



wintershall dea

OPINION PIECE

EURACTIV

TACKLING THE CLIMATE PROBLEM TOGETHER

The gas and oil industry is reducing emissions, storing CO₂ and producing hydrogen. In doing so, we are supporting the economy's transformation towards greater sustainability – and helping to solve the climate problem.

The COP28 climate conference will take place in Dubai. One focus will likely be on a promising technology that climate-protection advocates have high hopes for: carbon capture and storage (CCS). This entails capturing carbon dioxide at the source – such as in an industrial plant – transporting it away and safely storing it.

At first glance, it would seem that the gas and oil industry is merely part of the climate problem – but it will also be part of the solution. If gas were used instead of coal, CO₂ emissions would immediately go down – by almost half. Already today, we are decreasing the environmental impact of our activities worldwide by drastically reducing our methane emissions. In addition, with technologies such as CO₂ storage and H₂ production, we are helping other sectors to decarbonise, and we aim to harness our

expertise to ensure that the future energy system is more sustainable. In short, the oil and gas industry can, must and will be part of the solution to the climate problem.

Protecting the climate, preserving prosperity

In the short term, we are playing a key role in a balancing act of vital importance: namely, protecting the climate while also preserving prosperity – knowing full well that society will not accept the former without the latter. For this reason, the transformation of both the economy and the energy system must be realised in parallel. Even Ottmar Edenhofer, director of the Potsdam Institute for Climate Impact Research in Germany, has said: „We will have to live with the oil industry for a long time to come.“ Saving the climate, he added will require the sector's financial strength and high-tech.

Photo above:

Dawn Summers, Chief Operating Officer
and board member at Wintershall Dea.
The manager joined the company in 2020.

If we wish to pursue this path, natural gas will still play an important role in the global energy mix in the medium term – as all forecasts predict. Here at Wintershall Dea, we are already doing a lot to make this transitional solution as climate-friendly as possible. We produce natural gas, which has a smaller carbon footprint than coal and is therefore the ideal partner for renewables. And we are striving to decrease the methane intensity of our production-related activities to below 0.1 per cent by 2025 – as part of our efforts to achieve “net zero” for Scope 1 and 2 emissions by 2030. To this end, Wintershall Dea launched a global leak detection and repair (LDAR) campaign in 2021 to further reduce our emissions.

Storing unavoidable CO₂

However, despite all efforts to avoid greenhouse gas emissions, some industrial processes will continue to produce greenhouse gases. For this reason, we will need CO₂ storage in parallel with boosted efficiency and more decarbonisation. This approach is also backed by the Intergovernmental Panel on Climate Change (IPCC). In fact, the 1.5-degree target will only be successfully achieved by 2050 in three of the more than 400 IPCC scenarios – and CO₂ storage plays a crucial role in two of them. This shows in an impressive way just how central carbon capture and storage will be to climate protection.

The good news is that CCS technology is ready to go – even on a large scale. The gas and oil industry has the capital needed for investments. And it has the geological knowledge needed to safely store CO₂ under the sea.

CCS and H₂ pilot projects at Wintershall Dea

Wintershall Dea has a stake in five CO₂ storage licenses in the Norwegian, Danish and British areas of the North Sea. This past March, as part of Project Greensand, the entire CCS value chain (capture, transport and storage) was implemented across borders for the first time in the EU. Carbon dioxide from an industrial plant in Belgium was

transported to Denmark, shipped from there, and then safely stored in a depleted oil field under the Danish North Sea.

On top of that, we are planning the “BlueHyNow” project in the German port city of Wilhelmshaven. In a state-of-the-art facility, more than 200,000 cubic metres of hydrogen will be obtained from natural gas every hour. And the Carbon dioxide produced in the process is to be captured and stored. In the foreseeable future, there will not be enough “green” hydrogen from renewable energies. That’s why low-carbon hydrogen from natural gas will be key to ramping up a hydrogen market.

When it comes to such efforts, who – if not Germany, Norway and Denmark – could set a good example for the world? We are ready to help CO₂ storage achieve a breakthrough. But, to do so, we need the right legal framework. Transporting the CO₂ from Belgium and Denmark was made possible by a bilateral agreement that both countries had concluded last year. Now countries like Germany must finally authorise the use of CCS.

Ready to solve the climate problem

We in the gas and oil industry are not clinging tightly to our traditional business. Instead, we want to build a bridge – from the Fossil Age to the Renewable Age. Personally, I very much hope that COP28 will send out a strong signal in favour of this approach. In any case, at Wintershall Dea, we are willing and able to play our part in solving the climate problem.