

Green ITS: towards electric mobility

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Abstract

The concept of sustainability and environmental impacts of the transportation system must be standardized for traffic participants, roads and infrastructure from planning to operation. With consideration of the road transport accounting for 75% of the world's total carbon dioxide emissions from fossil fuel combustion. There is a continuous growth of the world population around 1.2% per year, concentrating on large urban nuclei. In this context tries answer this next question. What should we conduct to balance the energy saving and the demand of mobility?. And the same time reduces CO2 emission. It is necessary to give a good management, intelligent, sustainable and with the possibility of acting in real time that reduces CO2 emissions. The green intelligent transport system is the way to give solutions. Focusing on transport by road, the proposal is based on increasing the use of transport that uses renewable fuels. New energy vehicle technology and applications are important topic in the green ITS. The fundamental objective is to promote the use of electric vehicles. Electric vehicles will be part of a sustainable mobility strategy in the future. The limitations of low autonomy and slow recharge time have already been overcome. Electric vehicles due to their connectivity, design and configuration are easier to integrate ITS applications. Currently, the only vehicles whose emission of CO2 is 0% during movement are electric vehicles and hydrogen vehicles. Finally it is important to consider that the energy that recharges the vehicles comes from a renewable source.

Bio

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