An electric bus route in Tel Aviv that uses wireless charging technology built into roads.

Israel-based e-mobility company ElectRoad has created wireless road technology that powers electric vehicles while they drive, eliminating the need for batteries and the necessity of stopping to charge. The company's first creation, a dynamic wireless power transfer (DWPT) system, shares energy between vehicles within a grid, removing the energy source from the vehicles, reducing the cost and weight of a battery in vehicles, and eliminating the worry of having enough charged power for a journey.

Wireless energy strips made from electromagnets and copper plates are integrated into special road lanes, and similar plates are installed on the underside of vehicles. A roadside power converter links to the charging beds carved into the road. Vehicles integrated with the sustainable technology can also drive in normal road lanes for up to 5km.

The company’s aim is to eliminate dependency on oil, and is currently targeting public transportation within cities as its main market. The Israeli government is collaborating with ElectRoad to install a public bus route in its capital Tel Aviv, which is to be trialled this year. The technology will reduce CO2 emissions without comprising the fleet’s service, and will also curb a rise in operating costs.

Making transport as environmentally friendly as possible is an on-going challenge that businesses are keen to tackle, with recently examples including architects in Singapore creating a solar powered...
bus stop with digital information screens and Wi-Fi, and a UK supermarket fuelling delivery trucks with food waste. What else can companies tackle to create greener transport?