



Technical progress in the truck sector

Hasse Johansson, Executive Vice President R&D, Scania



ACEA

ACEA MEMBERS
COMMERCIAL VEHICLES



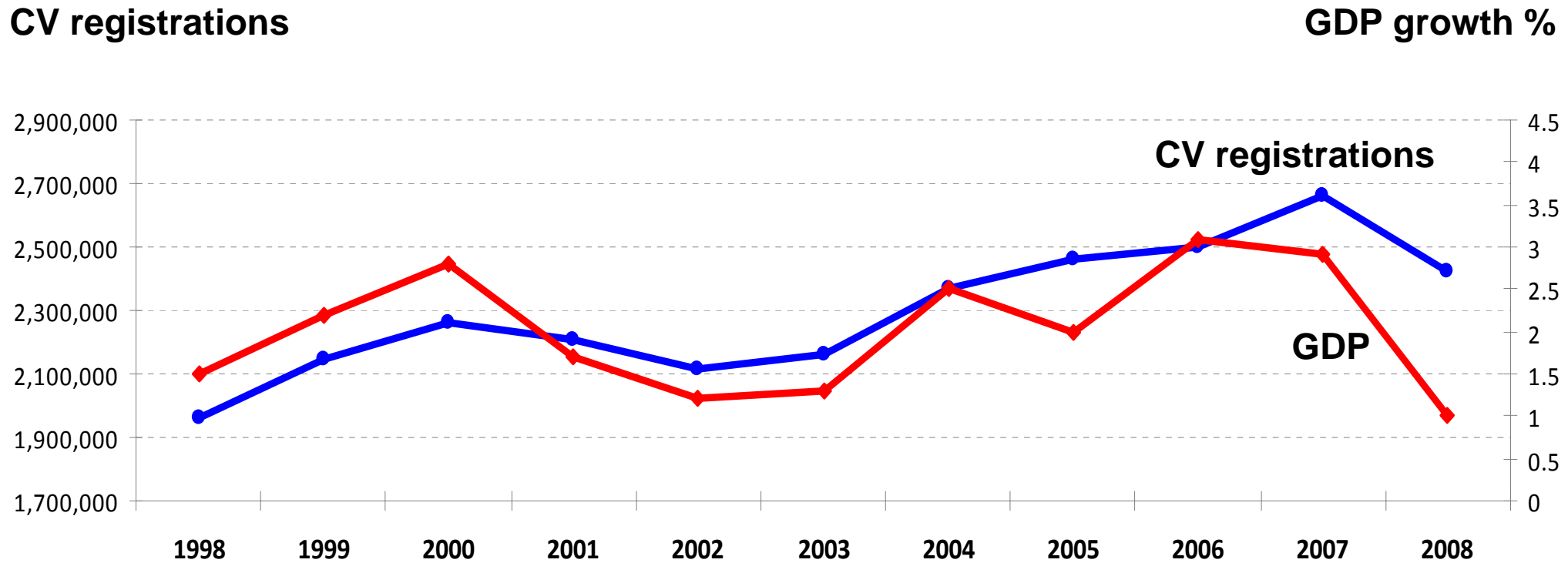
DAIMLER

VOLKSWAGEN
AKTIENGESELLSCHAFT

IVECO

VOLVO

Commercial vehicle registrations and GDP growth in the EU



Source: AAA, ACEA, DG ECFIN, IMF

Bridging the crisis



Scania

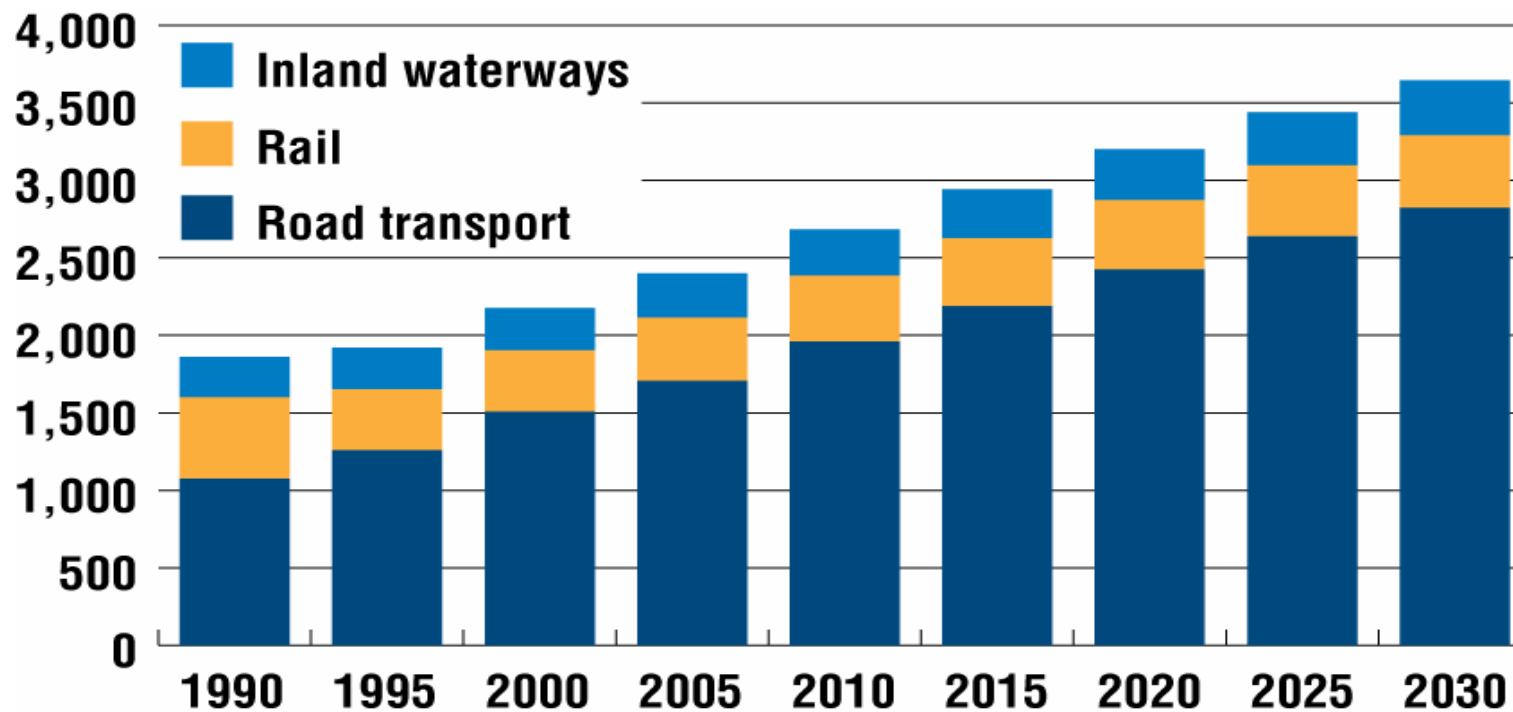


DAF



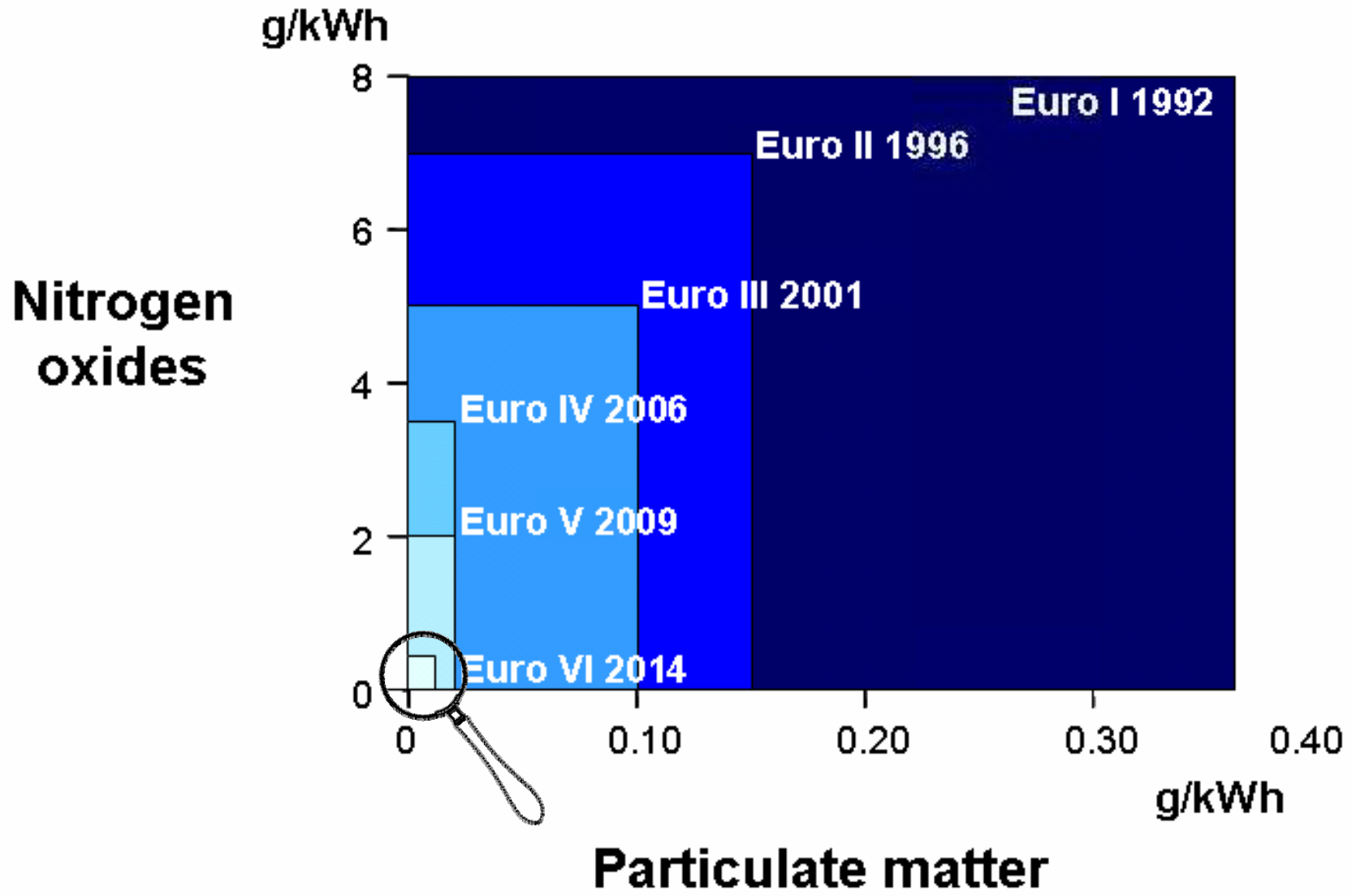
Goods transport in EU-27

Billion
tonne-km



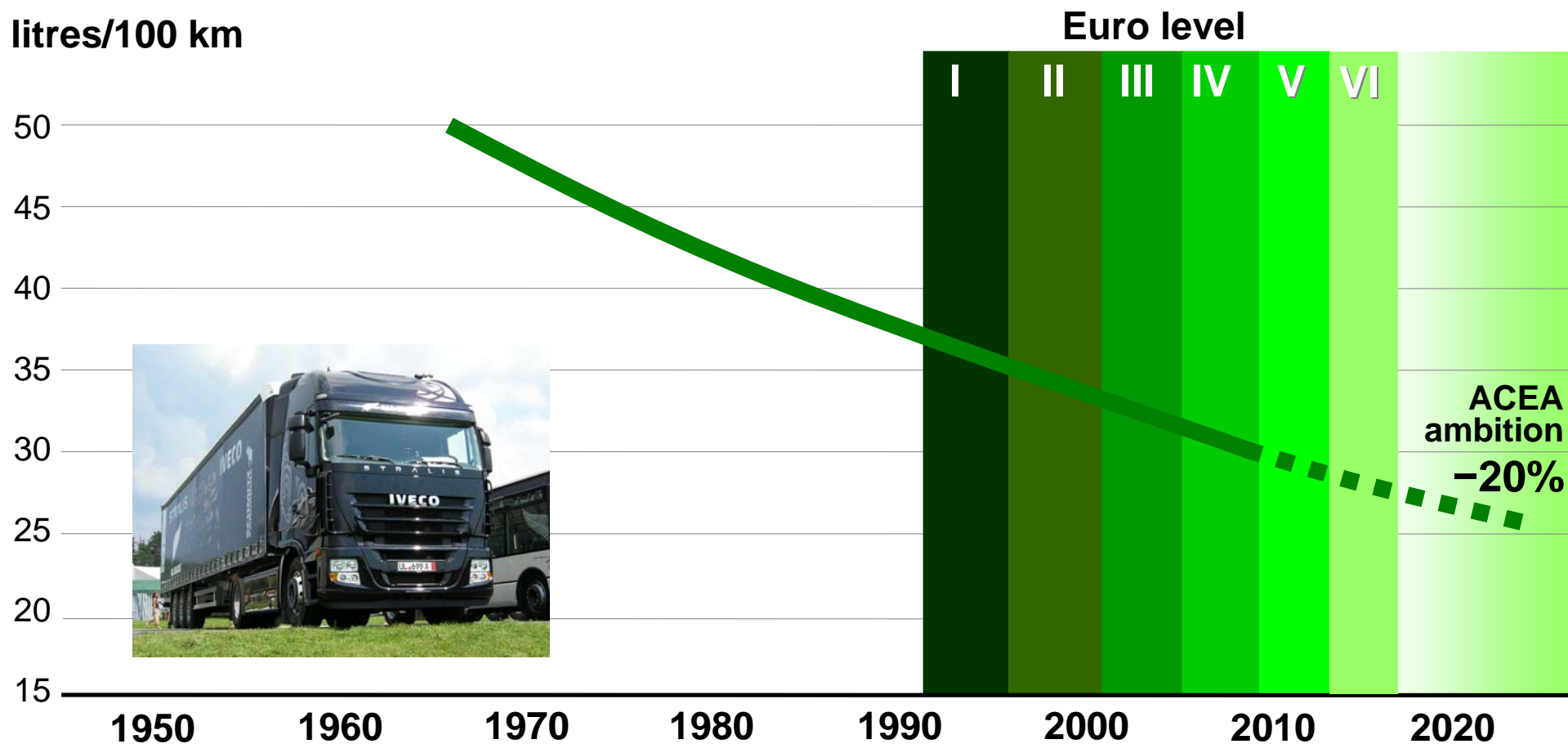
Source: EU Commission

European emission legislation



Efficiency improvement European 40-tonne combination

litres/100 km



ACEA
ambition
-20%

Energy usage

Aerodynamics

Driver training
Driver support

Waste heat recovery
Hybrid systems

Engine efficiency
Auxiliary systems

Rolling resistance

- Alternators
- Compressors
- ...

How far should we go?

50% more cargo
25% lower emissions
Fewer vehicles



Space for fuel savings and safety



Intermodal transport



How far should we go?

50% more cargo
25% lower emissions
Fewer vehicles



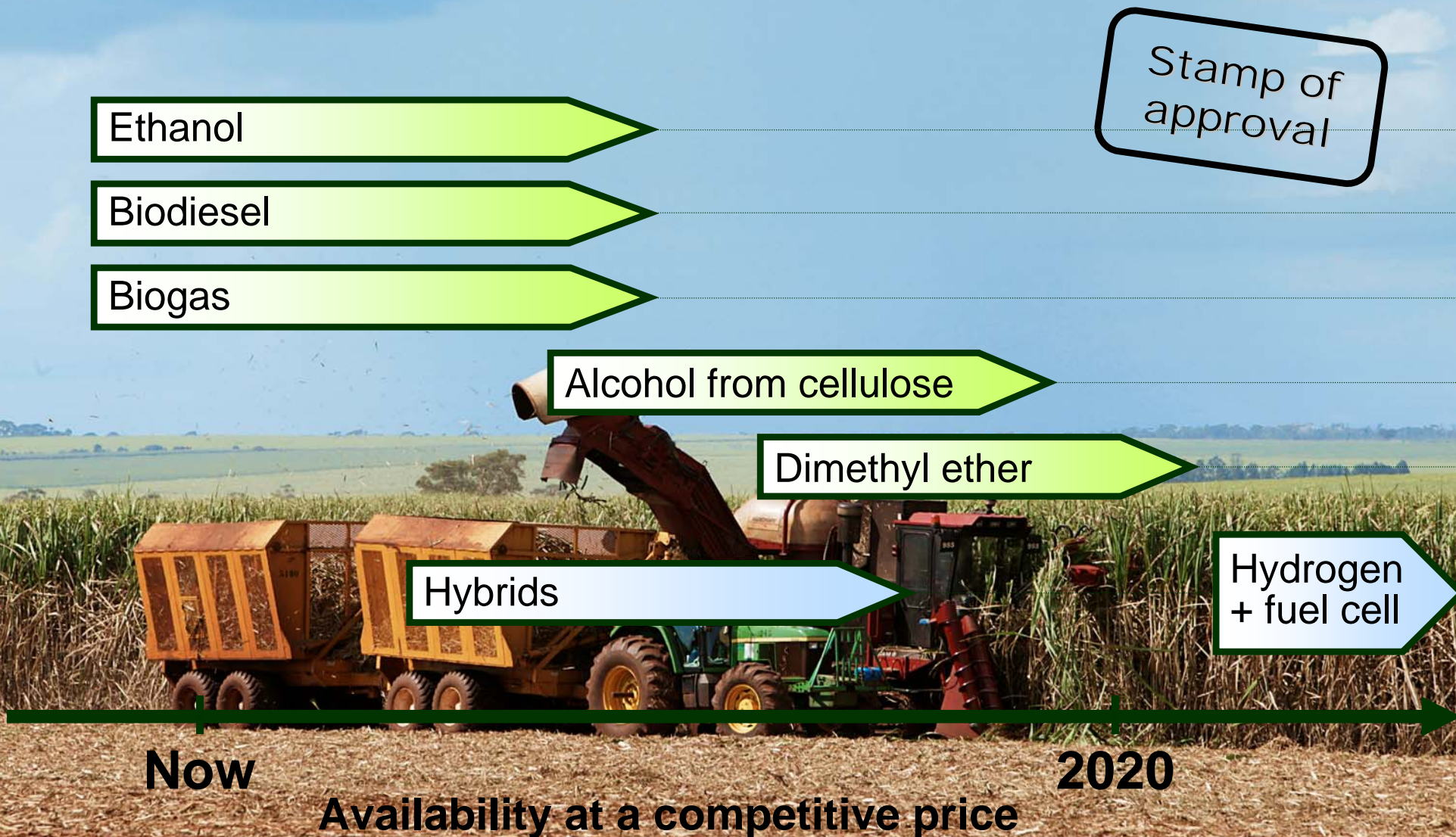
Space for fuel savings and safety



ITS – intelligent transport services
Platooning



Roadmap – biofuels and new technology



Hybrid fuel saving potential

 25%



 15%



 5%



3,000-5,000 litres saved per year

Degree of hybridisation



**Micro
hybrid**

**Parallel
hybrid**

**All-electric
drive**

**Conventional
powertrain**

**Mild
hybrid**

**Series
hybrid**

The driver is the most important actor

- Driver competence
- On-board support
- ITS – intelligent transport services

- Road safety
- CO₂ emissions / fuel
- Societal impact
- Wear-and-tear

