour Energy
Asdrúbal Bernal	Equinor
Gildas Lageat	Vår Energi
Patrick Stinson	Total Energies
Claire Richardson- temp Chair	Shell
<b>TC Improved Exploration</b>	
Eva Maria Traa	Aker BP
Atle Folkestad	Equinor
Sebastien Landru	DNO
Piotr Kabulski	PGNiG
Marli Blumenwitz	Wintershall Dea/Harbour Energy
Matteo Gennaro	Vår Energi
Catarina Marta Amaro	OMV
Stig-Morten Knutsen	Norwegian Offshore Directorate
<b>TC Sustainable Recovery</b>	
Johanna Normann Ravnås, Chair	Wintershall Dea/Harbour Energy
Bjørn Egil Ludvigsen	Aker BP
Anniken Teigen	Petoro
Teodor Damian	Shell
Robert Moe	ConocoPhillips
Emanuel Teichmann	Okea
Lars Inge Berge	Equinor
Eli Jens Høgnesen	Norwegian Offshore Directorate
<b>TC Energy Efficiency and Environment</b>	
Anna Ponten	Equinor
Carlos Rio-Chamorro	PGNiG
Georgios Samouilidis	Shell
Hans Røstøen	ConocoPhillips
Hege Odden	Petoro
Øyvind Åsarød	Repsol
Aslaug Eskeland Janssen	Norwegian Offshore Directorate

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## Activity report

In 2024, we observed a significant decline in participation in our seminars and webinars, marking the lowest attendance since 2015. With a total of 24 events with 1084 participants joining FORCE events, this trend is concerning as it reflects the challenges, we face in engaging our network group members and maintaining active participation.

Most of the events held this year were in-person seminars, which accounted for the highest number of events compared to webinars. Despite the preference for in-person interactions, the overall participation numbers have dropped.

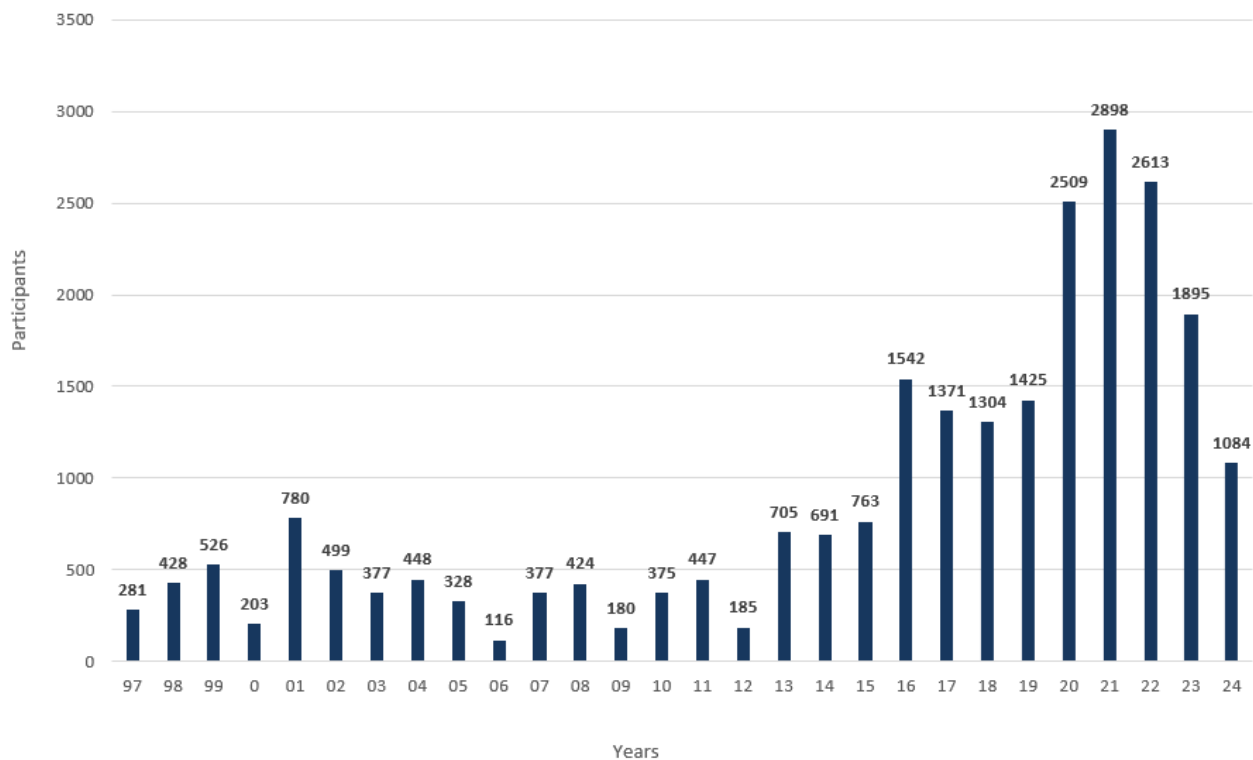
One of the factors contributing to this decline is the ongoing trend of companies merging, which may have impacted the dynamics within our network groups. This consolidation has made it difficult to sustain high levels of activity and engagement among members.

The seminar with the highest participation in 2024 was the **Webinar: Pressure interaction between CO2 storage sites** held on May 28, 2024, which attracted 111 participants. In addition, we want to highlight the IRM groups 2-day seminar: **Making good decisions under subsurface uncertainty: How difficult can it be?** With 105 participants. The IRM group has produced the most seminars of the network group. A huge thank you to them.

As we move forward, it is crucial to address these challenges and find innovative ways to boost engagement and participation within our network groups. We must explore new strategies to adapt to the changing landscape and ensure that our seminars and webinars continue to provide value to our members.

The diagram below illustrates number of attendees at the seminars and workshops through time.

FORCE SEMINARS 1997 - 2024



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### FORCE events in 2024

Date	Name	Seminar/Webinar	Participants
17.01.2024	Snorre conformance control pilot – Modeling the impact on oil recovery and CO2 footprint using IORSim	L&L	16
25.01.2024	Applications of bound biomarkers in petroleum exploration	Webinar	24
07.02.2024	Inflow Control Technology – Optimizing well performance through (A)ICD technology & design	Webinar	106
6-7.02.24	Making good decisions under subsurface uncertainty: How difficult can it be?	2-day Seminar	105
13.02.2024	Bubbling Opportunities: CO2 Foam for Enhanced Oil Recovery and CO2 Storage	L&L	21
05.03.2004	Operations Geology and application to Energy Transition and Renewables	L&L	11
5-6.03.24	Biostratigraphy, conventional and beyond	2-day Seminar	46
13.03.2024	Addressing Chalk Influx and Solids Production Challenges in the Southern North Sea	1-day Seminar	18
10.04.2024	Joining Forces	1-day Seminar	63
11.04.2024	In-person-DISKOS and Seismic Data Management – What Geophysicists need to know	L&L	23
17.04.2024	In-person Underexplored Plays V	2-day Seminar	71
23.04.2024	In-person Cake & Discuss	L&L	23
29.04.2024	In-person: CO2 Storage Project design – Insights from projects	L&L	33
28.05.2024	Webinar: Pressure interaction between CO2 storage sites	Webinar	111
04.06.2024	In-person: FORCE CCS core workshop	L&L	23
06.06.2024	Webinar: Fluid flow history and paragenesis along a syn-rift basin bounding fault: the Helmsdale Fau	Webinar	48
27.08.2024	Cake & Discuss- The uncertainty Study	L&L	25
18.09.2024	In-person: Structural Reservoir Compartmentalisation	2 day Seminar	51
25.09.2024	Charting the Depths: An Interpreter’s Perspective on FWI	2 day Seminar	84
22.10.2024	In-person: FORCE-NSGR Workshop- Seismic Geomorphology: Implication for Offshore Energy applications	1 day seminar	33
06.11.2024	In-person: Discoveries and cores of the year	1 day seminar	44
07.11.2024	In-person: Cake & Discuss-The Uncertainty Study	L&L	27
19.11.2024	In-person- Revitalizing under-explored salt basins for the energy transition: Geological storage in the Central North Sea	2 day Seminar	42
26.11 2024	JIP Proposal- Webinar: New Methodology for Hydro-Mechanical Characterisation of Faults	Webinar	36
<b>Totalt</b>			<b>1084</b>



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## Budget and annual accounts 2024

	Budget 2024		Result 2024	
	Income	Expenses	Income	Expenses
Transferred from 2023	1 790 712		1 790 712	
Pre-projects TC group		-300 000		
Payment (seminar fees)	600 000		808 500	
Sponsors			0	
Seminars Expenses		-600 000		-808 500
Seminar buffer		-300 000		-51 122
Lunch&Learn	20 000	-70 000	17 000	-44 822
Invited speakers-EE&E		-200 000		0
Invited speakers - IE		-200 000		0
Invited speakers - SR		-200 000		0
Membership fees	2 320 000		2 320 000	
Administration fee NPD		-2 020 000		-2 020 000
Secretariat expenses NPD		-300 000		-186 039
New members			266 666	
Service at meetings		-50 000		-18 674
Accessories for seminars		-10 000		
Webapplications		-180 000		-110 433
PayEx fee/Swedbank (monthly)		-10 000		-31 522
Div/travel expenses		-50 000		-25 410
<b>Total</b>	<b>4 730 712</b>	<b>-4 190 000</b>	<b>5 202 878</b>	<b>-3 110 483</b>
<b>Estimated balance 31.12.2023</b>	<b>540 712</b>		<b>2 092 396</b>	

Result	
Transferred from 2023	1 790 712
Outgoing balance	2 092 396
<b>Profit 2024</b>	<b>301 684</b>
Result seminar	0
Seminar buffer	-51 122
Invited speakers	0
Lunch & learn	-27 822
New members	266 666
Membership fee (income)	2 320 000
Admin cost (NPD)	-2 020 000
Secretariat	-186 039
<b>Sum</b>	<b>301 684</b>

Budget/balance	
Balance 2024	2 092 396
Budget/balance 2024	540 712
	<b>1 551 684</b>
Seed funds/Pre-projects	300 000
Seminars	0
Seminar buffer	248 878
Lunch & Learn	22 178
Invited speakers	600 000
New members	266 666
Member- admin fee and secretariat	113 962
	<b>1 551 684</b>