

Grupa LOTOS invests in hydrogen

At the end of November 2020, Grupa LOTOS signed a letter of intent with Toyota Motor Poland. This is another step showing the Company's commitment to the roll-out of hydrogen technologies. With projects such as Pure H2, the Gdańsk-based company is one of the leaders in Poland in the search for environmentally friendly solutions.



The application of hydrogen as fuel is becoming reality not only in the case of space flights. Hydrogen is a potential viable solution for general transport, where it can successfully compete as an alternative fuel even with electric vehicle engines. Grupa LOTOS is an unchallenged leader on the Polish market when it comes to hydrogen production as well as projects intended to develop a hydrogen distribution system.

The main initiative in this area is the Pure H2 project, designed to launch the distribution of hydrogen of very high purity (99.999%), which could be used by municipal transport services. The project envisages the construction of a hydrogen purification unit and a hydrogen sale and distribution station in the immediate vicinity of the LOTOS Group plant, as well as two vehicle refuelling points in Gdańsk and Warsaw. Its completion and launch of the refuelling points are scheduled for the end of 2021.

Poland is well positioned to develop hydrogen-based transport. It is one of the largest producers of this gas, and currently home to three manufacturers of hydrogen-powered buses. Grupa LOTOS does not limit its initiatives to creating a hydrogen production and distribution base. For instance, it has initiated cooperation with the local authorities of Gdynia and Wejherowo in the development of municipal transport services based on hydrogen-powered buses and the supply of hydrogen fuel for those vehicles.

Joint project of Grupa LOTOS and Toyota

An important element in this process is a letter of intent signed between Grupa LOTOS and Toyota Motor Poland, concerning the parties' cooperation to step up the efforts to develop technologies for the use of hydrogen in road transport. Under the document Toyota is to take patronage of the first hydrogen refuelling stations in Poland. Thanks to the joint activities of the LOTOS Group, a leader of Poland's fuel market, and Toyota Motor Poland, which is among the key players in the development of innovative hydrogen technologies for the automotive sector, hydrogen technology in transport can have a real and practical

application in Poland, with tangible benefits for motorists.

— As Grupa LOTOS, we are seeking the best partners that could support our technological growth. Our cooperation with Toyota is mainly focused on two themes, one of them being hydrogen. We are going to build hydrogen refuelling stations, while Toyota is a supplier of hydrogen-powered cars. We want to make sure that what we develop will match the requirements of the market

— says **Marian Krzemiński**, Vice President of the Grupa LOTOS Management Board, Chief Investment and Innovation Officer.

Responsibility for the future

The application of clean hydrogen goes beyond the transport sector. It is used by the medical, IT and food industries. Demand may be very high, which raises questions about emission-free methods of hydrogen production. Grupa LOTOS has engaged large resources and has made extensive efforts to promote hydrogen as a zero-emission fuel for widespread application in the future. It is addressing the issue on a very wide scale, so its experts are continuously looking for other solutions in addition to the Pure H2 project.

Many expert opinions point to hydrogen as the most optimal fuel of the future. Grupa LOTOS, as a state-owned company, feels responsible for what people will face in a decade or several decades from now. The Company's operations and development directly contribute to the growth of Poland's economy and energy security. This is why LOTOS does not limit its efforts to securing its current fuel production, but is also exploring the market for alternative fuels from a broad perspective. Apart from hydrogen, the Company is also investing in LNG and is expanding its EV charging station network, known as the Blue Trail.