

Country: Germany

Commission: Council of Ministers of Energy and Ecological Transition

Issue: “What are the solutions to ensure sustainable energy independence for the EU in the face of a challenge to its traditional energy supply sources?”

The Federal Republic of Germany is a state situated in Central Europe and divided into 16 constituent states, also known as Länder. Due to its notable size, demographically and geographically, it bears a significant weight in all European matters, playing a pivotal role in the creation of the EU we know today. With one of the most powerful industries in the world, nearing 5.3% of all global manufacturing output, Germany requires a significant amount of energy supply, which is why we are working closely with our European counterparts to develop renewable, independent, and clean energy sources. The head of state is currently M. Frank-Walter Steinmeier, and the head of the federal government, made up of the coalition of the Social Democrat, Liberal Democrat, and Green parties, is Chancellor Olaf Scholz.

Due to the war in Ukraine, Germany is faced with a severe lack of imports of one of its primary energy sources, natural gas. War times have forced Germany to replace it with other energy sources, in some cases carbon-heavy ones such as Lignite and Coal. Despite an increase in fossil fuels, our emissions in 2022 were reduced by 1% compared to 2021, due to a decrease in consumption. However, we are aware that this increase will be costly in the long term, which is why we are constantly pushing to clean our energy sourcing and production.

Energy prices are constantly rising, due to the war and the current economic situation, which could have a disastrous effect on the economy if not contained, slowing down industrial production and increasing social disparities.

The Renewable Energy Sources Act (EEG), which entered into force in 2000, is a crucial driving force for the expansion of renewable energy in Germany. Our goal is to transition to 80% renewable energy in our energy mix by 2030, and we aim to reach carbon neutrality by 2045; we are edging closer to our objectives every year, with a 5% increase in renewable energy consumption from 2021 to 2022, pushing us over 46%. Climate change is impacting our everyday lives; already in Germany, we have been affected by an increase in flash flooding and a destabilisation of our agricultural sectors, which is why we have committed to a strict green energy policy. The unstable nature and high maintenance costs of nuclear energy pushed the government to shut all power plants by the end of 2022, yet the government has postponed its nuclear exit: 3 will remain in operation until April 2023 because of the emergency gas levels declared in June of 2022.

Sustainable and carbon-neutral hydrogen is one of our main solutions to our energy-sourcing problems. Its renewable nature and high production capacity make it an intelligent choice to subsist for our needs. Faced with a short-term lack of renewable energy needed to produce the gas, it presents an opportunity for the German government to strengthen the bonds with our partners, and to develop economies, especially those of developing countries rich in energy resources. We aim to establish a sustainable energy future and strive to sign new treaties and energy deals, such as the BarMar project signed earlier this year, between France and Spain, which we recently adhered to, focusing on the importation of clean hydrogen gas.

With the introduction of new emergency renewable energy measures, the German Government has sped up the bureaucratic process for energies such as solar and wind power, which has helped increase their respective production capacities.

Faced with increasing energy prices, Germany has put aside 99 billion € to cap them at reasonable prices, to support our citizens in this challenging context, financed by an increase in windfall profits.

As the pioneers of biogas in the early 2000s, we believe that Biomethane could be one of the many solutions to achieve our energy goals. It is the most efficient and cost-effective way to reduce CO₂ emissions, as it is produced using manure or waste, and provides the most significant carbon decrease out of all types of biofuels. In Germany, biomethane is mainly used for electricity generation, however, its use in the transport sector has been slowly increasing in recent years; it is critically underproduced and has a substantial capacity for expansion. According to the BDEW, the association of water and energy industries, this niche renewable energy could have made up for 20% of the country's Russian natural gas consumption in 2021, which was 1652 TWh. Germany, therefore, proposes a European directive concerning biomethane, subsidising its use to reduce its cost, notably in the transport sector, to reduce the carbon emitted by automobiles.

Geothermal energy accounted for only 0.1% of energy production in 2020 or just over 1.2 TWh. According to The Leibniz Institute for Applied Geophysics (LIAG), geothermal energy represents a massive amount of untapped potential and could grow to a production capacity of 100TWh by 2050. Projects on a European scale funding geothermal research projects have already been implemented, nevertheless, we would like to go one step further: we believe a new European directive focusing on the expansion of geothermal energy by setting goals for the near future, from 2030 to 2050, based on the potential production capacities of the member states would be beneficial in the journey towards a carbon neutral future in the EU. Furthermore, a new wave of funding aiming to reduce the costs of geothermal infrastructure and a revision of the bureaucratic process, like what was done for solar and wind energy, could be instrumental in a fight for carbon reduction. Germany also believes that a summit on high-potential renewable energies such as the ones stated above could be advantageous to their development.

Germany, therefore, is in a critical position regarding the energy transition. We hope to achieve our energy quotas on time through the development and expansion of already existing energy infrastructure such as our solar energy and wind power farms, as well as new energies with high potentials such as biogas and more notably biomethane, as well as geothermal and green hydrogen.

The evolution of our energy sector is also an opportunity to strengthen our bonds with our partners in Europe and other continents, and it presents a chance to create new alliances. We are consistently aiming to lower our energy prices to avoid a social and economic crisis through the implementation of the measures stated above.