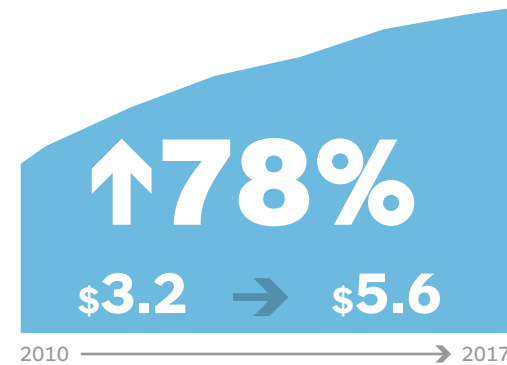


Where's the car going?

The auto industry's three big challenges: CO₂ emissions standards, integrating new technology and balancing global production.

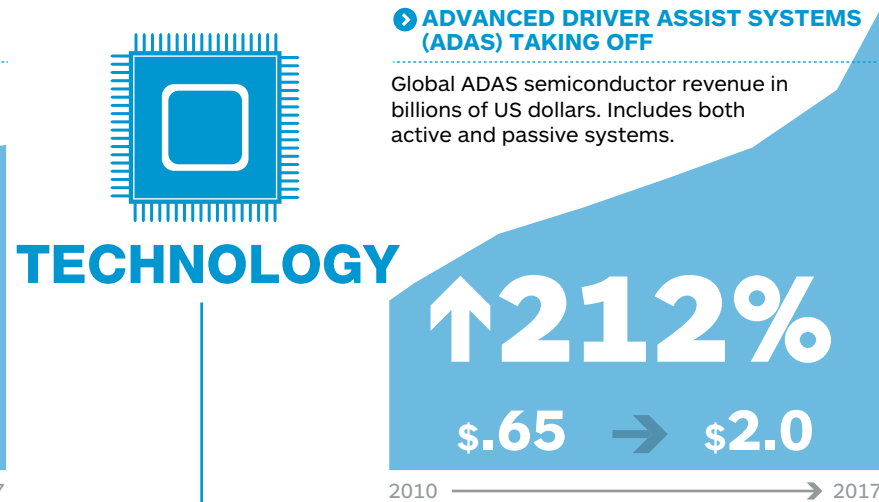
➤ RISING DEMAND FOR HIGHER TECH INFOTAINMENT SYSTEMS

Global infotainment semiconductor revenue (OEM market only) in billions of US dollars.



➤ ADVANCED DRIVER ASSIST SYSTEMS (ADAS) TAKING OFF

Global ADAS semiconductor revenue in billions of US dollars. Includes both active and passive systems.

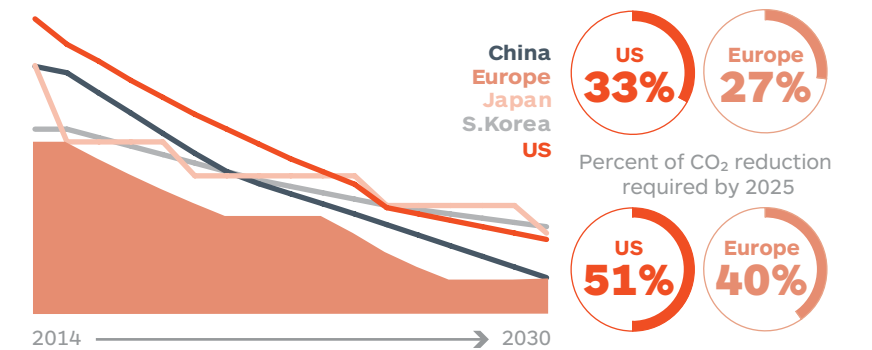


CO₂ EMISSIONS

➤ THE BIG CHALLENGE AHEAD FOR AUTO MAKERS

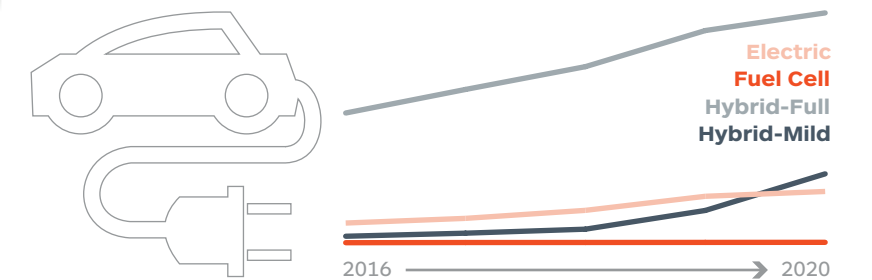
CO₂ reduction targets measured in grams per kilometer, normalized to Europe's NEDC Test Cycle.

Percent of CO₂ reduction required by 2020



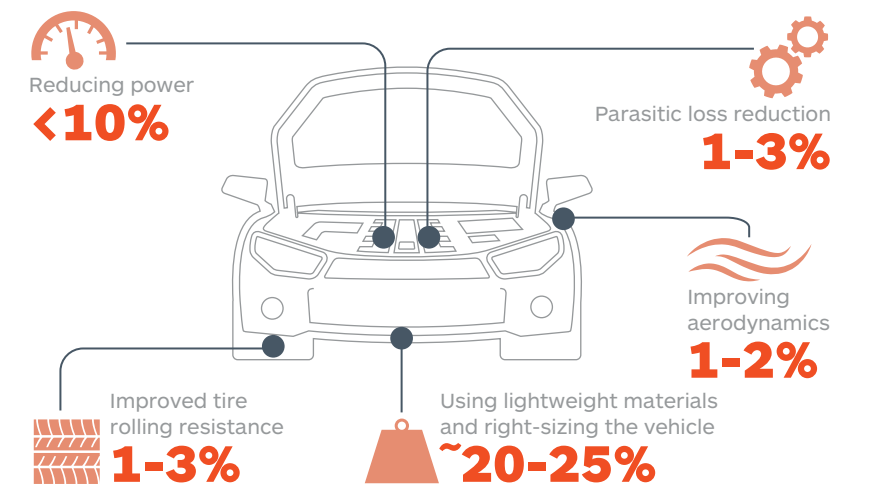
➤ FOUR POWERTRAIN OPTIONS TO REDUCE CO₂ EMISSION

Full hybrids are leading the way. Millions of vehicles produced worldwide.



➤ FIVE WAYS TO IMPROVE FUEL CONSUMPTION

Estimates of potential gains in fuel efficiency from new technologies.



SUPPLY & DEMAND

➤ BIG GROWTH AHEAD FOR AUTO MAKERS IN EMERGING MARKETS

Percentage change in annual production volume and sales of light vehicles by region, 2014 to 2025.

⚙️ PRODUCTION 🗝️ SALES

↑ 30.3% WORLD TOTAL
🗝️ 32.6%

↑ 9.7% NORTH AMERICA
🗝️ 5.5%

↑ 50.8% SOUTH AMERICA
🗝️ 47.7%

↑ 44.4% MIDDLE EAST/AFRICA
🗝️ 36.2%



⚙️ 21.1% EUROPE
🗝️ 25.7% ↑

⚙️ -7.2% JAPAN/KOREA
🗝️ -7.9% ↓

⚙️ 48.6% GREATER CHINA
🗝️ 46.9% ↑

⚙️ 83.3% SOUTH ASIA
🗝️ 88.4% ↑

Sources: IHS, International Council on Clean Transportation (CO₂ reduction targets)