Innovating to compete

Europe is a leader in transport innovation
In the EU, about **one fourth** of the **total business R&D expenditure** is transport related.

Private R&D expenditure in transport compared to total national expenditure:

**Source:** EU industrial R&D scoreboard, 2016 - *Calculated on the top 1000 Companies with their headquarters in the EU, of which 57 are transport related

Share of total R&D expenditure by sector:

- **Chemicals** 2.9%
- **Software & Computer Services** 4.2%
- **Banks** 4.8%
- **Industrial Engineering** 4.8%
- **Electronic & Electrical Equipment** 5.3%
- **Aerospace & Defence** 5.1%
- **Technology hardware & equipment** 7.9%
- **Pharmaceuticals & biotechnology** 19.3%
- **Others** 19.5%

**Source:** EU industrial R&D scoreboard, 2016 - *Calculated on the best 2500 world corporates, of which 165 are transport-related (Automobile and parts, Industrial transportation), and 43 in the EU
In 2014, **32.9%** of European transport companies were considered **innovative enterprises**, divided as follow:

- **27.4%** introduced new or significantly improved products and/or production processes
- **35.7%** of the companies innovated both aspects
- **36.9%** introduced new organisational methods and/or new marketing concepts and strategies

*Source: estimates based on Eurostat Community Innovation Survey 2014*
Transport GHG emissions* in 2015 were **10% lower** than in 2007.

GHG emissions by mode of transport:

- **ROAD:** 72.9%
- **WATERBORNE:** 12.8%
- **RAILWAYS:** 0.5%
- **AVIATION:** 13.3%
- **OTHER:** 0.5%

*Source: European Environment Agency (EEA), June 2017* - *including international maritime bunkers*
European transport companies* are leading innovators! In 2016 they invested more than 50 bn € in industrial R&D, equal to 47% of the world share*, well ahead of Japanese and American companies.

Source: EU industrial R&D scoreboard, 2016 - *Calculated on the best 2500 world corporates, of which 165 are transport-related (Automobile and parts, Industrial transportation), and 43 in the EU
Automotive Corporate R&D investments are dominated by just a few companies. In the EU, 10 companies* account for 87% of R&D investment in transport.

Source: EU industrial R&D Investment Scoreboard, 2016 - * Calculated on the top 1000 Companies with their headquarters in the EU, of which 57 are transport related
Investing and expanding: Europe is a world leader in transport

Germany, Spain and the UK are among the 10 top car producers in the world, with about 9.8 M cars produced in 2016.

Source: Organization of Motor Vehicle Manufacturers (OICA)