

## This year's deep dive study 2023

OG21 conducts every year a study on a topic of particular strategic interest for the Norwegian petroleum sector. In 2023, we will be looking at Norway's role as perhaps the most important energy partner for Europe, and how technology contributes to security of supply from the Norwegian continental shelf.

The war in Ukraine has put energy security even more clearly on the agenda. In order to become independent of Russian energy, Europe wants to accelerate renewable energy and phase out natural gas. As a consequence, Europe needs more natural gas from reliable countries, both in the form of LNG and piped gas.

At the same time, the UN Climate Panel's 6th report is clearer than ever on the urgency of reducing greenhouse gas emissions. Although Norwegian deliveries of natural gas to Europe will be within volumes needed in energy transition scenarios, it may appear as a paradox that Norway should maintain its production of petroleum whilst European customers reduce their use of fossil fuels through the energy transition.

The Norwegian goal is to reduce greenhouse gas emissions by at least 55% up to 2030. Measures in the petroleum industry, and especially electrification, are important both for reaching Norway's and the petroleum industry's climate goals. But with an increased need for electrification also in other industries and sectors and with the prospect of a possible power deficit before 2030, electrification projects in the petroleum industry are now being challenged.

New technologies such as floating offshore wind and CCS can help solve challenges through the energy transition. They can contribute to reducing emissions from petroleum production and to provide low-emission energy to Norway and Europe. But even such solutions spur discussions, for example relating to the exchange of electrical power with foreign countries.

Over the past year, Norway has become an even more important energy partner for Europe. We have many opportunities to develop the partnership further through the energy transition, both in the short and longer term. Given that we are able to address the challenges we face on the NCS, we can continue to be an important contributor to energy security in Europe. Technology and knowledge are key elements of that.

This is the background for this year's deep dive study from OG21. The project goal is: Identify threats to the supply of energy from the Norwegian continental shelf to Europe and describe how the Norwegian oil and gas sector can contribute with technology and knowledge to remove, mitigate or otherwise manage such threats.

OG21 has engaged Rystad Energy to assist OG21 in the work. Details on the scope can be found here: [The project description](#).

The OG21 Technology Groups (TGs) will be engaged through three workshops:

- Workshop on competence challenges 1 June. See [report](#).
- Workshop on technologies related to each TG, 26 September (invite sent out 6 July).
- Cross-discipline workshop, 19 October (invite sent out 10 August)

We would welcome also participation from stakeholders outside the OG21 network to these workshops. Please contact [ghl@rcn.no](mailto:ghl@rcn.no), if your organization wants to participate.

The workshops 26 September og 19 Oktober will be conducted as hybrid meetings. We hope that as many as possible will be able to participate physically at the Research Council's meeting center at Lysaker, but we will also facilitate participation through Teams.