

WALLENIIUS WILHELMSEN  
LOGISTICS ASA

# TAKING THE PULSE OF THE RORO MARKET

Mike Hynekamp – Georgia Foreign Trade Conference

February 2018

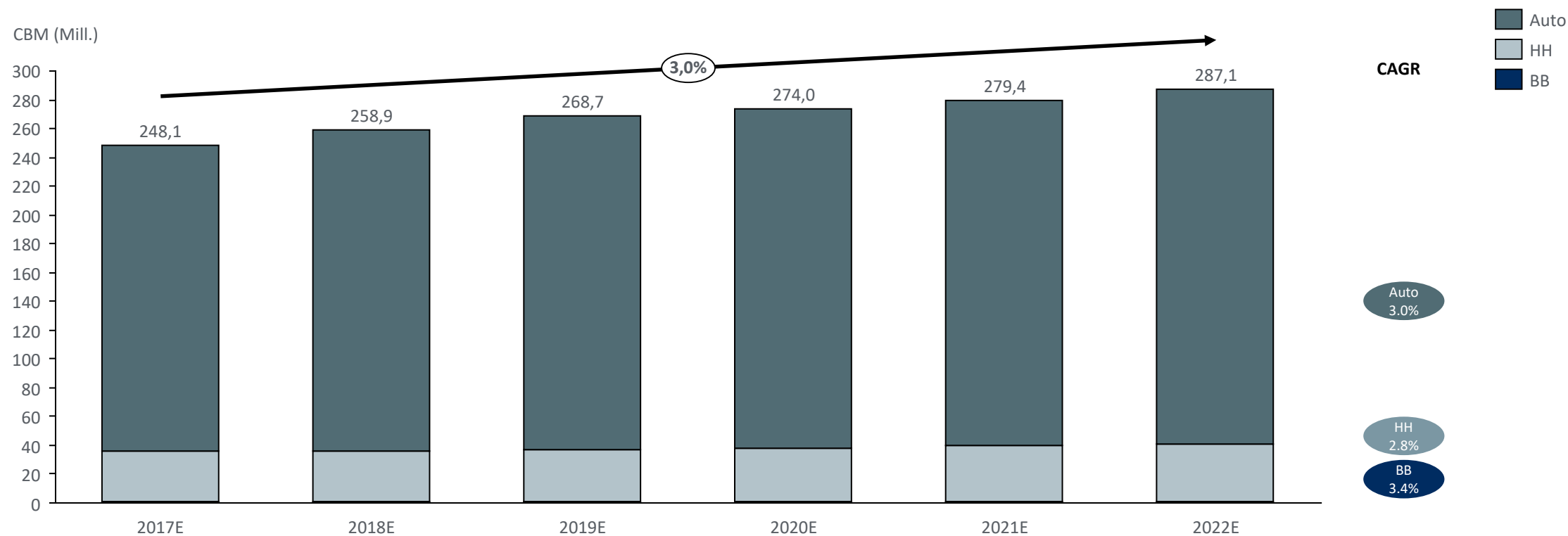
# Agenda - Market outlook

- Market overview
  - Global economy
  - Auto & HH
  - Capacity and Fleet
  - Bunkers / IMO
  
- Our industry is changing, disruptive changes ahead
  - Alternative fuels as propulsion -Electrification
  - Mobility changing -Autonomy
  - Digitalization –New mobility models and entrants

# Global RoRo volumes are expected to grow going forward

**Global Ro-Ro markets expected to grow 3.0% p.a. for the next 5 years**

*Million CBM, 2017-2022*

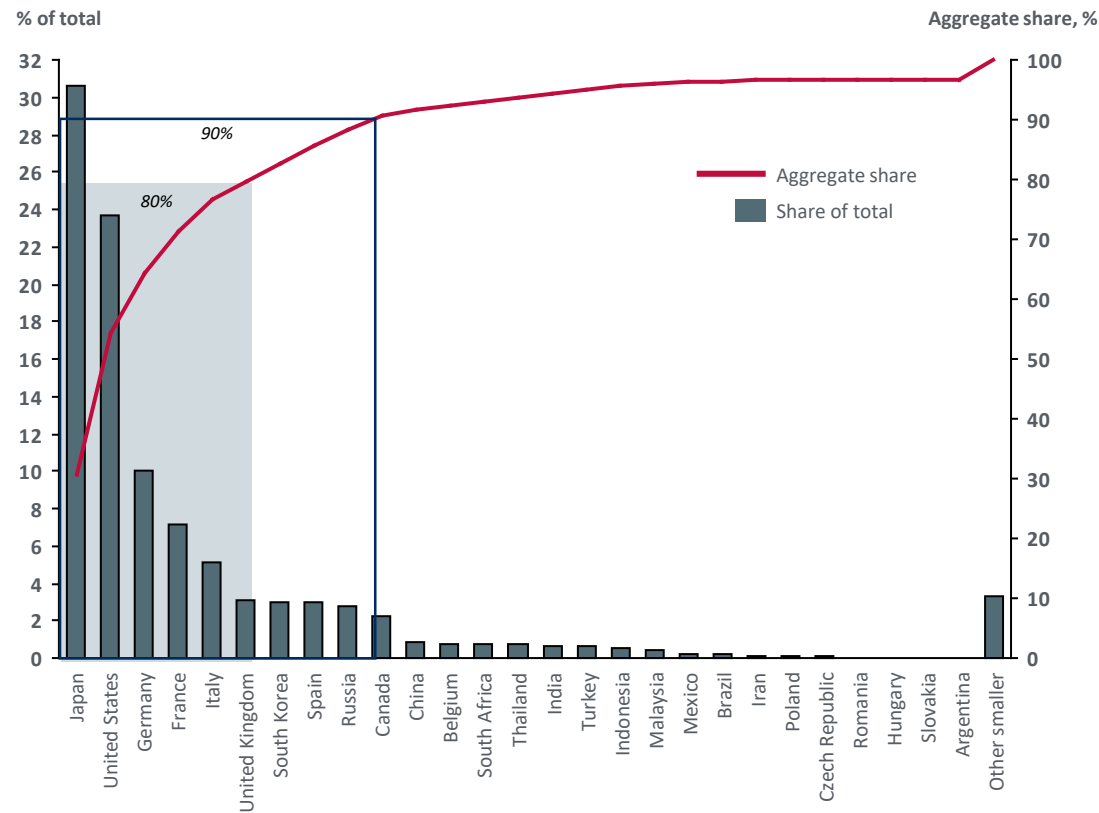


# The RoRo world is changing

In 1990, 5 countries contributed with 80% of the world production - In 2020, manufacturing is more fragmented, with 12 countries contributing with the same 80%

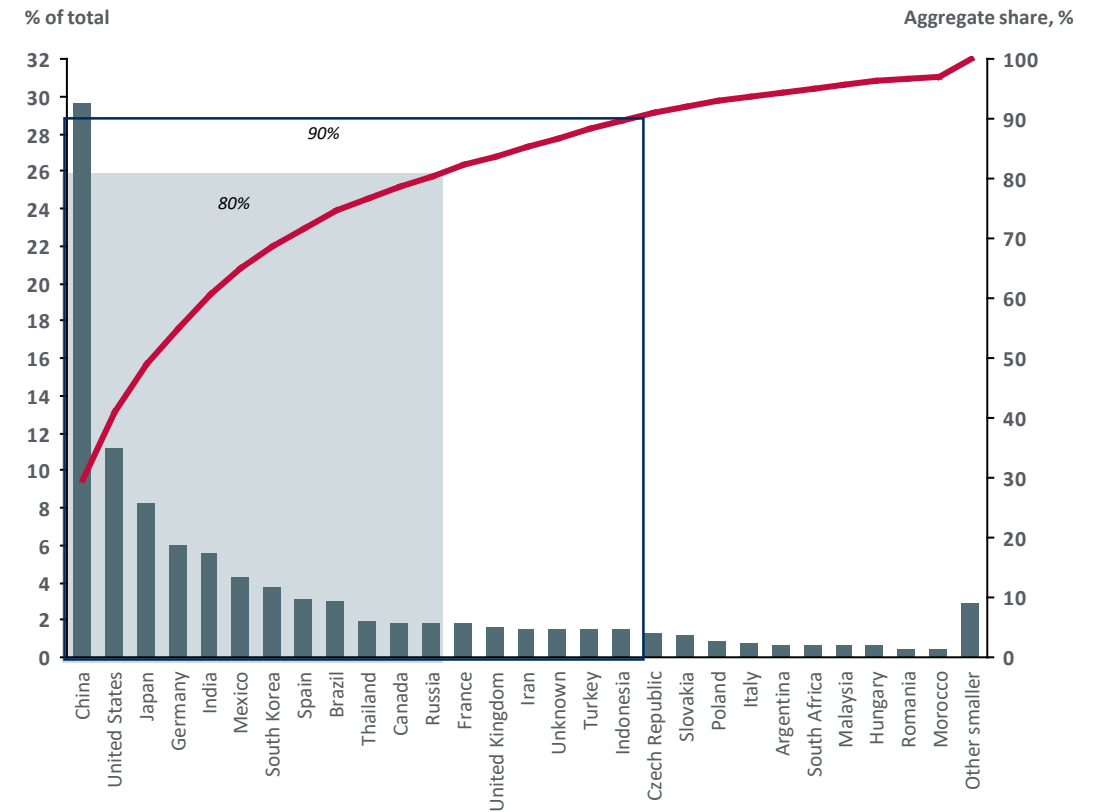
## The main LV manufacturing countries in 1990...

Share of global production, aggregate share, in %, 1990



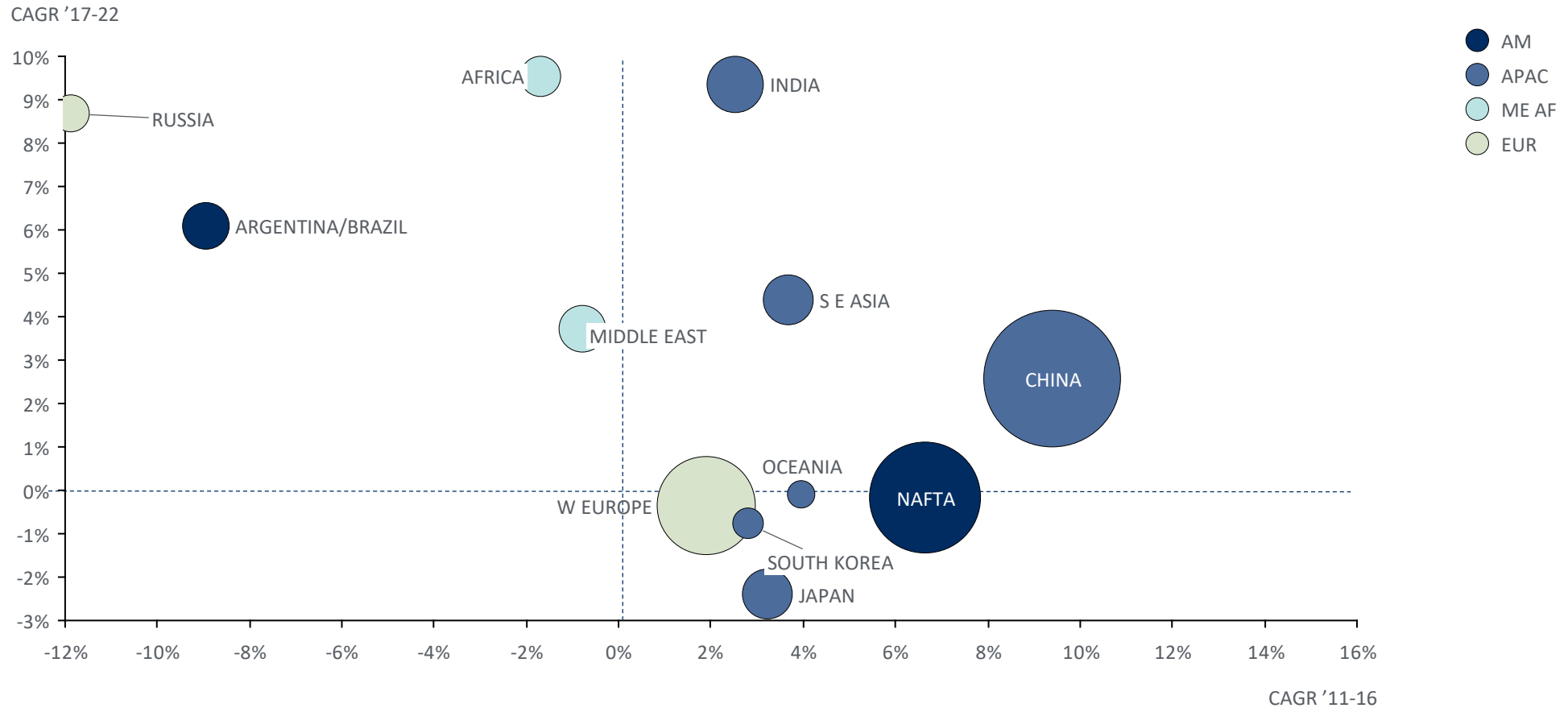
## ...compared to the same split in 2020

Share of global production, aggregate share, in %, 2020



# Total light vehicle sales expected to see a CAGR of 2.1% next 5 years

**Global sales of light vehicles by country/region**  
CAGR, 2011-16 and 2017-22

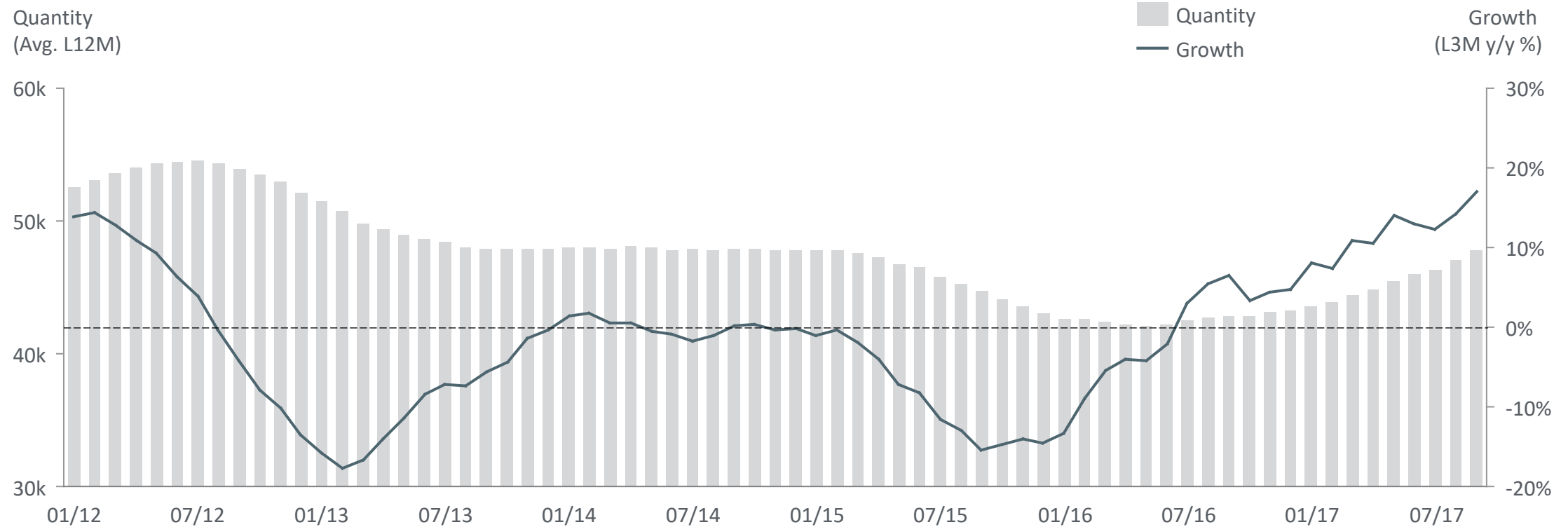


# Global construction momentum solid as we enter 2018

Global trade volume of construction and rolling mining equipment continue up

**After falling for years, construction equipment demand is now growing against a solid economic backdrop in most parts of the world**

Global construction and rolling mining equipment imports, 12-17

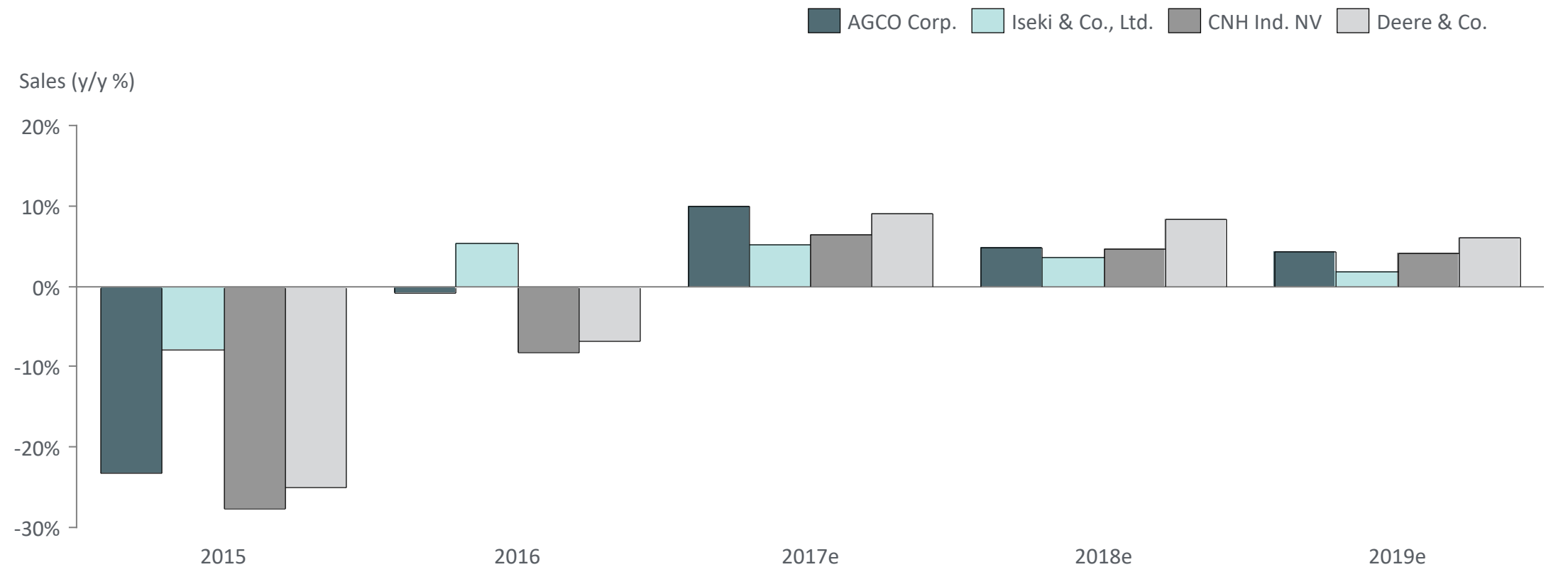


# Global agriculture markets still remain mixed

The US market is finally showing signs of bottoming out

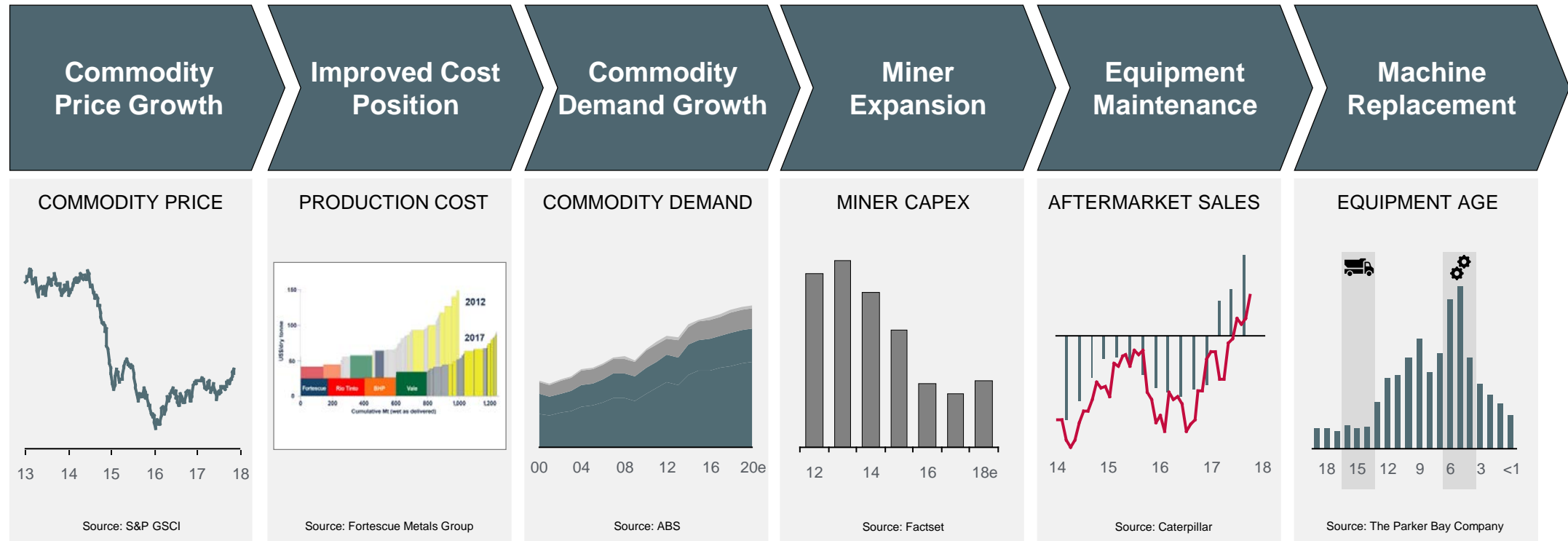
## Agriculture machinery markets are mixed, but may have bottomed out

OEM Revenue – Actuals and analyst consensus estimates, 15-19e



# An increasing number of indicators support a mining machinery turnaround

Commodity markets have firmed, miners strengthened, and the equipment fleet is getting old

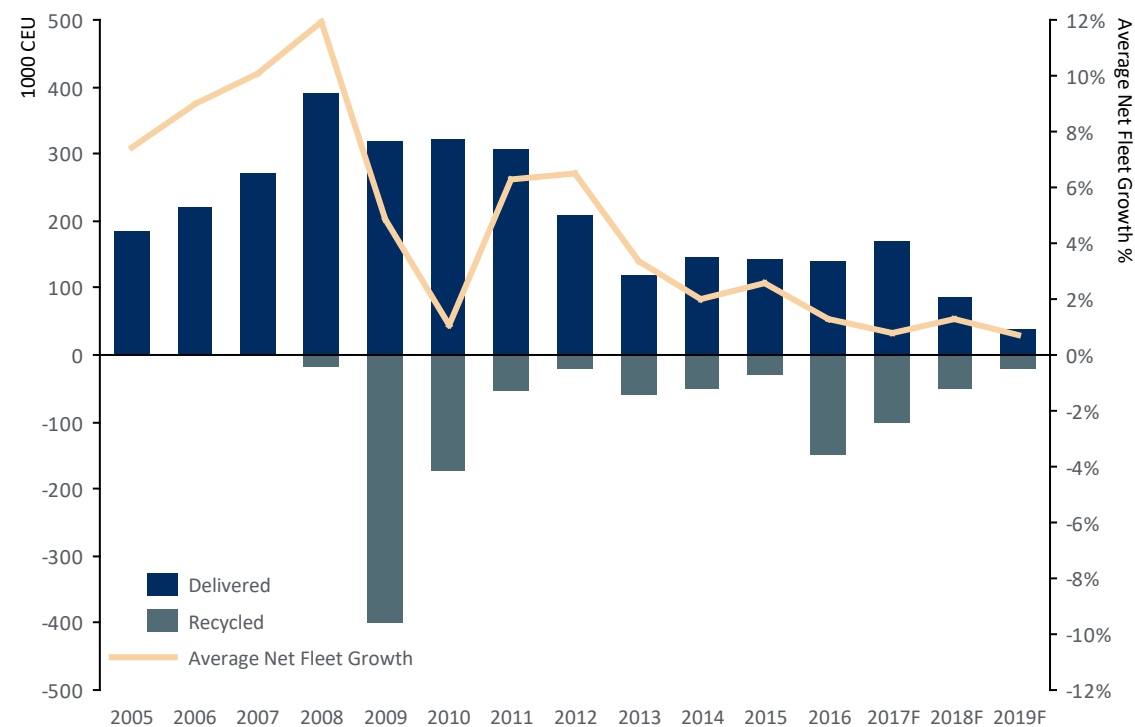




# The Ro-Ro fleet supply-demand balance is tightening

## Shrinking fleet growth is contributing to...

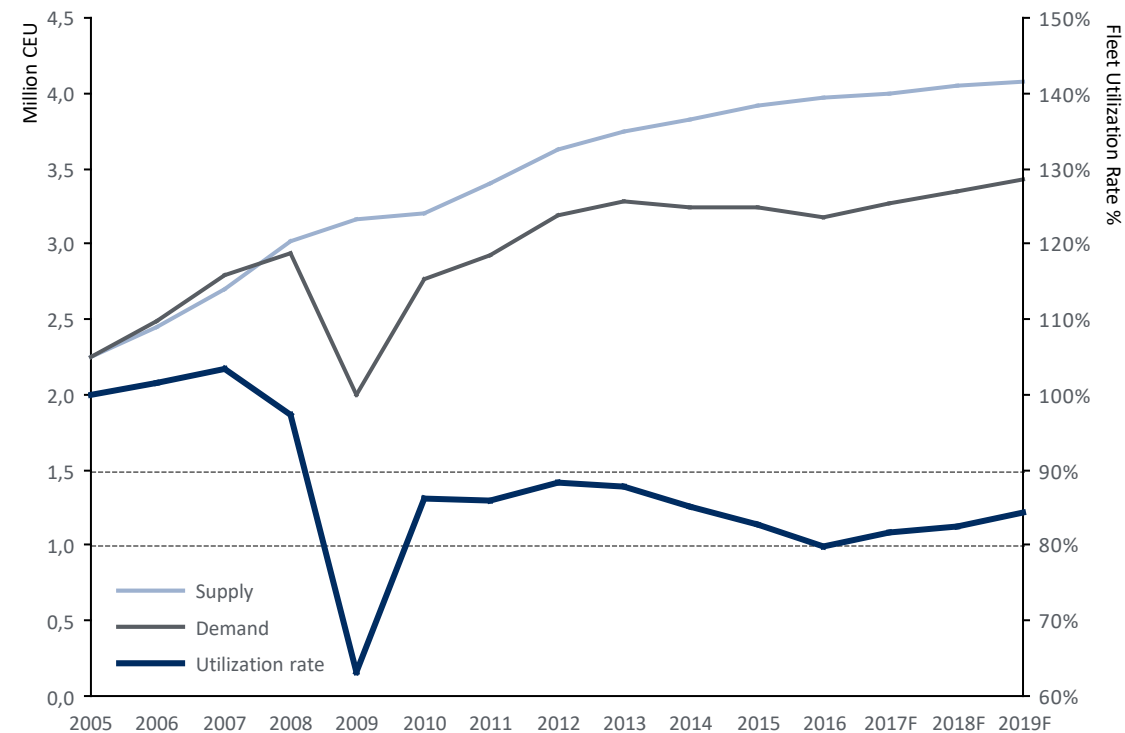
Average net fleet growth %, 2005-2019F



The annual average fleet growth is estimated at around 1% as deliveries will slow significantly, leading to a continued low fleet growth in 2018 and 2019.

## ...tightening supply-demand balance

Fleet utilization rate, 2015-19F

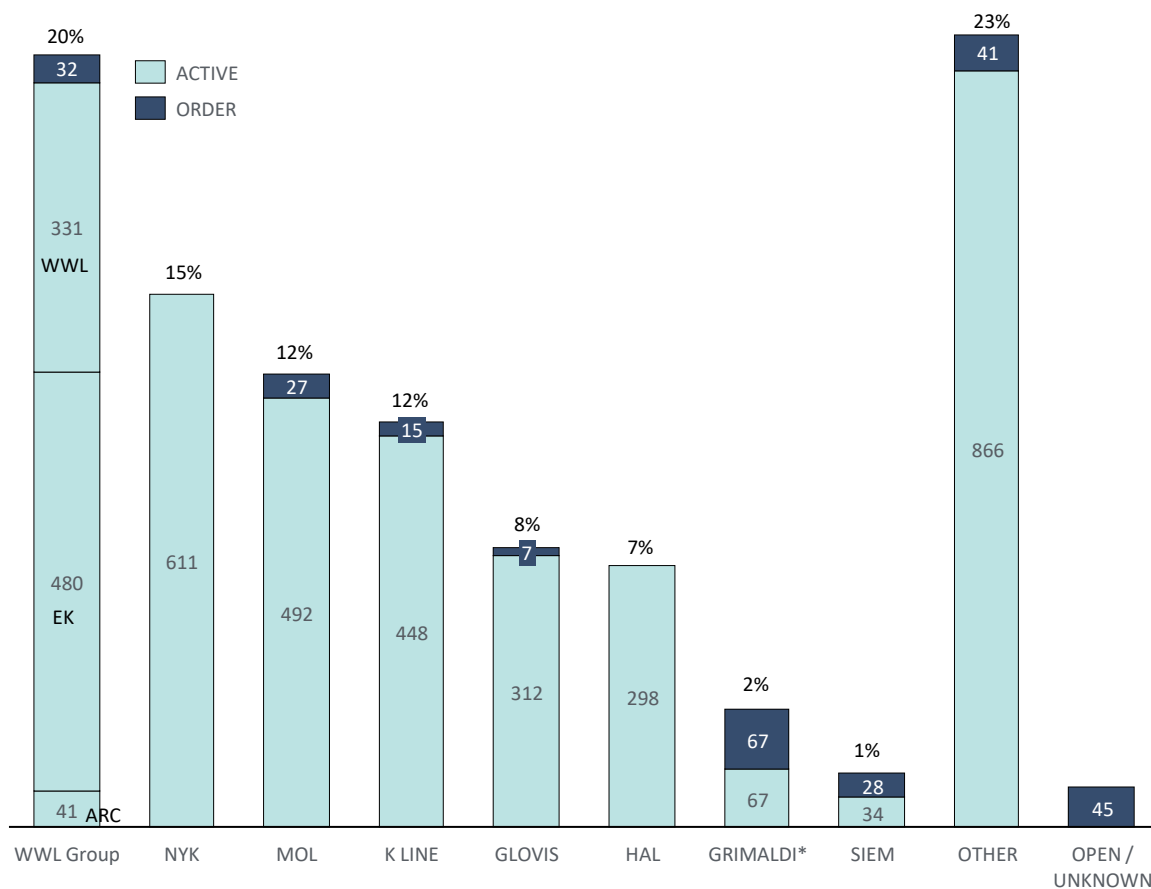


Tonnage balance is expected to gradually strengthen post 2018 as a result of an expected recovery in tonnage demand and low fleet growth.

# RoRo fleet overview

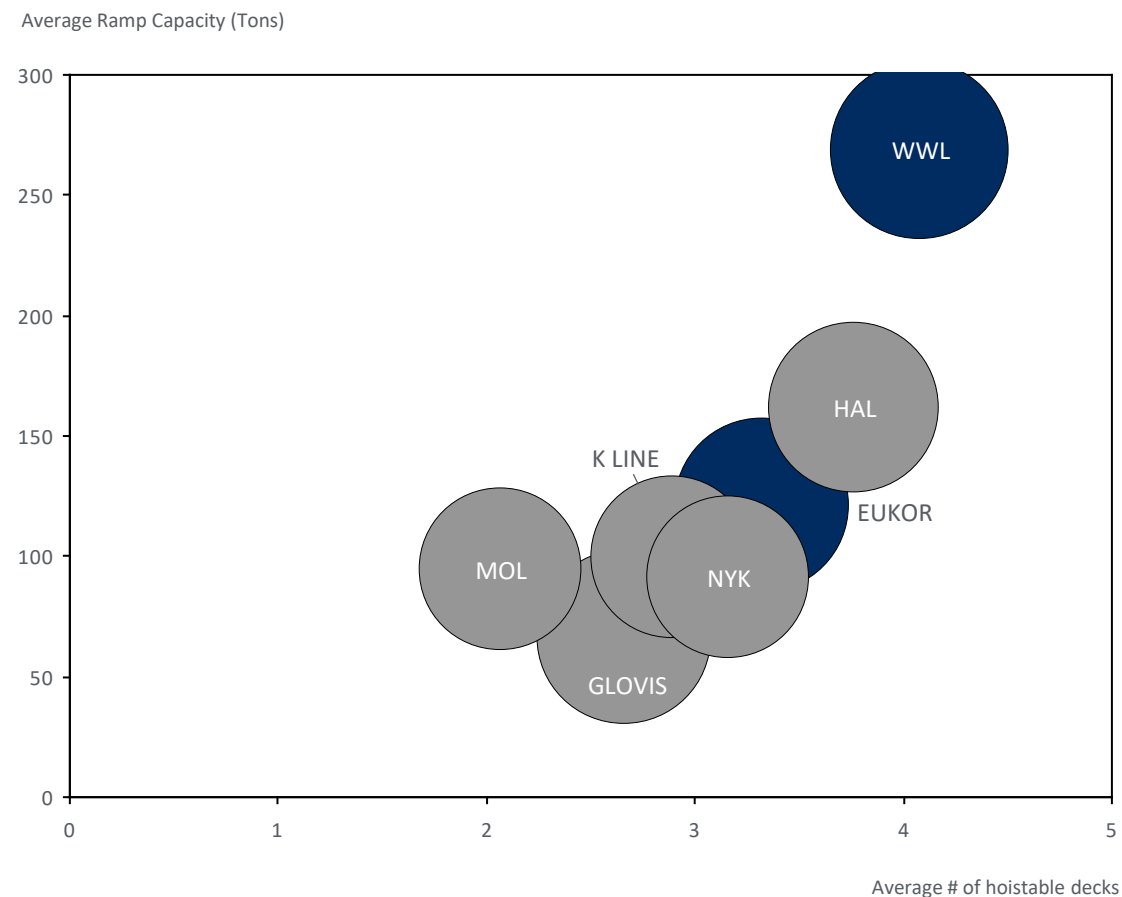
## WWL ASA is the largest operator group in the market...

Car Carrier Fleet, Thousand in CEU, share of current fleet capacity in (%)



## ...and still ahead on fleet capabilities

Ramp capacity in tons, # of hoistable decks and CEU capacity (size), August 2017



# Global Sulphur Cap 2020 in brief

## New regulations with global reach



● Additional local regulations

● Existing ECA (0.1%S)

● WWL main service ports

## Comments

**Why:** Sulphur emissions harmful to health and environment

**What:** Sulphur content reduction, 3.5% to 0.5%

**When:** Effective from Jan 1st 2020

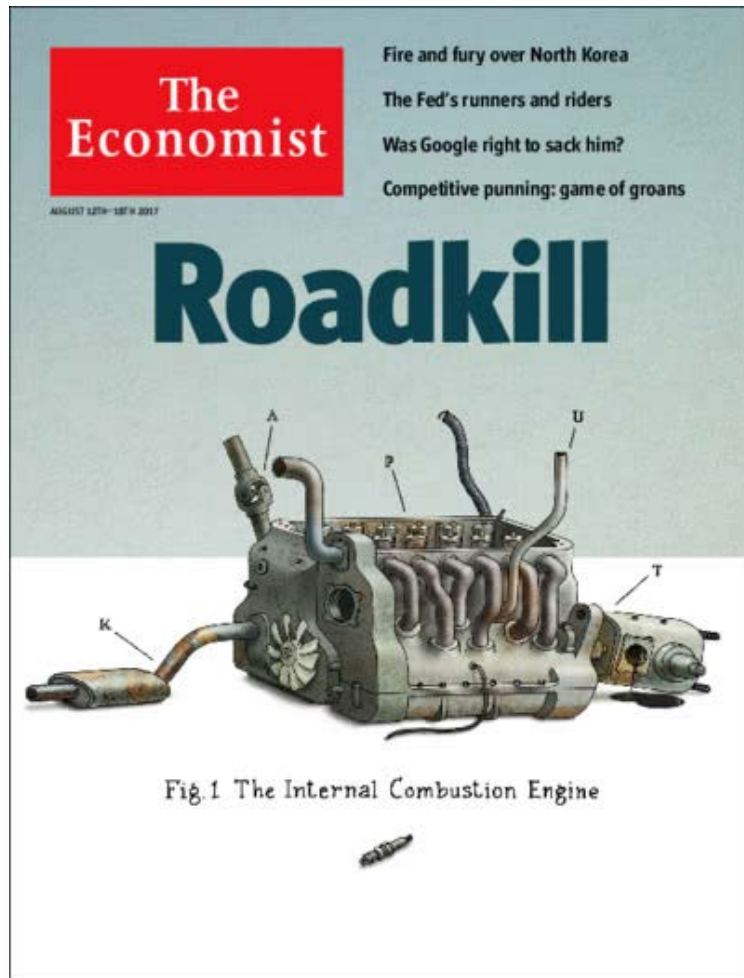
– no possibility of deferral

**Who:** All vessels, all the time and everywhere

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  - Digitalization - New mobility models and entrants

There are more risks in the medium/long term than it has ever been



### Clean disruption of Energy and Transportation (Tony Seba):

*Within 10 years of the regulatory approval of driverless vehicles, 95 percent of U.S. passenger miles travelled will be served by on-demand, autonomous electric vehicles owned by companies providing **Transport as a Service**, which we call **TaaS**.*

–The Collapse of the ICE vehicle and Oil industries.

5<sup>th</sup> Ave New York City, April 15, 1900

**1900:**  
**Where**  
**is THE**  
**CAR?**



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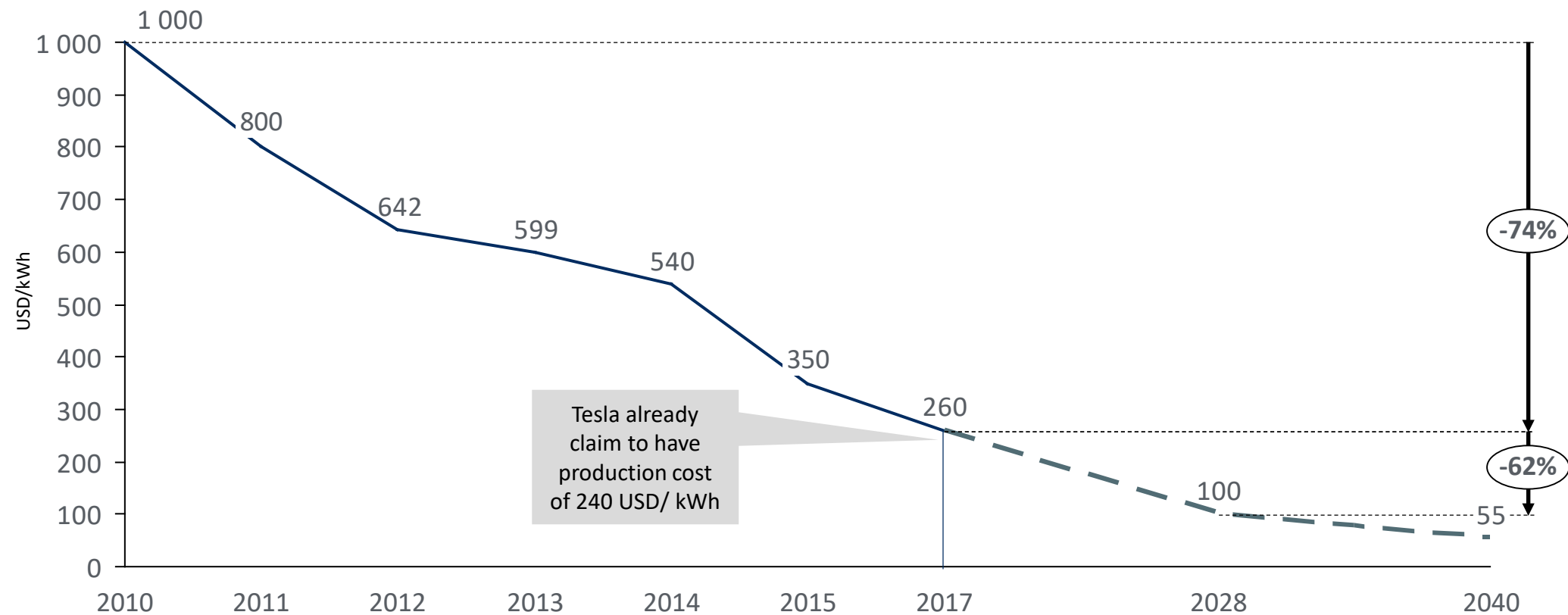


# Alternative fuel as propulsion – Electricity seems to have won the race

Average battery pack price continues to come significantly down

## Average industry standard battery pack price declines due to scale and improved technology (chemistry & management)

Average battery pack (cell and auxiliaries) USD/kWh, 2010-35



# Mobility is changing – Autonomy an important driver

Autonomy is not here yet – but much closer than we thought



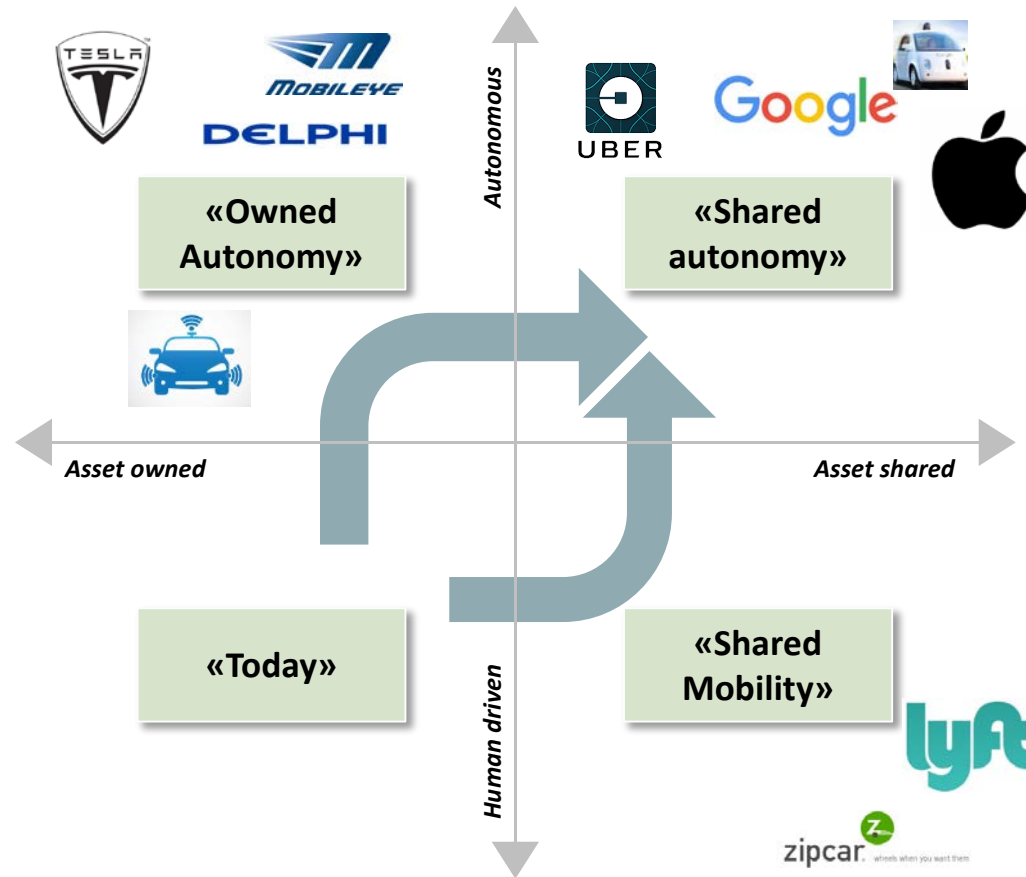
## Autonomy aims to give several benefits:

- Reduce accidents
- Increase comfort/ Free up time for driver
- Improve fuel economy / Reduce emissions
- Reduce wear of cars
- Might reduce need for roads as the self driving cars can drive closer
- Less search for parking (supporting environment)
- Tech less costly (LIDAR, camera, sensor etc.)
- Audi A8 to be delivered with level 3 in 2017, Tesla expect to reach level 5 by end of 2019
- Self-driving might start in public services first
- Public perception / legal issues / ethics



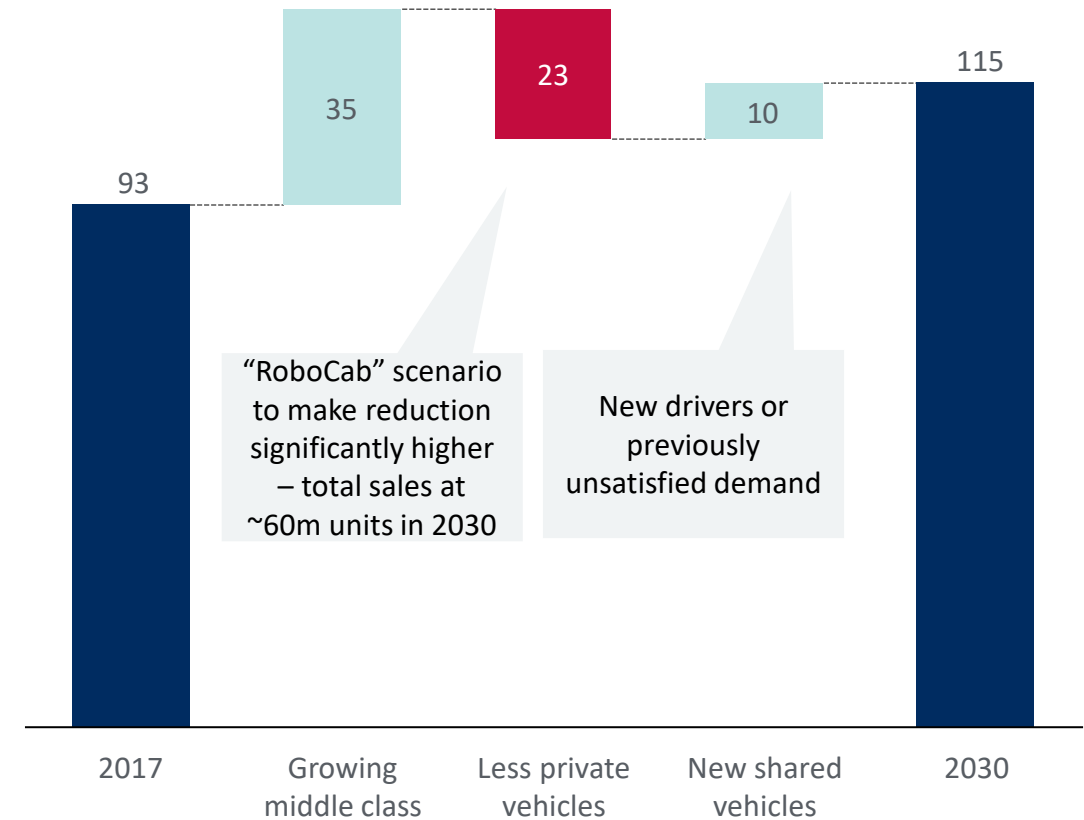
# Auto industry in fast paced change – from product to service

## Mobility models transformed by user demand and technology...



## ...but demand for transportation will continue to grow

Annual car sales, million units

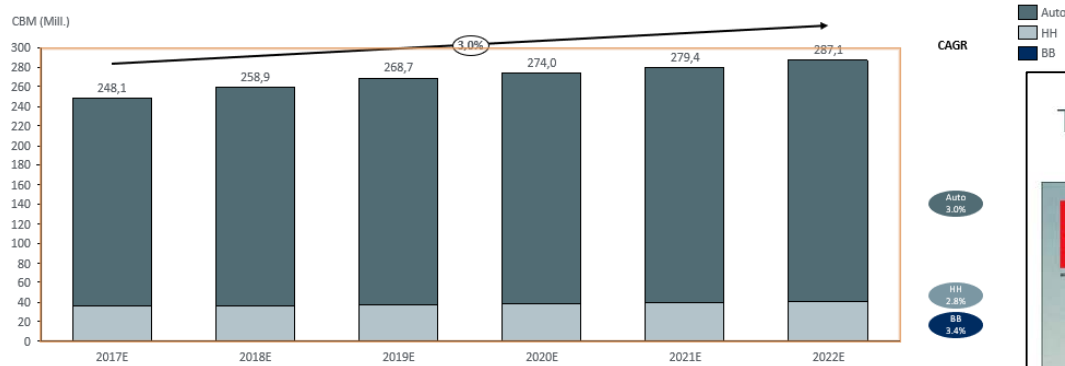




# Solid development expected for the next 5 years - but more risk in the medium/long term

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Source: IHS Markit / GMI

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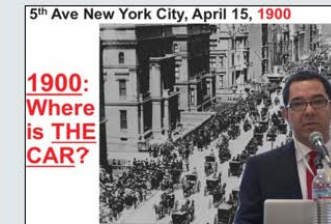


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# The pace of change will be swift

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Thank you