



PRESS RELEASE

Four-week trial of the Solaris Urbino 12 hydrogen in Jaworzno

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On Wednesday, 2 March, the city of Jaworzno will start testing one of the most technologically advanced Solaris vehicles, the Urbino 12 hydrogen bus. The trials will last four weeks. Local transport operator PKM Jaworzno has been setting standards in the successful implementation of e-mobility for many years. Now, the carrier wants to learn all about what the deployment of hydrogen has to offer in urban transport.

Public transport operator PKM Jaworzno is just starting test rides of the Solaris Urbino 12 hydrogen bus. They will last four weeks, from 2 to 31 March. The bus is to be put in service, among other places, on the most commonly used routes in Jaworzno, connecting the largest residential districts of the city. It will operate 7 days a week, all day long, above all on bus routes 303 and 307. This will provide numerous possibilities to travel on this unique vehicle and to learn more about hydrogen technology. Hydrogen refilling will take place at a mobile station run by industrial company AirProducts.

“I was very glad to hear that the possibilities of this state-of-the-art vehicle will be put on trial in Jaworzno, a city which is an excellent example of the successful implementation of e-mobility in public transport. The tests will last four weeks, which will enable the city to thoroughly acquaint itself with all the functionalities that the Urbino 12 hydrogen offers for everyday urban traffic. Let us recall that Jaworzno was a trailblazer when it comes to fleet electrification in Poland and it is even by European standards. Now, it has a chance to become a leader in hydrogen technology, another advanced technology for the zero-emission transport of the future. I believe that today nobody doubts any more that in the modern world hydrogen is one of the key pillars in public transport’s transformation,” said Petros Spinaris, member of the Management Board of Solaris Bus & Coach sp. z o.o. for Sales, Marketing and After Sales.

“It is very important to us that Jaworzno be perceived as a place that supports new technologies and is open to investors and new residents. Efficient public transport is a pivotal aspect when it comes to the functioning of the urban organism. According to regularly conducted public opinion surveys, local residents appreciate the high quality of our transport services. Over 80 percent of the city’s inhabitants use public transport and 88 percent approve of the introduction and development of the local electric vehicle fleet,” says Paweł Silbert, mayor of Jaworzno.

“Our company’s first e-bus is already 7 years old. We constantly need to remember to renew our vehicle fleet and are looking for the most efficient technologies in this regard. We hope that the experience gathered during the trials will enable us to successfully apply for external funding for further fleet modernisation. In the near future, we will be the first to announce a date as of which a large city, like Jaworzno, will no longer be served by diesel buses,” notes Zbigniew Nosal, CEO of PKM Jaworzno.

The basic equipment featured on the hydrogen-powered Urbino buses includes ultra-modern packs of 70 kW fuel cells and five composite tanks for hydrogen storage, with a total capacity of 1560 l, placed on the bus roof, as well as two e-motors of 125 kW each. Hydrogen stored in gaseous form in tanks is directed to a fuel cell where electricity is produced as a result of a reaction whereby

hydrogen combines with oxygen. This electricity is then transferred to the driveline. Due to the technology applied, the bus is capable of covering 350 km on a single refill, and the sole by-products generated during the process are heat and steam.

Operator PKM Jaworzno and Solaris Bus & Coach have been continuously collaborating for 21 years now. So far, over 80 Urbino buses sporting the operator's distinctive colours have been plying the streets of the city, of which over half are zero-emission electric vehicles. In 2022, the company will be operating a staggering 50 e-buses.

PKM Jaworzno has been introducing various innovations, which are then later eagerly taken up by other towns and cities. Cashless fare payment systems, Wi-Fi Internet and USB charging ports are already standard equipment for the carrier's fleet. Positive experiences with the mass operation of buses that use new drive technology have contributed to the rapid development of e-mobility in Poland. One electric bus in Jaworzno drives up to 100,000 km yearly and provides passenger transport services of up to 400 km daily. What is more, vehicles of this type have already covered over 11 million kilometres in total, having proved that with suitable traction battery capacities, and an appropriate number of charging stations, an e-bus may successfully replace a diesel bus in service.

Thanks to the Urbino 12 hydrogen, a model that generates absolutely no local emissions, being made available for test rides, Jaworzno will be able to gain invaluable experience regarding the use of this advanced technology. The test's aim is to determine real-world hydrogen consumption during intensive operation of the bus with passengers on board, as well as to estimate the necessary frequency and time of refuelling. The vehicle's behaviour in low temperatures will also be tested. The trials will show if this technology can be applied in future as the next step in the development of completely green public transport.

The use of hydrogen in transport provides a real opportunity to reduce emissions generated by the public transport sector. This chance has already been grasped by Solaris clients from Austria, the Czech Republic, France, the Netherlands, Germany, Poland, Sweden and Italy. These countries already have, or will soon receive, their own Urbino 12 hydrogen buses. Many of these procurement decisions were preceded by tests. The bus has been demonstrated and put on trial in, among other cities, Budapest, Frankfurt, Hamburg, Konin, Madrid, Paris and Vienna.

Additional information

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About our company

Solaris Bus & Coach sp. z o.o. is one of the leading European bus and trolleybus manufacturers. Benefiting from 25 years of experience and having manufactured over 20,000 vehicles, Solaris affects the quality of city transport in hundreds of cities across Europe every day. Thinking of the future, the firm is setting new standards by dynamically developing its products, in particular in the electromobility sector. Solaris electric buses, trolleybuses and hydrogen buses are cutting-edge solutions for zero emission public transport. Solaris products have been repeatedly awarded for quality and innovation. The Solaris Urbino 12 electric won the prestigious European "Bus of the Year 2017" competition. In September 2018 Solaris Bus & Coach sp. z o.o. joined CAF Group.