



IAA Transportation 2024

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Medlemsmøte, 25.09.2024

Welcome to
IAA TRANSPORTATION 2024

» IAA
TRANSPORTATION

SERIE
02
Nord 1

Wir liefern.

Klimafreundliche Zukunft
hier erleben.

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TRANSPORTATION



Entrance

Eingang

Aussteller



Nordiske aktører møtte produsentene



DAIMLER
TRUCK



IVECO



HYVIA

STELLANTIS

EUs CO2-standard en utfordring for lastebilprodusentene

Kravene:




- 15% reduksjon i 2025
- 45% reduksjon i 2030
- 65% reduksjon i 2035
- 90% reduksjon i 2040



Utbygging av infrastruktur matcher ikke CO2-kravene

ACEA (The European Automobile Manufacturers' Association):

CO2 targets: zero emission vehicles and infrastructure needed

CO2 target 2030		-45%		
Zero-emission vehicles needed on EU roads (minimum)		~400,000		
	Battery-electric vehicles	~330,000		
	Hydrogen-powered vehicles	~70,000		
Infrastructure				AFIR** kravene omsatt i tall:
	Publicly accessible charging points	Total	at least 50,000	25.800
		of which are MCS *	~35,000	-
	Hydrogen refilling stations	6 tons/ day	at least 700	-
		2 tons/ day	~2,000	624

*MCS = Megawatt Charging System

** AFIR = Alternative Fuels Infrastructure Regulation

IVECO: H2 ICE og H2 FC



IAA Commercial Vehicles: MAN hTGX honoured with Truck Innovation Award 2025



by ITOY

Daimler: GenH2



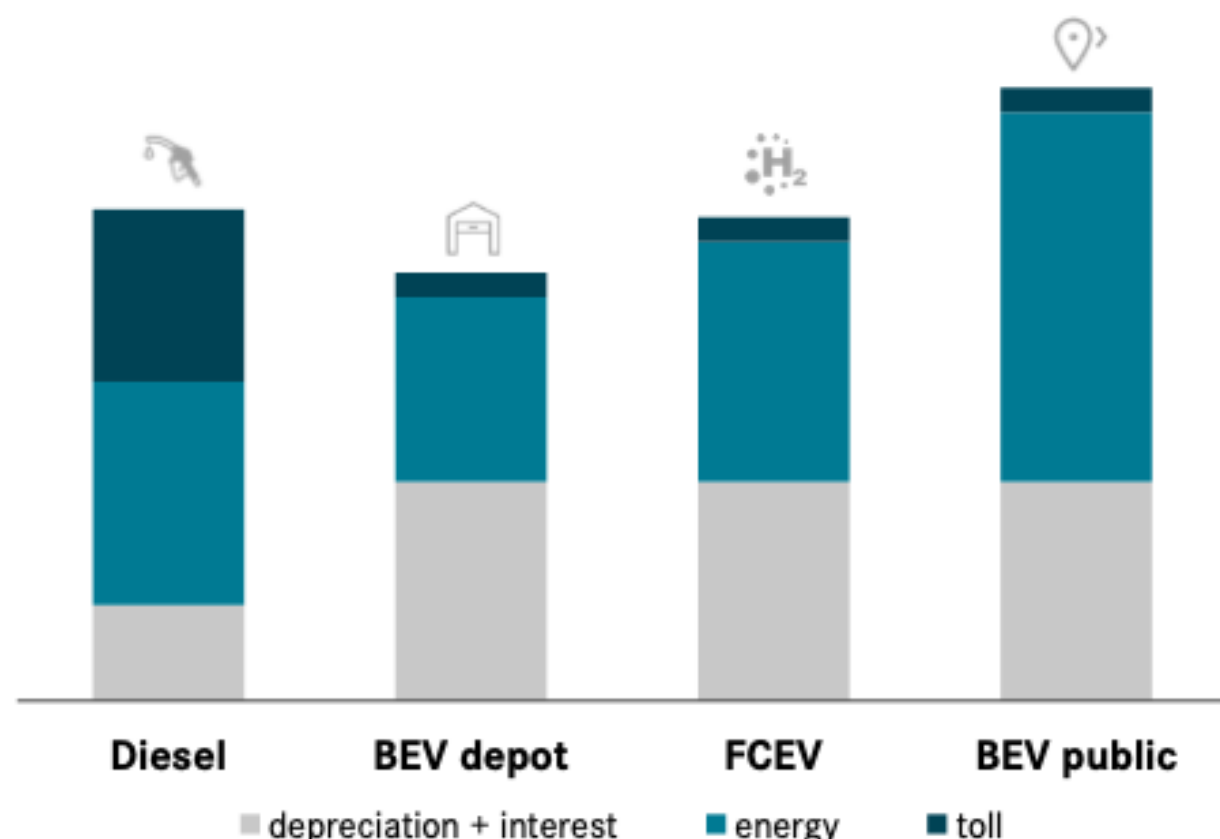


Fuel cell trucks deployed in real-life operations: start of initial customer trials with Mercedes-Benz GenH2 Trucks

ZE-Truck purchase price will stay more expensive than of Diesel ones – 2 key drivers decide on the business case: **energy costs and road toll**



TCO HDV long haul 2028+



	Diesel	BEV "depot"	FCEV	BEV "public"
Mileage [km/a]	120.000	120.000	120.000	120.000
Holding Period [a]	5	5	5	5
Toll p. km [€]	0,35 €	0,05 €	0,05 €	0,05 €
Fuel Price w/o VAT [€/l or €/kWh or €/kg]	1,45 €/l	0,25 €/kWh	6,50 €/kg	0,50 €/kWh**
Energy Consumption [kWh or l or kg/ 100 km]	<27	<130	<7	<130

BEV scenarios understood as sensitivities not as realistic cases

BEV depot → scenario 100% depot charging

BEV public → scenario 100% public charging

Sources: Fraunhofer ISI, PIK, Daimler Truck (2023)

- End of 2023 Germany has implemented a strong change of the road toll system considering 200 € per tonne CO₂
- But only with electricity mainly from the depot and affordable hydrogen costs, ZEV can compete with Diesel trucks.

*average HPC price for cars today in Germany (w/o VAT) **charging price incl. station invest

Både ukjente og kjente produsenter av hydrogenlastebiler...



Volvo
+
Westport Fuel
Systems
=
cespira

Varebilene er også på vei...



Hyvia
(Renault og Plug Power)



Stellantis
(Opel, Citroen, Peugeot)

Wisdom Motor - Kinesisk langdistansebuss på hydrogen



Tusen takk for oppmerksomheten!

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**Norsk
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