# THE FUTURE OF MOBILITY

Transportation innovations such as autonomy, connectivity, electrification and shared mobility are already driving significant change in the automotive sector. The powerful combination of these mobility innovations will positively impact the quality of life for millions of people over the coming decades.

# How can city smog become a problem of the past?

#### Electric vehicles reduce the environmental impact of transport



#### Key benefits

- Greenhouse gas mitigation
- Zero tailpipe emissions
- **Reduced noise levels**
- Improved energy efficiency

#### **Overall impact**

Electrification of passenger road transport will reduce local air pollutant emissions such as particulate matters and NO<sub>x</sub>, which are a significant risk to human health.

#### Market outlook

Electric vehicles could represent 35% of global new car sales by 2040.

# How can accidents and traffic jams be avoided?

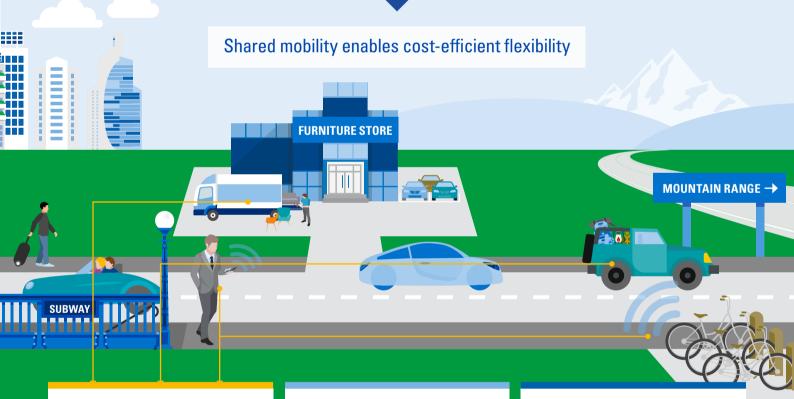




Enhanced road safety



# How can your vehicle be dynamically adapted to your needs?



# Key benefits

- Increased asset efficiency
- Multimodal passenger flow
- Reduced need for parking spaces

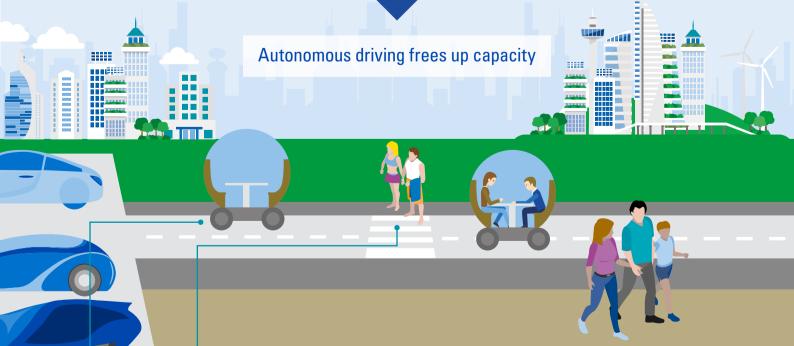
# **Overall impact**

Capacity optimisation of a shared mobility system could reduce city dwellers' travel costs by 50%.

# Market outlook

By 2050, one out of three new cars sold could potentially be a shared vehicle.

# How can you have more time for the important things in life?



#### Key benefits

- Optimised driving
- Improved fuel efficiency
- Increased safety

### **Overall impact**

Commuters worldwide could save a combined one billion hours every day once autonomous vehicles qo mainstream.

# Market outlook

Sales of driverless cars could reach 12 million units annually by 2035.

Backed by a century of German automotive safety engineering experience, TÜV SÜD is strongly involved in the safe development of the high-tech transportation systems of tomorrow, from e-mobility to autonomous driving and IT-security.

Bloomberg New Energy Finance, February 25, 2016 | The Transformation of the Automobile, BI Intelligence, 2016 Automotive Revolution – Perspective Towards 2030, McKinsey&Company, 2016 | The Road to Autonomous Driving, Boston Consulting Group, 2015 Ten Ways Autonomous Driving Could Redefine the Automotive World, McKinsey&Company, June 2015 Shared Mobility, International Transport Forum, 2016 | The Benefits of Connected Car Technologies, FIA, 2016



Get ready for the mobility of the future www.tuv-sud.com/e-mobility www.tuv-sud.com/automotive

2017 © TÜV SÜD AG