

GASCADE

NEL

OPAL

GREIFSWALD LANDING STATION



NATURAL GAS FOR EUROPE



On the path to climate-neutral supply with renewable energies, in other words, solar, wind and water, gas plays an important supporting role in Europe. Demand in the coming years, both in private households and industry will initially increase, in other words, Europe needs more natural gas. And OPAL Gastransport GmbH & Co. KG and NEL Gastransport GmbH are among those ensuring the supply.

The gas lands

The Greifswald landing station plays an essential role here, since it connects Nord Stream 1 coming from Russia with the two connecting European pipelines OPAL (Baltic Sea Pipeline Link) and NEL (Northern European Gas Pipeline), which transport the Russian gas to German consumers and into the European transit network.

Well positioned with four owners

Together with its partners – Lubmin Brandov Gastransport GmbH (LBTG), Gasunie Ostseeanbindungsleitung GmbH (GOAL) and Fluxys Deutschland GmbH – GASCADE Gastransport GmbH strengthens supply security in Europe through the landing station. As operator of this complex station, GASCADE provides a highly qualified and dedicated team with many years' experience in the natural gas transport sector. The employees ensure that everything runs smoothly across the entire site and are also responsible for maintaining and servicing the station.

PRESSURIZING GAS



When the gas arrives in Lubmin, it has traveled an impressive 1,200 kilometers through the Baltic Sea. However, the pressure is high, reaching up to 180 bar – too high for the German network, which is designed for a maximum pressure of 100 bar. To be able to transport the gas onward, this problem needs to be solved: The gas needs to expand, which is exactly what the landing station does.

GREIFSWALD LANDING STATION



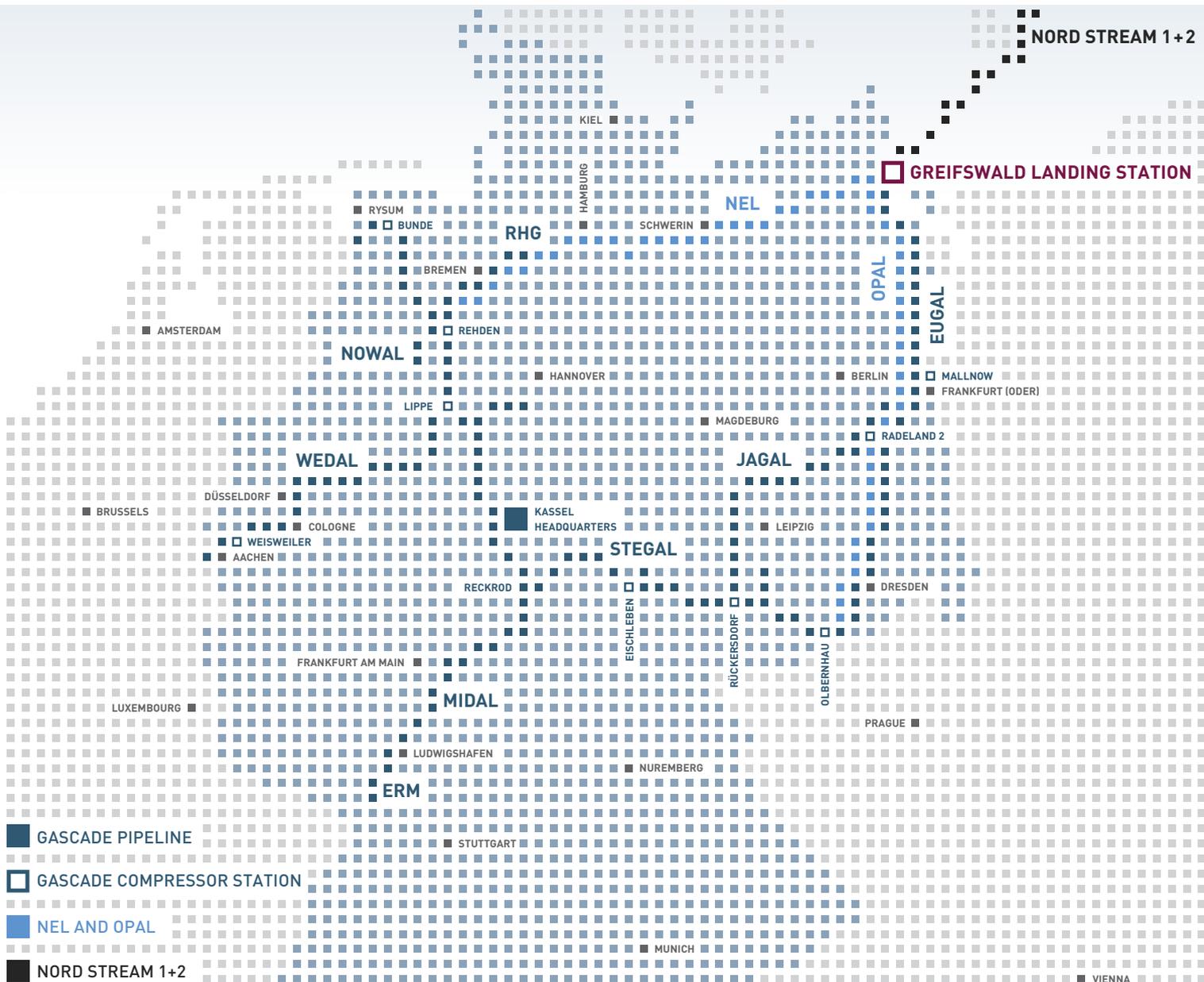
The station comprises two sections: an offshore section for the incoming Baltic Sea pipeline and an onshore section where the two downstream pipelines OPAL and NEL are located. The onshore section is divided into a 180 bar and a 105 bar section. The 180 bar area has filters, pre-heaters, and control valves. Mainly measuring and control systems operate in the 105 bar area.

The gas flows through the offshore landing section into the 180 bar section, where it is freed from liquid droplets and dust particles. It then flows into the pre-heating area, since the gas cools rapidly during expansion, even reaching sub-zero temperatures, which means it could freeze the fittings, for example. To prevent this kind of damage, the gas is heated up: Water heated in flame tube boilers or in the combined heat and power generation system flows into tube heat exchangers, in which the gas is brought to the right temperature. Only then can the gas be expanded safely, and the gas flow is now regulated to 100 bar.

In a final step, the measuring systems in the 105 bar section check the quantity, composition and quality of the gas and record this information. The gas flows through OPAL or NEL to its intended destinations.



GASCADE'S PIPELINE NETWORK



CONTACT

GASCADE Gastransport GmbH

Headquarters

Kölnische Straße 108-112

34119 Kassel, Germany

Phone +49 561 934 0

Fax +49 561 934 1208

Greifswald Landing Station

Am Hafen 2

17509 Lubmin

Phone + 49 38354 1794 1801

www.gascade.de