



GOLDI Mobility Presents a Fuel Cell Plug-in Hybrid Electric Bus (FC-PHEB)

10th Feb, Ráckeve: GOLDI Mobility Kft (GOLDI) is pleased to announce that its articulated electric bus (GOLDiON H18) will be a special plug-in hybrid bus, which means apart from hydrogen it also runs on electricity.

GOLDI has initiated the first of its kind in Hungary- the 18m fuel cell electric bus development program in August 2019 under the project GOLDiON. In early 2020, the program was further extended to include battery electric buses, thus completing both types of zero emission electric bus fleet. GOLDI's technical and project management partner, Hy-Hybrid Energy supported the entire project and performed an extensive market analysis before selecting the key components and drivetrain technology. It was the aim of study that all the GOLDiON buses should accompany the most advanced technology while offering long range, extended warranty and competitive pricing. As a result, the GOLDiON H18 was selected to be designed as a special plug-in hybrid with battery and fuel cell drive.



GOLDiON H18: A Special Plug-in Hybrid with Battery & Fuel Cell Drive Articulated Bus

The GOLDiON H18 is designed to use a charge depleting strategy for the battery (CD mode), draining only electricity. The battery is discharged until it reaches a minimum state-of-charge (SOC). When this SOC level is reached, a charge sustaining strategy (CS mode) is engaged and the SOC is maintained. The fuel cell is used to help propulsion and to provide additional energy to maintain the battery SOC. With its advanced energy management system, the powertrain efficiency is fully optimized by considering both zero-emission technologies which are taking part in propulsion.

The bus can be refueled at a high flow rate from a hydrogen station like other hydrogen buses. Furthermore, its plug-in technology allows the battery to be re-charged from an electricity outlet.

Ferenc Kovacs, CEO, GOLDI Mobility says: “We are pleased to offer such an advanced articulated bus that can be driven, both by hydrogen and battery- truly zero-emission each.”

Hy-Hybrid Energy, the UK based fuel cell services provider has been overseeing the entire project. Dr. Naveed Akhtar, CEO, Hy-Hybrid Energy brings nearly two decades of experience in hydrogen and fuel cells. Dr. Akhtar says: "We decided to take the best out of the two zero emission drivetrains, i.e., battery and hydrogen fuel cell, and the result was GOLDiON H18." Dr. Akhtar further added: “With an optimized operating strategy, this combination offers maximum efficiency, dual-energy propulsion and extended range over currently available state-of-the-art fuel cell electric buses (FCEBs), battery electric buses (BEBs) & fuel cell range extender buses (FCREBs)."

About GOLDI MOBILITY Kft:

GOLDI provides manufacturing and repair services for public transportation (trams and buses) since 1981. As an ambitious Hungarian manufacturer, GOLDI plans for local assembly of fuel cell electric drivetrains for buses, including fuel cells, batteries, supercapacitors, electric motors, DC-DC converters and control systems.

Visit www.goldi.co or contact Ferenc Kovacs, info@goldion.eu

About Hy-Hybrid Energy Limited:

Working with the leading players in the hydrogen and fuel cell sector, Hy-Hybrid Energy provides services in clean energy technologies. Based in Scotland, UK, the team are specialists in all major fuel cell types, renewable energy systems, hydrogen storage and production, and support both low and high temperature fuel cell technology. Earlier this year, the Company organized the world's first international hydrogen aviation conference (IHAC 2020). The conference attracted high-level international speakers as well as a global audience discussing the role of hydrogen in aviation.

Visit: www.hy-hybrid.com or contact Hy-Hybrid Energy, info@hy-hybrid.com