

Millised on kütuse valikud täna, homme ja ülehomme?

**FLEET POWERTRAIN SHIFT
MARKET AND FORECAST**

Tanel Mõistus
ALD International



IN GLOBAL
ALLIANCE WITH



ALD AUTOMOTIVE

AT A GLANCE



1st

Worldwide coverage

1st

European Leasing company



6,500 + people

100,000 + customers

Part of



> €8,9 billion**

+ 8,5 % (vs.2017)
Revenues in 2018

S&P Global Ratings **BBB+**

with stable outlook "long term issuer credit rating"

Fitch Ratings **A-**

with stable outlook "issuer default rating"



Managing over

1,66 M*

vehicles (+ 10,1% vs end 2017)



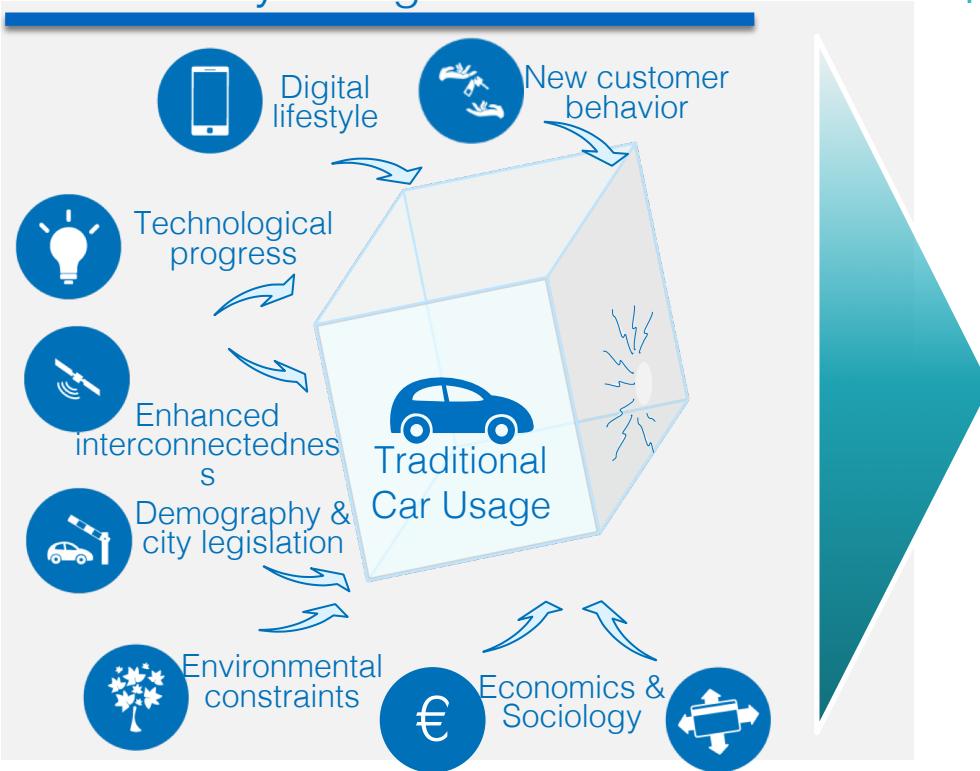
Direct presence in **43** countries

* At end of December 2018

** Revenues from external customers, 2018

WELL DEFINED DISRUPTION!

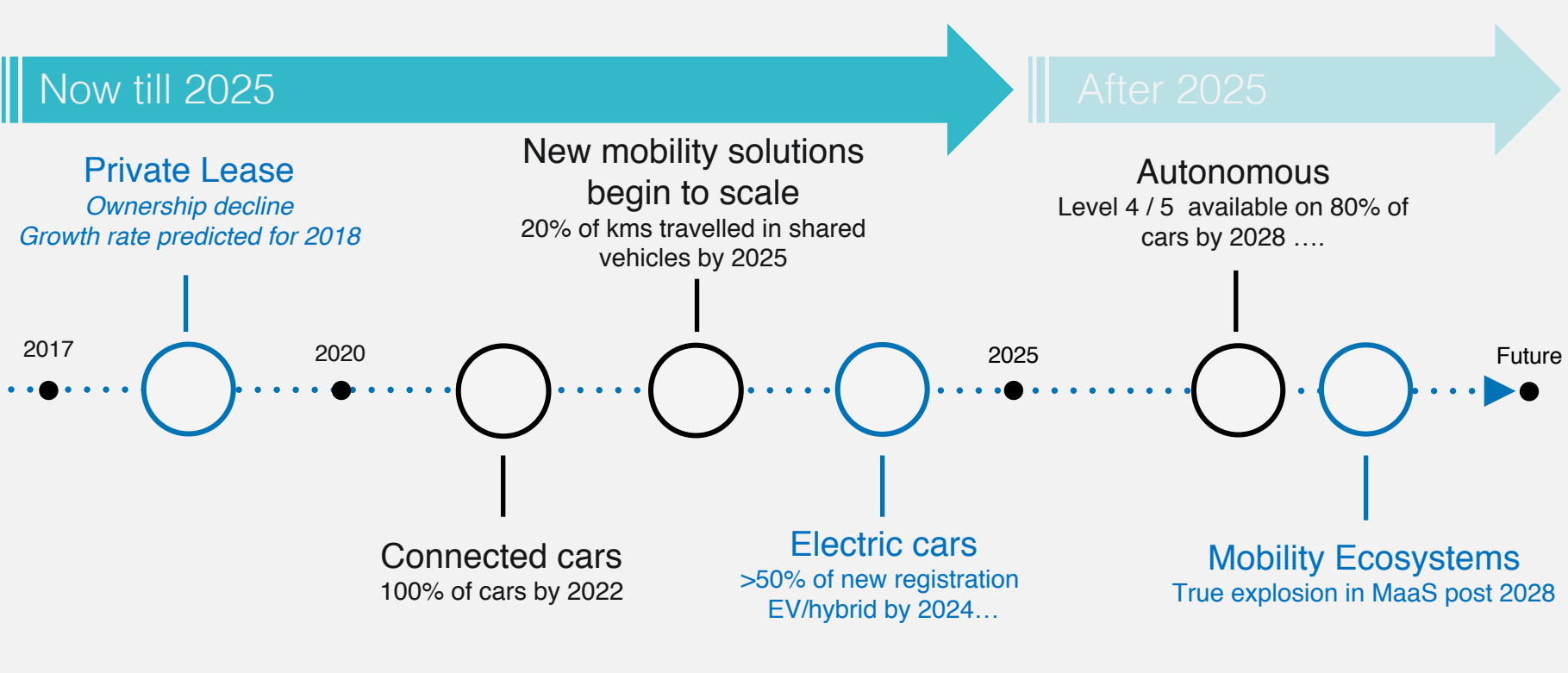
Today's mega trends...



...driving change across five dimensions

- 1 Continuing shift from ownership to usage
↳ Full Service Lease / Private Lease
- 2 The emergence of alternative powertrains
↳ Electric vehicles
- 3 The rise of connected cars and digital services
↳ Connected Car ecosystem
- 4 The shift to mobility as a service
↳ Mobility services & platforms
- 5 The paradigm shift in mobility services
↳ Autonomous

MEGA TRENDS RESHAPING THE MOBILITY SECTOR



ANNOUNCED DIESEL AND PETROL BANS

OVERVIEW

Norway:
2025: all ICE ban

Netherlands:
2030: all new vehicles commercialized must be Zero emission
Amsterdam:
2025: Zero emission city [infographic click here](#)

Rome: **2024** Ban of all Diesel in city center
Milan: **2030** Ban of all Diesel in city center

Brussels:
Since 01/01/2018 <Euro 1 ban
Until 2025: progressive ban of other vehicles
Wallonia Region:
From 2023: <Euro1 ban From 2024: <Euro2 ban
2030: only Euro 6 authorized

Copenhagen:
2019: ban of new diesel cars. The law would only affect drivers of new diesel cars registered after 2018



UK:
2040: all new car sales of 100% Diesel and petrol cars ban

Ireland:
2030: all new car sales of ICE ban

France:
2040: all new car sales of ICE ban
Paris:
2019: diesel car < 2005 ban
2022: diesel car < 2011 ban
2024: all diesel cars ban
2030: all ICE ban

Madrid:
2020: parking forbidden for older vehicles both petrol and diesel
2025: Ban of oldest vehicles (petrol and diesel)
Barcelona:
2020: current temporary ban of circulating for cars without label from Dirección General de Tráfico expanded to permanent ban

Germany:
2030: all ICE Ban

IS DIESEL THE DEVIL?

THE EXPERT VIEW

✍ Are 'death of diesel' warnings premature?

By [Natalie Middleton](#) / 2 weeks ago / [Large](#), [Latest News](#), [Medium](#), [Small](#), [Top Stories](#) /

A 'perfect storm' for diesel registrations will see their share of the U slashed radically over the coming year according to new analysis – warned that the writing isn't on the wall for diesel yet.



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Home News and Insights **Diesel is still important for German fleet market with no real alternative available**

Diesel is still important for German fleet market with no real alternative available

18 December 2017

While diesel sales globally are plummeting, thanks to the Volkswagen (VW) emissions scandal and damaging media reports, the fleet industry is unlikely to abandon the technology.

This is according to Marc-Oliver Prinzing, chairman of the Federal Association of Fleet Management in Germany. He suggests that diesel is not easily replaceable, and will still play a big part in the market's future.

- Diesel engines being homologated under the latest Euro 6d standards with Real Driving Emissions testing are the **cleanest ever produced**: they emit far less CO2 than their petrol equivalents, with air pollution levels similar to petrol
- **Fleets look at TCO as a key decision driver** and diesel is a sensible economic choice in a lot of circumstances, especially for long mileages and/or large vehicles
- **OEMs set the pace and they need diesel** to meet their CO2 target of 95g/km in 2020/21 (and for their margins)
- **Diesel still needed as a “bridge” technology**: it will continue to account for a large percentage of the fleet for the foreseeable future, as part of a “blended” fuel policy.

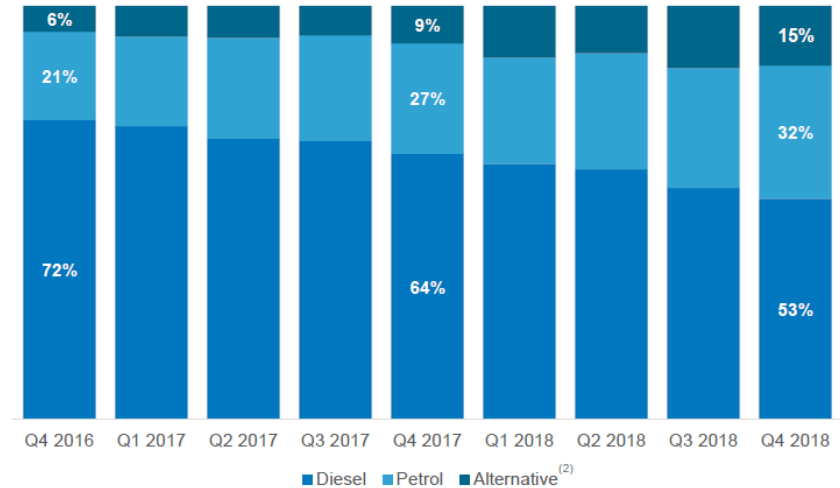
LESS DIESEL CARS IN FLEETS

THE SHIFT HAS STARTED



- Diesel share of deliveries has eroded from 72% to 53% in 2 years
- Diesel expected to be less than 50% of ALD deliveries in 2019
- Petrol is nearly 1/3 of deliveries in Q4 2018, significant increase in last 2 years
- Hybrids & electric become material with 15% of deliveries in Q4 2018
- > 100,000 hybrid & electric vehicles under ALD management at end of 2018

Evolution of ALD Passenger Cars deliveries (1)

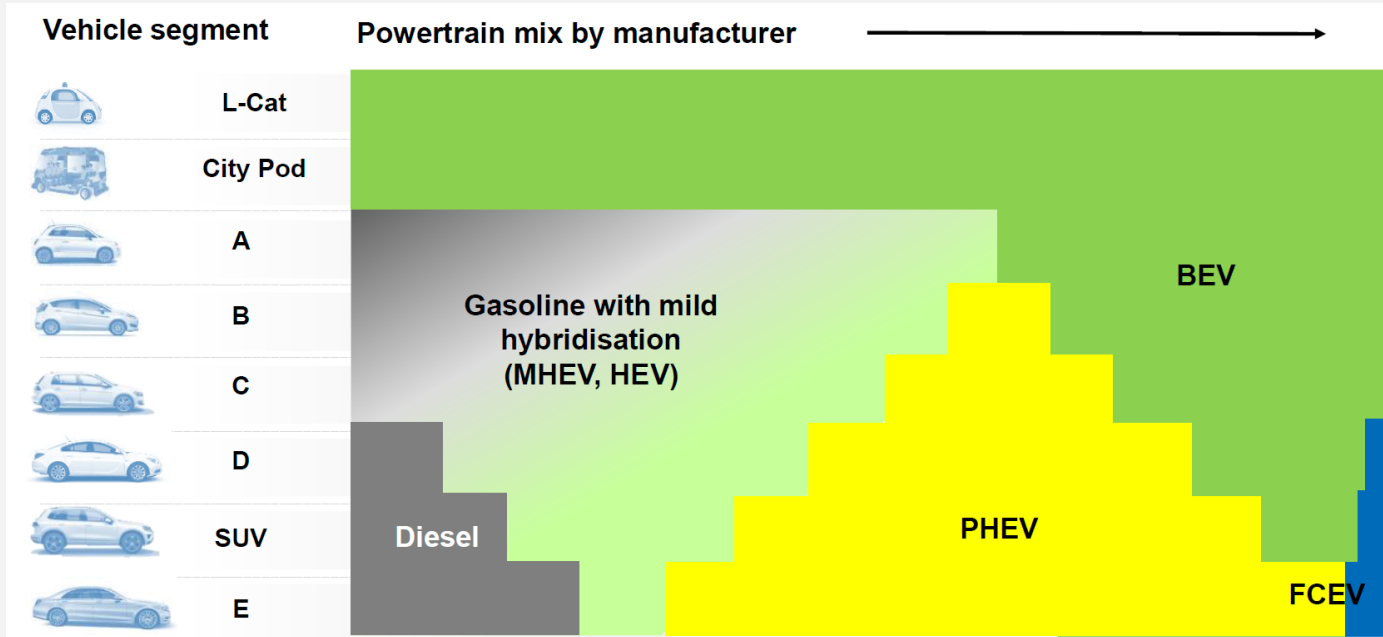


(1) ALD funded fleet (FSL and FL contracts)

(2) Alternative powertrains: Electric vehicles, Hybrids, Plug-in Hybrids

THE FUTURE IS DIVERSE

A VIEW OF POWERTRAIN LANDSCAPE IN 2030



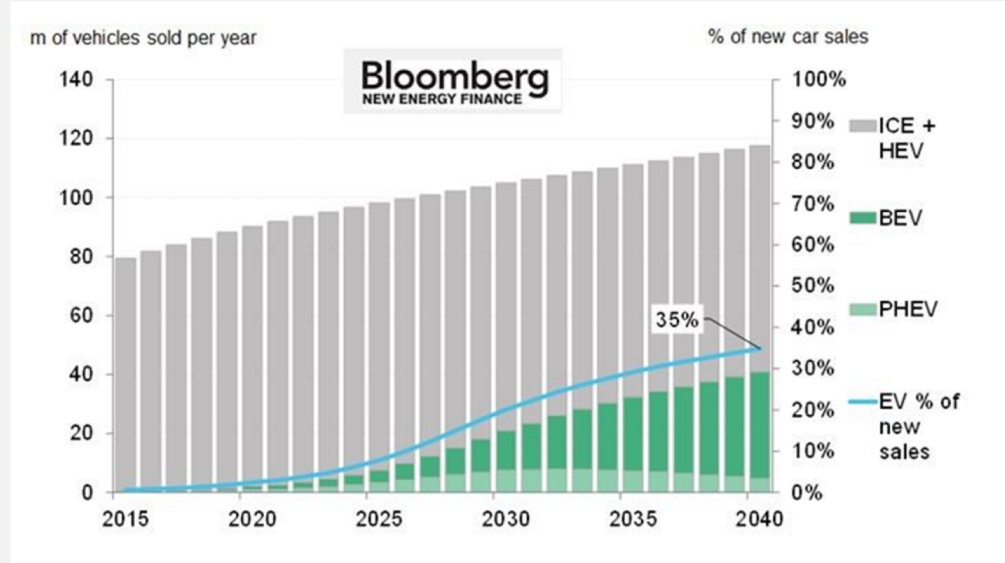
Source: Ricardo – limited charging infrastructure scenario

MARKET FORECAST

EXPERT VIEWS

Areas of consensus

- Electrically chargeable vehicles to represent significant share of new car sales (in Europe and China mainly) by 2030
- Share of conventional ICE to decrease sharply, especially diesel
- But ICEs are not dead: Mild Hybrids to play a decisive role (and help OEMs pass the targets)
- Diesel to remain in the game with minority share until 2025, probably not beyond
- TCO of EV to become generally more competitive from 2022-2025
- Share of PHEVs within ECVs to decrease as battery technology improves and cost of battery comes down (100€/Kw as common target)
- The future is made of a blend of technologies. It is all about usage !



ROADMAP OF PRODUCT LAUNCHES

PRODUCT OFFENSIVE FROM 2019



ELECTRIC VEHICLE OUTLOOK: EXPECTED BEV LAUNCHES, GLOBAL, 2018–2021						
OEM	Year	2018	2019	2020	2021	Until 2025
Apple					Apple EV	
Aston Martin			Aston Martin Rapid E			3+ models
BMW	i3s		X3 Electric	BMW i5, iNEXT		11+ models
Daimler			B250e, C-class,	Mercedes EQ, GLS	Mercedes S-Class	7+ models
Faraday Future	FF91			FF90	FF80	
Ford Motors			Ford Model E	SUV		2+ models
General Motors			Crossover	Large Wagon	3 Crossover +1 Sport	8+ models
Honda			Urban EV		Honda Fit EV	3+ models
Geely				S60 EV	Polestar	4+ models
JLR	Jaguar I-Pace, eType					2+ models
Hyundai-Kia	Kona, Stonic		Electric SUV			3+ models
Lucid Motors	Lucid Air					2+ models
PSA			E-Evolution	EMP 2		5+ models
Renault-Nissan	Nissan Leaf			Sedan based	Fluence ZE	4+ models
Tesla	Model 3		Roadster	Model Y		
Toyota			2+ models	3+ models		4+ models
Volkswagen Group	Audi Q6 e-tron,		Audi A9, VW E-Golf, Porsche Boxster	VW ID, VW Phaeton, Audi Q8, Audi R8 gen 2	Porsche Mission-E	9+ models

ELECTRIC VEHICLE OUTLOOK: EXPECTED PHEV LAUNCHES, GLOBAL, 2018–2021						
OEM	Year	2018	2019	2020	2021	Until 2025
BMW		Mini Countryman	Rolls Royce Phantom, 1 Series,	i9, Mini Spacebox	M3, 3 Series GT	BMW 4 Series, i6 (Autonomous) and 3 more models
Daimler		V-Class			C-Class	4+ models
FCA		Maserati Levante, Dodge Ram				2+ models
Ford Motors		Lincoln MKZ	Ford Kuga	Ford Mondeo		4+ models
Geely		Volvo S90 (SPA), XC40	Volvo XC90 (SPA)			4+ models
General Motors				Opel Insignia		3+ models
Honda		Honda CR-V,	Clarity		Honda Accord	4+ models
Hyundai-Kia		Hyundai Stonic	Hyundai i30			2+ models
PSA Group			Peugeot 308R,	D - Midsize, C -	C-Compact, SUV	4+ models
Renault-Nissan		Nissan eREV		Nissan Murano		2+ models
JLR		Range Rover PHEV		XF	XJ	2+ models
Toyota			Corolla PHEV	Lexus SUV		4+ models
VW Group		VW Touran, VW Jetta, Audi Q5, Audi Roadster, Porsche Macan	Audi Q7, VW Passat, SEAT Ibiza, Bentley Bentayga	Skoda Superb, Audi A3, Porsche 911, SEAT Leon	Skoda Fabia, Skoda Roomster	15+ models

Source: Frost & Sullivan

POWERTRAINS FOR FLEETS

TECHNOLOGY x USAGE: MOST NATURAL FITS FOR NEXT 5 YEARS



WHAT CAR?	City cars (A)	Small (B)	Lower & Upper Medium, Small SUVs (C + D)	Premium (E)	Large SUVs & MPVs	Small Vans	Large Vans
WHAT FOR? Typical fleet user or usage	City Pool cars, car sharing	Technicians Employees Urban	Sales Reps Middle Management High mileage	Top Management, Entrepreneurs	Top Management, Entrepreneurs	Utilities Craftsmen Last mile delivery	Utilities Craftsmen
Diesel	NO	NO		YES	YES	YES	YES
Petrol	YES	YES					NO
HEV		YES	YES	YES			
PHEV	NO (cost)	NO (cost)		YES	YES	NO (cost)	NO (cost)
Mild Hybrid		YES	YES				
BEV	YES (low voltage)	YES		YES			NO



Tänan!

Küsimusi?

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