

ABB brings electric hybrid bus charging to Luxembourg City

February 13, 2017 – ABB has installed two fast-chargers for electric hybrid buses at Luxembourg City’s central station. The chargers are based on OppCharge, an open interface for the automated charging of electric buses from any manufacturer, and use a pantograph on the infrastructure to connect the bus to the charging point.

Inaugurated by Ville de Luxembourg on 10 February 2017, the chargers will support 5 electric hybrid buses from Volvo, fully charging each vehicle with 150kW of power in three to six minutes, during the layover times at the end point of the bus route.

The charging points were set up in record time – the order was received in May 2016 and the chargers were ready for the commercial launch at the start of February 2017. Despite the challenging position of the site, a busy station with a lot of traffic, the production, installation, commissioning and training were completed within 9 months.

ABB’s fast-chargers are connected to the cloud for remote diagnostics and management, and receive over-the-air software upgrades to ensure maximum availability.

As electric vehicle technology evolves, it is likely that the batteries used in electric hybrid and full electric buses will increase in size, meaning that more power will be required for charging. The modular design of ABB’s chargers and substations means that onsite charging power can be easily increased to 300kW or 450kW if required. The Luxembourg City installation is ready for the future.

Urs Waelchli, Product Group Manager for EV Charging at ABB, states: “We’re delighted to have delivered 2 fast-chargers to Ville de Luxembourg to support their electric hybrid bus network. This is a growing market and we expect to see more commissions for our fast-chargers in future. These installations are required to be functional for many years, so it’s important to consider their longevity and ensure they are future-proof. ABB’s fast-chargers are flexible and adaptable. Their modular design allows charging power upgrades, they are cloud-connected for software updates and we closely follow the global standardization initiatives around electric hybrid and full electric buses.”

The seat of many European institutions and an important banking and administrative center, Luxembourg City sees around 160,000 people commute in and out each day. ABB’s fast-chargers support the City’s decision to invest in sustainable transport to reduce environmental impact and traffic volume.

“The decision to operate electric hybrid buses in the City of Luxembourg perfectly aligns with our continuous efforts to create a sustainable city. The society will immediately benefit from this project through a cleaner environment, reduced noise levels and increased comfort during bus journeys. This ambitious pioneering project represents the starting point in our endeavor to a zero emission urban bus system for the City of Luxembourg in the near future”, says Sam Tanson, First Deputy Mayor of the City of Luxembourg, in charge of Finance and Mobility.



Luxembourg City has a goal to cut overall carbon dioxide emissions by at least 20 percent by 2020.

Since 2010, ABB has sold approximately 5,000 fast chargers around the world for passenger cars. Over the last few months, ABB has commissioned OppCharge opportunity chargers for hybrid and full electric buses in Bertrange (Luxembourg), Gothenborg (Sweden) and Namur (Belgium). Orders for new projects in other countries have also been received and will be announced in separate communications.

About OppCharge

More information on OppCharge via www.oppcharge.org

About ABB

ABB (ABBN: SIX Swiss Ex) is a pioneering technology leader in electrification products, robotics and motion, industrial automation and power grids, serving customers in utilities, industry and transport & infrastructure globally. Continuing more than a 125-year history of innovation, ABB today is writing the future of industrial digitalization and driving the Energy and Fourth Industrial Revolutions. ABB operates in more than 100 countries with about 135,000 employees. www.abb.com

About ABB bus chargers

- Easy to integrate into existing bus lines (inverted pantograph enables use of a low-cost and low weight interface on roof of the bus)
- Modular design offering charging power of 150 kW, 300 kW or 450 kW
- ABB's proven suite of connectivity features enables maximum availability, high uptime and fast service response.
- Based on OppCharge and IEC 61851-23, the international standard for fast charging of electric vehicles ensuring the appropriate safety systems are in place, the electrical design is in accordance with regulations, and the systems architecture and working principle are supported by the wider automotive community in future.

About Volvo 7900 Electric Hybrid buses

- Can be powered by electricity for up to 70% of operating time
- Quiet and exhaust-free when running on electricity
- 60% lower energy consumption* than a corresponding diesel bus
- 75 to 90% lower emissions of carbon dioxide* compared with a conventional diesel bus, depending on the fuel used
- Equipped with an electric motor, batteries and a small diesel engine
- The batteries are recharged in 3-6 minutes at the route's end stations

**Estimated value on a city bus route of 10 kilometers, compared to a diesel bus Euro 6.*