DAIMLER

2021 BusVic Management Forum & AGM







We aim to be the company that stands like no other for CO2-neutral, safe and efficient future transport.









We're shaping the future of C02-neutral transportation



- Truly CO2-neutral transport works only on the basis of CO2-neutral drives.
- We're focusing on electric batteries and hydrogen
- This enables us to cover our customer's entire range of applications.











eCitaro

The eCitaro is a fully matured bus for operation

- In order to ensure reliability to the operator, the eCitaro was subjected to rigorous tests at temperatures lower than 15 degrees Celsius below zero in the polar circle and of more than 30 degrees Celsius in Spain's summer heat, it has proven its maturity for series production.
- The winter tests include, among other things, driving tests on low-grip surfaces to check driving dynamics control systems and recuperation.
- The eCitaro passed summer tests in strenuous city traffic and on steep ascents and descents in the Sierra Nevada.









eCitaro

Key Facts

Released to Market: 2018

Current Delivery Quantity: 500+ units













eCBC Chassis

- eCBC chassis takes most of the eDrive components from the eCitaro
- Mercedes-Benz will still conduct 12 months of testing to ensure the product is suitable for rigors of commercial operation.
- The first two chassis have been completed. With one undergoing testing in Brazil and one in Germany.
- Four more chassis are currently under construction,
 - two will go to Chile for testing.
 - two will go to Mexico for testing.
- Upon completion of all the testing the next chassis will be for Australia and will be bodied by Volgren.













Hydrogen Fuel-Cell

- 2004 Mercedes-Benz global hydrogen bus trial
- Transperth were selected
- Other trials conducted in Amsterdam, Barcelona, Bejing, Hamburg, London, Luxemburg, Madrid, Oporto, Reykjavik, Stockholm and Stuttgart.
- 3-year successful trial of Ecobuses found that:
 - Hydrogen produced from crude oil and then transported some distance to a refuelling point made the operational costs about the same as for diesel or CNG fuelled buses.
 - Technology changes to the design of the buses (electric motors in wheel hubs, use of regenerative braking and electronic control) would give greater efficiency.
 - Cost of a fuel delivery system for just 3 buses was high, substantial fleet of hydrogen fuelled buses would be needed











Hydrogen Fuel-Cell

Cellcentric
A Daimler Truck & Volvo Group Company

- The Volvo Group acquired 50% of the existing Daimler Truck Fuel Cell GmbH & Co.
- The ambition to make the new joint venture a leading global manufacturer of fuel-cells, and thus help the world take a major step towards climate-neutral and sustainable transportation by 2050.
- Daimler Truck AG and the Volvo Group have agreed to rename the company cellcentric GmbH & Co. KG.
- The joint venture will develop, produce and commercialize fuel-cell systems for use in heavy-duty trucks and Buses
- A key goal of Daimler Truck AG and the Volvo Group is to start with customer tests of trucks with fuel-cells in about three years and to commence series production by 2025





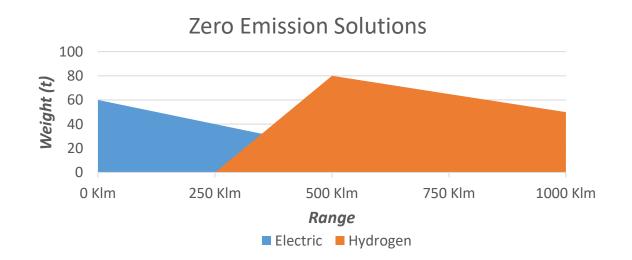


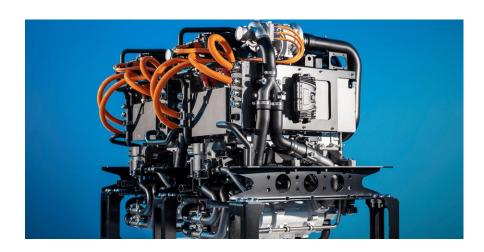


Hydrogen Fuel-Cell

cellcentric A Daimler Truck & Volvo Group Company

- Daimler and Volvo see the parallel development of battery and fuel cell in the commercial vehicle sector.
- Battery-electric vehicles on the short-haul, fuel cells for the long-haul.
- Trucks are often used flexibly. "You can't always plan,"
- Heavy load on power grids if we are to run everything on green electricity so need a second source of energy for our drives.













Thank you.







