Addressing the challenges of traffic growth

A report from the Economist Intelligence Unit commissioned by Abertis, the world’s leading toll road operator, has found that new road technologies are transforming transport – and hold the key to a cleaner, safer and smarter mobility future.

1. Challenges of traffic growth
More people on the move is resulting in productivity losses, road accidents, air pollution and an adverse impact on public health.

- $1.4tn Annual cost of traffic jams: WEF
- 22% Of OECD emissions from vehicles
- 1.25m Annual deaths on the road: WEF

2. The solution: Road Tech
New vehicle technologies and the smart infrastructure that supports them can help overcome these challenges.

- 90% Potential reduction in fatalities from autonomous vehicles: McKinsey
- 4-7 mins Faster response time to accidents thanks to Waze data

3. Innovation on the road surface
The road surface itself is the focus of considerable innovation, like inductive charging for electric vehicles and solar roads.

- 15% Reduction in fuel consumption in signal co-ordination trials
- 25 Partners working on the FABRIC project, testing on-road electric vehicle charging across France, Sweden and Italy

4. Redefining road infrastructure
Roads are being redefined to include digital components like wireless network technologies and AI.

- 200 Universal EV fast-charging terminals across France through the Corri-Door project

5. Big data and smart mobility
Big data and the sharing economy are facilitating “mobility as a service” (Maas), which could further reduce emissions while increasing road efficiency.

- 97% Reduction in required parking space
- 33% Reduction in emissions

6. Connectivity
The road surface itself is the focus of considerable innovation, like inductive charging for electric vehicles and solar roads.

- 5G Networks
Trialling vehicle-to-vehicle 5G networks with Vodafone

- 97% Reduction in required parking space
- +33% Reduction in emissions

Governments have a pivotal role to play in enabling greater adoption of these technologies – and the next 5-10 years will be crucial in determining the future of the world’s roads.

- $11.4tn Road infrastructure funding gap between now and 2030: McKinsey

At Abertis we believe Road Tech can help tackle the challenges of global traffic growth. This report develops the most comprehensive overview of the technologies and innovations coming through – and what’s needed to accelerate their adoption.

Francisco Reynés, Vice Chairman and Chief Executive Officer, Abertis