

# GREEN STREETS

The Parliament Magazine's  
**REGIONAL**  
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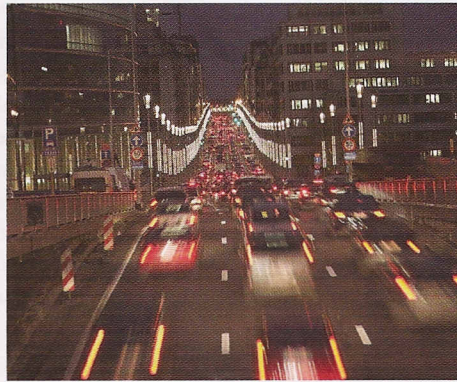


THE CHALLENGE OF SUSTAINABLE  
TRANSPORT TO, FROM AND WITHIN CITIES  
2 DAY CONFERENCE, 7-8 SEPTEMBER 2009  
COMMITTEE OF THE REGIONS, BRUSSELS



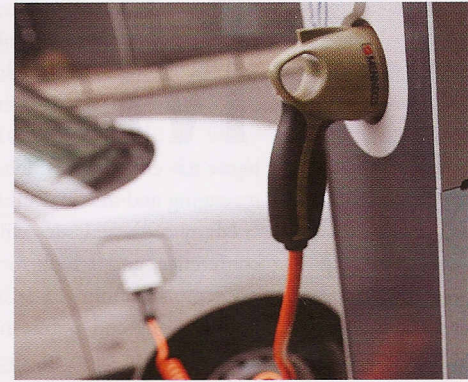
## 30 From the ground up

Setting the tone for the green theme of the conference on sustainable urban development, Erik van Merrienboer introduces his region's ideas for sustainable transport



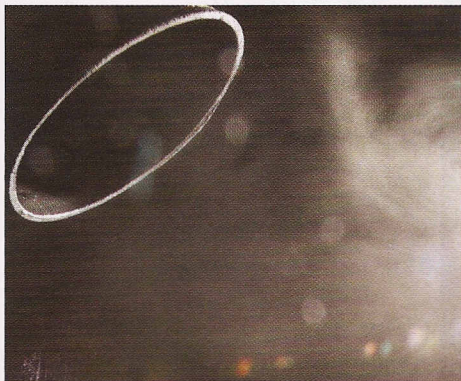
## 34 Going urban

With urbanisation on the increase, Paul Bevan says addressing the mobility of Europe's cities is of major strategic importance



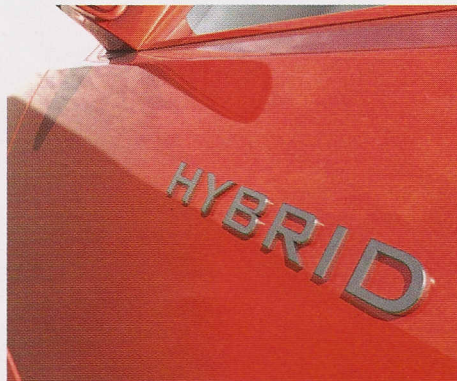
## 36 Electrified thinking

Giles Chichester, a member of the parliament's industry, energy and research committee, will be discussing cars in the sustainable city at Green Streets. He talked to Francesca Ross about what it really means to be sustainable



## 40 A hard road to travel

More political will is needed if Europe is to set tough environmental standards in transport, says Oliver Mietzsch



## 41 What's the alternative?

There are a range of alternatives to traditional fuels and the EU must strive to strike the right balance, but there will be no magic cure, says Jeffrey Seisler



## 44 Green streets programme

Details of the key debates and speeches at Green Streets

HYBRID

# What's the alternative?

There are a range of alternatives to traditional fuels and the EU must strive to strike the right balance, but there will be no magic cure, says **Jeffrey Seisler**

**T**he motivations for a European policy focused on clean alternative transportation fuels – and cleaner traditional fuels – have been based on overriding concerns about energy security, environmental protection, climate change mitigation, and energy efficiency. The EU wants to rely less on imported petroleum and more on sustainable, renewable transportation fuels. Increasingly strict emissions regulations and other policies are driving vehicle exhaust pollution down. Concerns about global warming have resulted in CO<sub>2</sub> being added to the list of regulated emissions.

The portfolio of non-petroleum alternative fuels (or 'energy carriers') has been more-or-less identified as first, liquid biofuels such as ethanol and biodiesel. Second, gaseous fuels including hydrogen and natural gas (fossil gas compressed, liquefied natural gas and biogas upgraded to biomethane) and liquefied petroleum gas (known as LPG).

The other option is electricity which may be used in hybrid vehicles via various technical strategies and 'backup' fuels (often petrol) or 'pure electric' plug-ins otherwise reliant on battery energy storage.

Policymakers (and the public) must, by now, realise there is no 'silver bullet' technology or fuel panacea. Each has its positives and challenges. All the vehicle technologies are more expensive than their petrol-based counterparts and all

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suffer from concerns about fuel storage (and, thus, vehicle range). All need to modify or develop a supporting fuelling infrastructure. Only LPG and natural gas are cheaper than petroleum.

The key question is: can the EU develop a balanced, sustainable, and effective fuels policy (with measurable results) that fulfils the objectives of energy security and commitment to environmental protection?

Since the early 1980s alternative fuel 'favourites' have changed significantly as policymakers and technologists grapple to find the 'silver bullet'. The 1980s saw intense excitement and heavy funding for electric battery vehicles. The panacea of fuel cells running on hydrogen made from renewable electricity, emitting only water was the focus of unprecedented funding from the EU, US and Japan throughout the 1990s and, though now more tempered, remains popular for extensive government funding. Hybrid vehicles are gaining popularity at the turn of the 21st century, even though before the initial market success of the Toyota Prius, most car manufacturers viewed them as the 'three 2s': two drive-trains; too complicated; too expensive.

Renewable-based liquid biofuels – ethanol and biodiesel – became all the rage with support from the farm industry to produce fuel additives to petroleum. Though liquids are more compatible with status-quo petroleum fuels than gaseous

fuels or electricity, questions about 'sustainability' (such as effects on the food chain balance, impact on land use, supply potential, economics) may reduce the long term financial subsidies and lower targets to replace petrol.

LPG, natural gas and now renewable bio-methane continue to make steady in-roads in the global transport sector, but historically have suffered in Europe from a lack of funding and widespread EU-level political support, despite their fit with energy security and environmental policy objectives.

Once the new parliament and commission gain momentum there are new energy and environment political initiatives that provide an opportunity to achieve greater balance for European alternative fuels. These include, but are not limited to: a second energy strategy (building upon the energy and climate package); an energy efficiency directive that likely will include a transportation component; continued development of an EU transport greenhouse gas strategy to 2050; fuel tax initiatives; a new bio-waste directive; and a sustainable cities framework.

In politics the alternative fuel stakeholders need to be partners to ensure that effective and well-balanced policies are created. Well constructed incentives should provide good opportunities for all the alternatives. Ultimately, however, the private and public sector consumers will decide which fuel alternative will be best for them. ★



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