

“More natural gas for a better climate!”

- **Wintershall board member sees potential to reduce CO₂ emissions quickly**
- **Study: Shut down coal-fired power plants and achieve Germany’s climate targets by 2023 with natural gas**
- **Coal-fired power plants in Lausitz can be replaced cost-effectively by gas power plants**

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Berlin. The Innovation Award of the German gas industry was presented in Berlin yesterday, just under two weeks before the start of the COP24 climate change conference in Katowice, Poland. “There’s a huge potential to reduce CO₂ emissions in Germany and Europe, which we must leverage in the short term to a much greater extent. We need more natural gas for a better climate!” urged Thilo Wieland, member of the Wintershall Board of Executive Directors, with an eye to the climate change conference, in front of more than 200 invited guests from politics and the industry. Limiting global warming to 1.5 degrees Celsius compared to the level before the start of industrialization was feasible, he added. “We in the energy industry have the technological means, the aspiration and the courage to adopt new approaches and will actively shape the energy system of the future,” said Wieland in his address at the award ceremony.

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Achieving climate targets with renewables and natural gas

There is a lot of potential in the electricity market in particular. “Flexible and highly efficient gas power plants should partner up with the renewables in the electricity market,” stated Wieland. “In order for us in Germany to achieve our climate targets, we must return to the original idea of the energy transition: renewables plus natural gas.” Unfortunately, however, Germany has replaced nuclear power with coal following Fukushima and is now even exporting coal-fired electricity on a large scale. Around 40 percent of electricity in Germany is currently generated from coal, while gas power plants contribute 13 percent. “That is grotesque in terms of climate policy. After all, lignite-fired power plants produce three times as much CO₂ as gas power plants in generating electricity,” said Wieland in his speech.

Study: Replace coal-fired with gas power plants

A recent study by the independent consultancy Aurora Energy Research on behalf of the industry association Zukunft ERDGAS shows that there’s a different way. It analyzes the impact of a partial phase-out of lignite as a means of generating power within the next five years. The study’s conclusion provides a cause for optimism: The original climate target of a 40 percent reduction in CO₂ emissions over the 1990 levels can no longer be achieved by 2020, but probably by 2023.

However, the vital prerequisite for that would be to shut down lignite-fired power plants with a capacity of nine gigawatts, which corresponds to 2-3 average German power plants. Second, there has to be an uncompromising switch to gas power plants, whose capacity is usually not fully utilized at present. As a result, the CO₂ produced in power generation could be reduced by around 40 compared to 1990 from 2023.

Gas power plants could also be built cost-effectively at some German locations where there are coal-fired ones, since parts of the facilities and infrastructure can continue to be used. That view is shared by the Coal Exit Commission, which has also presented initial proposals which would benefit the Lausitz region in its interim report. “A move from coal-fired to gas power plants would not only be good for the climate, but also for the people in the regions,” said Wieland. It would help mitigate the impact of the loss of jobs in traditional coal-mining regions to some extent.

The all-rounder natural gas is ready

Natural gas proves in practice what it can do to protect the climate: Natural gas is the favorite fuel among Germans in the heating market. Around half of all German homes are heated with climate-friendly natural gas. Natural gas is also ready for the mobility transition – for cars, trucks and buses in local public transport. Ships, such as the AIDAnova cruise ship (as of December), will be increasingly powered by natural gas and thus enable the energy transition in the transport sector.

In particular, natural gas can already make a huge contribution to air quality improvement in towns and cities. Gas-powered vehicles emit around a quarter less CO₂ than diesel vehicles and around 35 percent less than gasoline vehicles. And: natural gas burns with practically no particulate matter. Gas-powered buses have been running for a long time in European cities such as Madrid and Barcelona, with the result being that considerable quantities of nitrogen oxides, particulate matter and CO₂ emissions are avoided. Some 1,200 natural gas buses in the Spanish capital Madrid, for example, reduce emissions of nitrogen oxides and particulate matter by 75 percent compared to conventional diesel buses, according to the transport company EMB. However, the industry is also adopting new approaches and grappling intensively with the challenges of green gas and decarbonization of natural gas: “Natural gas is already the cleanest conventional source

of energy. If its CO₂ is removed, natural gas can become even more climate-friendly in the future,” said Wieland.

Efficiency is being increased

Above all, our future power supply needs to be energy-efficient. In this regard, natural gas delivers a performance that surpasses some renewable technologies: for example, thanks to state-of-the-art condensing technology in combination with solar or geothermal energy, combined gas and steam turbine power plants, and natural gas technologies in heavy transport.

At the same time, natural gas production is becoming more and more efficient. As Wieland commented: “Our company is working on exciting, highly promising technologies, in particular against the background of digitalization.” A great deal of data is generated in the oil and gas industry. “If that data is sorted and analyzed systematically, for example, by using artificial intelligence, that will make production far safer and more efficient.”

Detailed information on the Zukunft ERDGAS study can be found [here](#) and at zukunft.erdgas.info/

Detailed information on the Innovation Award of the German gas industry and on the winning projects can be found here: <https://www.innovationspreis-gas.de/>

Wintershall Holding GmbH, based in Kassel, Germany, is a wholly-owned subsidiary of BASF in Ludwigshafen. The company has been active in the extraction of natural resources for 120 years, and in the exploration and production of crude oil and natural gas for over 85 years. Wintershall focuses on selected core regions where the company has built up a high level of regional and technological expertise. These are Europe, Russia, North Africa, South America, and increasingly the Middle East region. The company wants to expand its business further with exploration and production, selected partnerships, innovation and technological competence.

Wintershall employs about 2.000 staff worldwide from 50 nations and is now Germany's largest, internationally active crude oil and natural gas producer.

At the end of September 2018, BASF and LetterOne signed a binding agreement to merge their respective oil and gas companies, Wintershall and DEA (Deutsche Erdöl AG). Subject to regulatory approvals, the transaction is expected to close in the first half of 2019. Wintershall DEA would become the leading independent oil and gas producer in Europe. BASF and LetterOne are planning an initial public offering (IPO) for Wintershall DEA in the medium term.

Wintershall. Shaping the future.

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About the Innovation Award of the German Gas Industry 2018

Every two years, the German gas industry associations confer the Innovation Award of the German Gas Industry, which is organized by the Association for Efficient and Environmentally Friendly Energy Consumption (**ASUE**). The ASUE partners in conferring the Innovation Award are the German Technical and Scientific Association for Gas and Water ([DVGW](#)), the Federal Association of German Energy and Water Industries ([BDEW](#)) as well as the [Zukunft Erdgas](#) industry initiative.

Separate awards are conferred in four prize categories: Innovative Products, Efficient Energy Concepts, Research & Development and Mobility & Transport. In addition, for the first time a special prize will be awarded to innovative start-ups, who can submit their ideas to the competition.