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.



Challenges of traffic growth Innovation on the road surface 2 The solution: Road Tech More people on the move is resulting in productivity losses, road New vehicle technologies and the smart infrastructure The road surface itself is the focus of considerable innovation, accidents, air pollution and an adverse impact on public health. that supports them can help overcome these challenges. like inductive charging for electric vehicles and solar roads. **\$1.4**tn 🚰 22% **5G Networks** 90% **4-/**mins (7) Trialling vehicle-to-vehicle Of OECD emissions Potential reduction in Annual cost of Faster response time 5G networks with Vodafone traffic jams: WEF from vehicles fatalities from autonomous to accidents thanks to vehicles: McKinsey Waze data Connectivity **1.25**m AT&T developing vehicle-to-everything Annual deaths network service, connecting cars with on the road: WEF infrastructure and pedestrians as well as other vehicles **3** Redefining road infrastructure Roads are being redefined to include digital components like wireless network technologies and AI.

[≈]abertis

15% Reduction in fuel

consumption in signal

co-ordination trials



Partners working on the FABRIC project, testing on-road electric vehicle charging across France, Sweden and Italy



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

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.

6 Big data and smart mobility

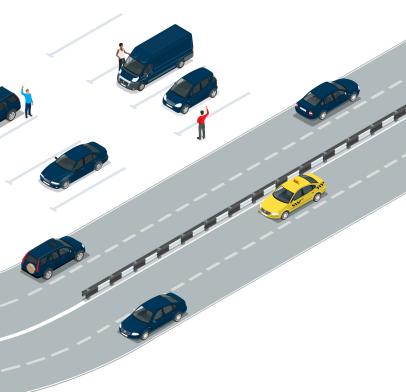
Big data and the sharing economy are facilitating "mobility as a service" (Maas), which could further reduce emissions while increasing road efficiency. Results of OECD trial in Lisbon to replace personal vehicles with autonomous cars and huse

97%



Reduction in required parking space

Reduction in emissions



6 The next 5-10 years

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.

PPPs Will play an increasingly important role in creating a smarter mobility future: Boston Consulting Group



Road infrastructure funding gap between now and 2030: McKinsey

Francisco Reynés, Vice Chairman and Chief Executive Officer, Abertis