

DAIMLER

Daimler Trucks

The Road to Carbon Neutral Transportation

Dr Jan Krönig, Head of Strategy Daimler Trucks & Buses

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15 trillion ton-kilometers p.a.

15,000 000 000 000

2,000 000 000

2 billion tons CO² p.a.

The background of the slide features a European Union flag with its characteristic twelve gold stars on a blue field, waving on a flagpole. In the background, a large, classical-style building with a dome, likely the European Parliament, is visible under a clear sky. The entire image has a dark teal overlay.

Our ambition:
All of our new vehicles
in Europe to be
CO²-neutral by 2039

For all who keep...



...the world moving

Three facts are crucial:

1. Attractive vehicle range

2. Costs of CO₂ neutrality H₂

3. Government actions

MERCEDES-BENZ eACTROS “INNOVATION FLEET”

- Tough real-world testing already for over a year
- Ten 18- and 25-tonne trucks with customers in Germany and Switzerland
- Evaluation of tens of thousands of driven kilometers as well as exchange with drivers
- Feedback flows directly into development of series production eActros, due to commence in 2021

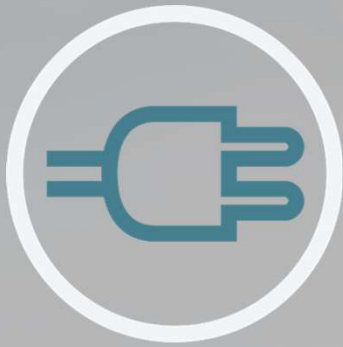
AS of 2021: battery electric vehicles in series production



- eC2 (Jouley) 2020: hand-over of 60 vehicles
- eCascadia and eM2: innovation fleet of 30 vehicles already in customer trials
- eActros start of series production in 2021
- eCitaro since 2018 in series production
- eCanter: more than 150 vehicles in operation globally



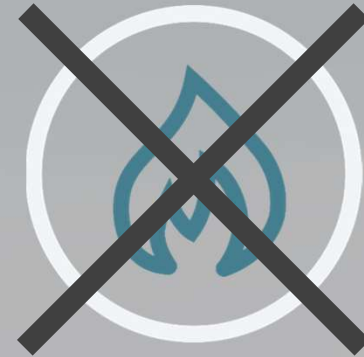
Only two options to achieve our goals



Battery



Hydrogen



Fossil Fuels

25 years experience in fuel cell technology



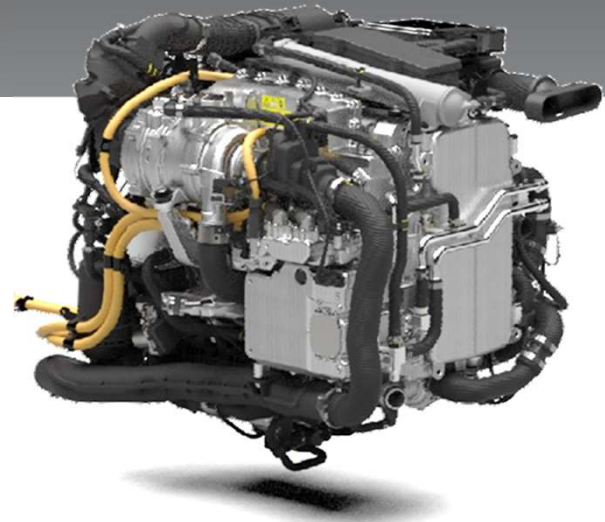
Mercedes-Benz Passenger Cars

15 million km in Europe and US
350.000 km driven in one single vehicle



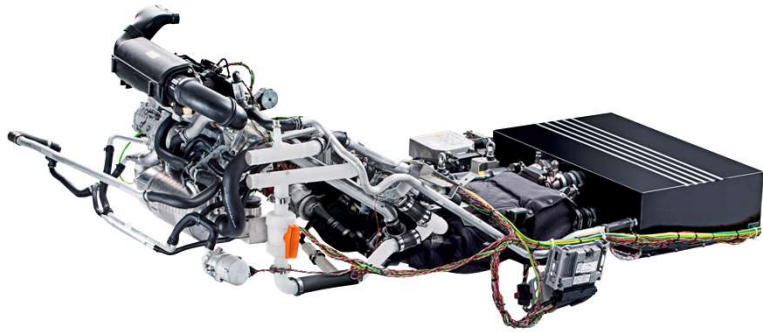
Mercedes-Benz Citaro FuelCELL Hybrid

More than 5 million km in Europe
More than 1 million km by a single vehicle in customer service



- ▶ Stack Development
- ▶ Stack & Fuel Cell System Engineering
- ▶ Operating Strategy & Software Development

System development



2010



2018



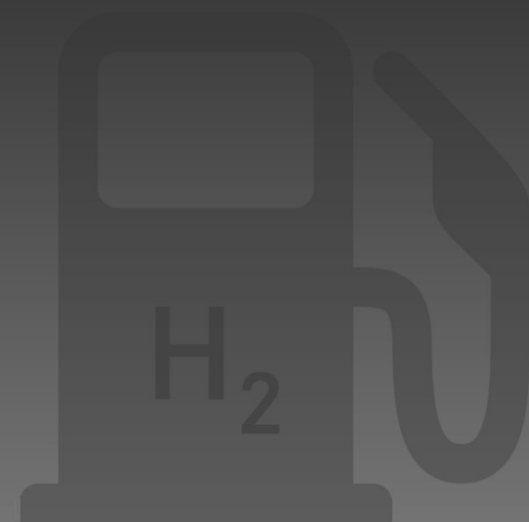
30% reduced installation space required

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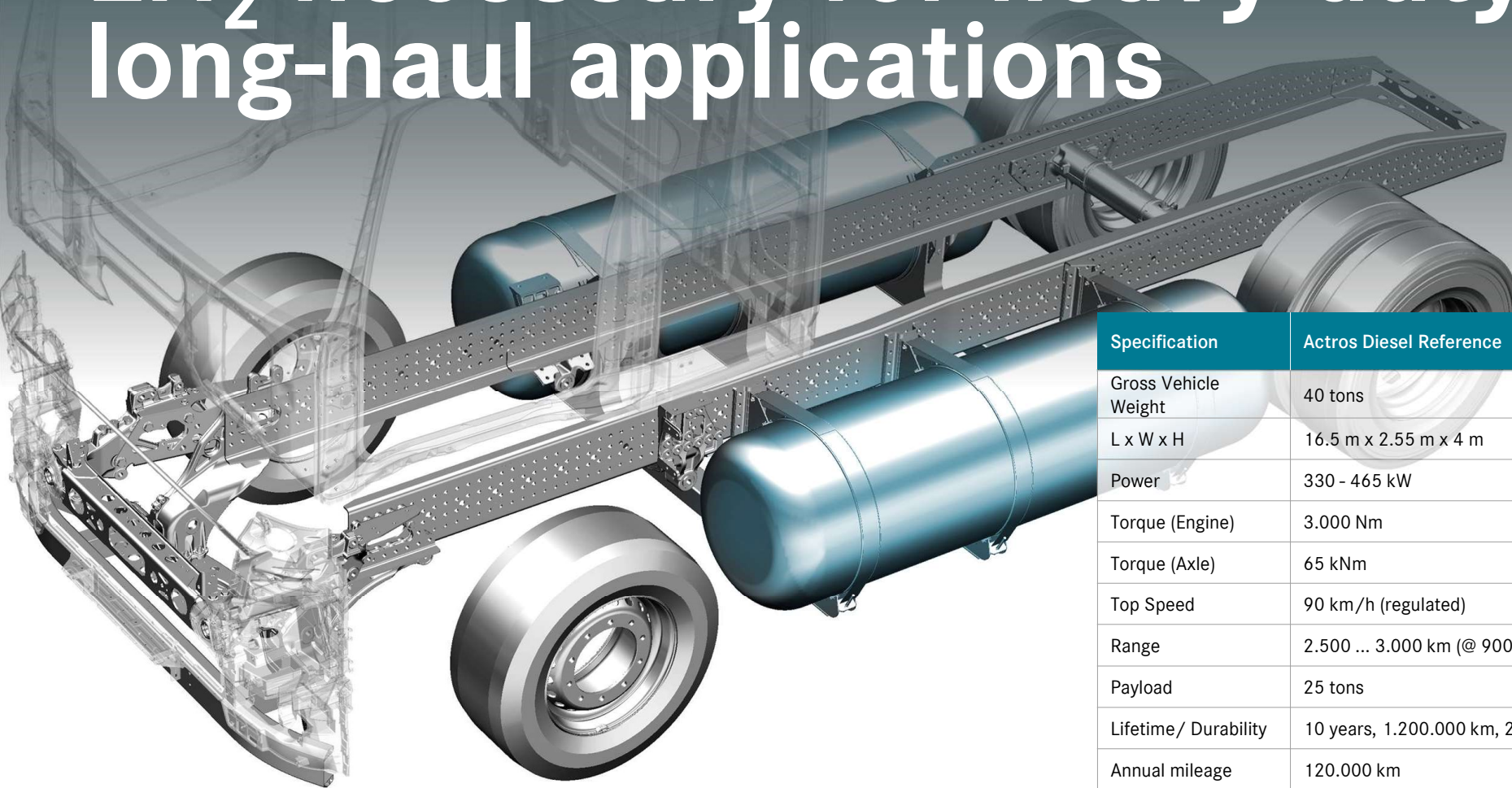
LH₂ as alternative to diesel: benefits and challenges

- Long distance application > 600 km
- LH₂ enables TCO parity
- Infrastructure
 - 10 years to develop a complete new infrastructure
 - Partnering

A hand is shown pointing at a digital interface. In the center of the interface is a large, stylized drop shape containing the text 'LH₂'. The background of the interface is dark blue with various circular and rectangular patterns, some of which contain binary code (0s and 1s). The overall aesthetic is futuristic and technological.

LH₂

LH₂ necessary for heavy-duty long-haul applications



Specification	Actros Diesel Reference
Gross Vehicle Weight	40 tons
L x W x H	16.5 m x 2.55 m x 4 m
Power	330 - 465 kW
Torque (Engine)	3.000 Nm
Torque (Axle)	65 kNm
Top Speed	90 km/h (regulated)
Range	2.500 ... 3.000 km (@ 900l Diesel)
Payload	25 tons
Lifetime/ Durability	10 years, 1.200.000 km, 25.000 hours
Annual mileage	120.000 km

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- Balance out cost disadvantages of CO²-neutrality
- Climate protection package of German government - 900 Mio. funding for H₂ trucks
- In Europe: link tolls to CO² truck emissions
- Develop necessary infrastructure



Let's shape the future of CO²-neutral transportation together



Stay tuned...

