

FROM DIESEL TO ZERO EMISSIONS WITH HYDROGEN

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HÖPEN GMBH

	Hary AG	Höpen GmbH
Shareholder	Dirk Graszt COO	Dirk Lehmann CTO
Facts	<ul style="list-style-type: none">• Operative and financial expert• 500 Trucks for logistic application• Experienced entrepreneur• Access to political and investment networks	<ul style="list-style-type: none">• Technical Chief of Becker Marine Systems• Experienced entrepreneur• Worldwide network on maritime economy and logistics

CO₂ Emission in Germany by sectors

1990 bis 2018 (1990=100%)



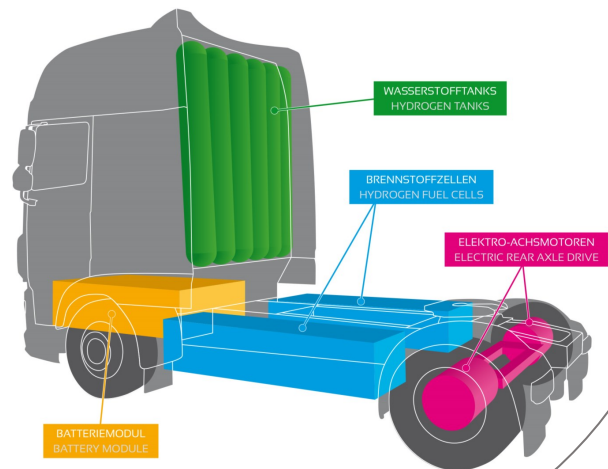
Quelle: Allianz pro Schiene | 07/2019 | auf Basis von Umweltbundesamt 2019

Lizenz: (cc) (i) Nutzung frei für redaktionelle Zwecke unter Namensnennung

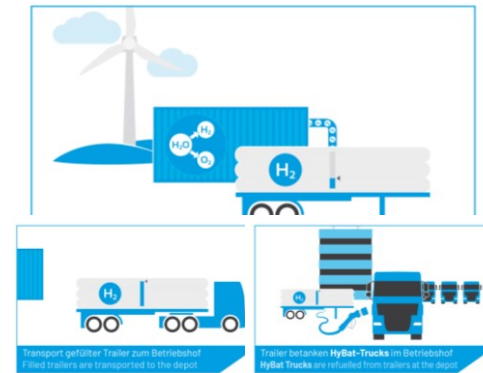
Target 2030
German Government
Reduce 40%
of traffic
emission

Forecast 2030
Road freight
transport is
increasing by
39%

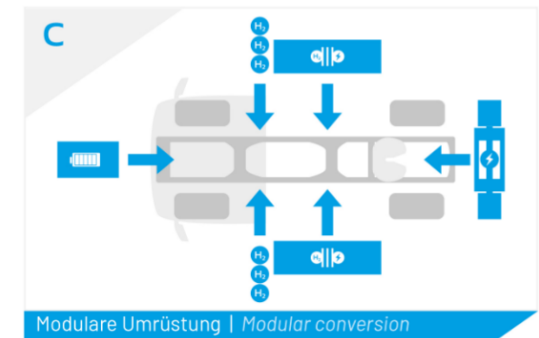
CONVERSION



INFRASTRUCTURE



DEVELOPMENT OF NEW BUSINESSES



HYBAT-TRUCK (FCEV)

WE CREATE THE FUTURE

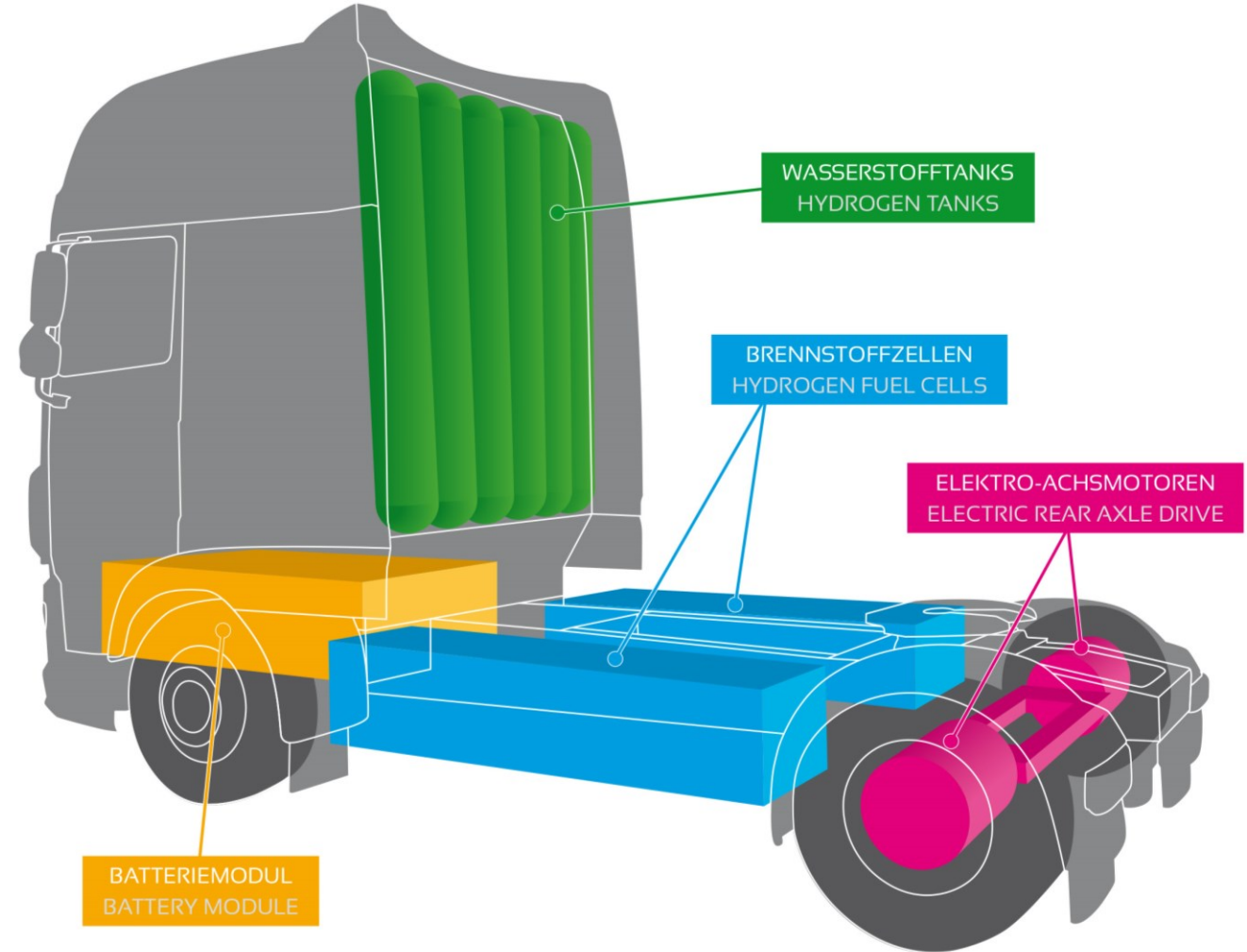
43 kg
H2-Tank

Battery
200 kWh

400-500
km
range

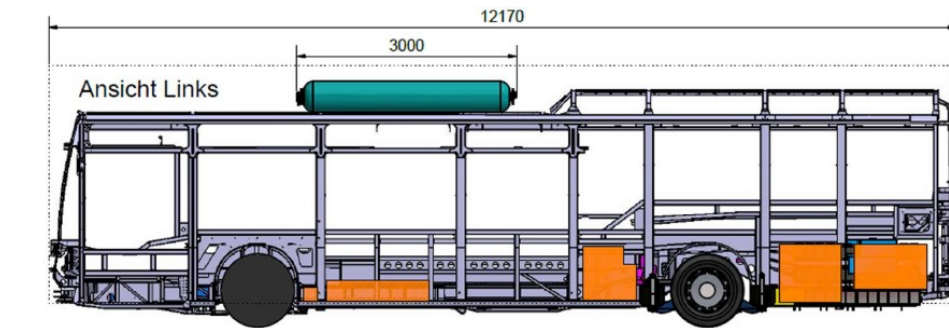
Rear Axle
Drive
400 kW
(peak)

220 kW
Fuel cells



HYBAT-BUS CONVERSION 12m | 18t

WE CREATE THE FUTURE



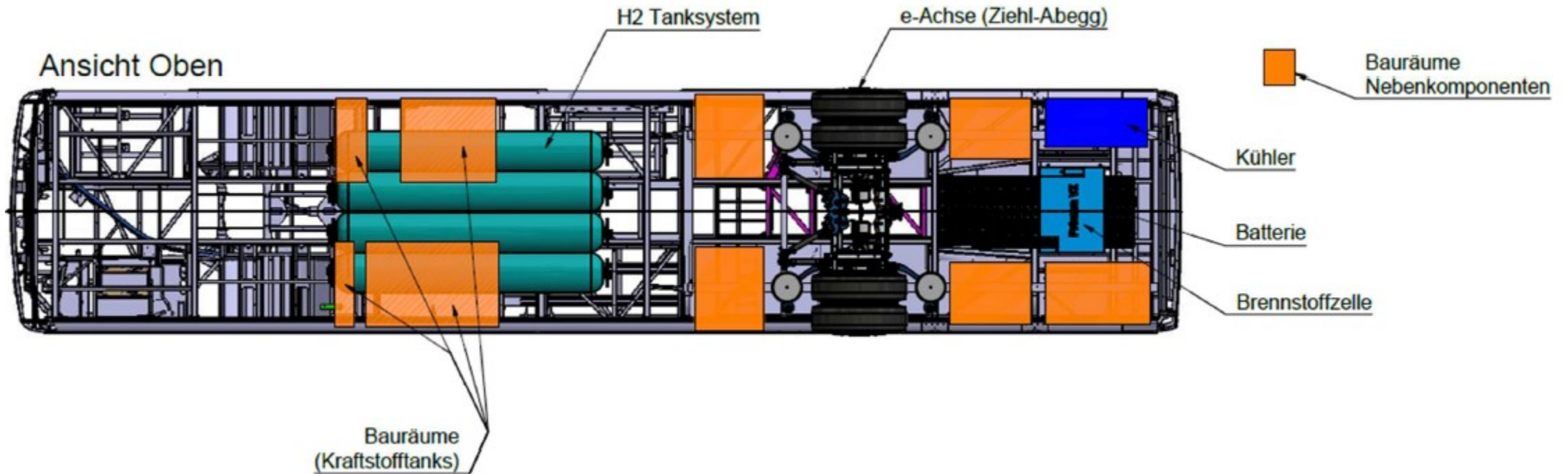
Rear Axle
Drive
400 kW

Range
>300 KM

60 kW
Fuel Cell

30 KG
H₂-Tank

65 kWh
Battery





becker marine systems

- Office in Busan
- Systemsupplier for rudder systems
- Close collaboration with Hyundai, Sasmsung and Daewoo
- Production network of rudder systems in Korea

SOURCING

- Electric/ hydrogen components

TECHNOLOGY TRANSFER

- cooperation with korean companys



HÖPEN GMBH



SISU AXLES



ZIEHL-ABEGG 



Bundesministerium
für Verkehr und
digitale Infrastruktur

