

EUROPEAN TRANSPORT POLICIES TO 2020 & BEYOND

6th June 2006

World Gas Conference

Strategic Panel 2: NGVs: The Road Ahead?



Presented on behalf of

Jorgen Henningsen, Adviser to the Director
General, DG Tren

THREE TOPICS TO BE DISCUSSED FOR NGVs

- **Policy formulation**
- **Assessment advantages**
- **What can be done for the future?**

POLITICAL BACKGROUND TO ALTERNATIVE FUELS ACTIVITIES

- *Green Paper on Energy Security of Supply* from 2002 with the ambitious target to replace 20% of the oil products in the transport sector by 2020
- 2001 *Communication on Alternative Motor Fuels* that indicated replacement of petroleum fuels with 5% hydrogen, 7-8% biofuels and 10% natural gas by 2020
- *Directive on the Promotion of Use of Biofuels and other Renewable Fuels for Transport*. Directive 2003/30/EC. 8 May 2003
- A more solid justification for natural gas and hydrogen during the work of the *Contact Group*, established in 2002 and reporting on *Market Development of Alternative Fuels* in December 2003
- *Green Paper on Energy Policy* March 2006

EUROPEAN ALTERNATIVE FUELS POLICY

% Fuel Replacement, Transport Sector, 15 EU Countries by 2020

() = Optimistic

Options with potential over the next 20 years

Only three options appear to have a volume potential of more than 5% fuel consumption. If **active policy** is decided to promote them, their **optimistic** development scenario is (% fuel consumption):

	Biofuels	Natural gas	Hydrogen	Total
2005	2			2
2010	6	2		8
2015	(7)	5	2	14
2020	(8)	10	2(5)	(23)

Alternative Fuels Contact Group. *Market Development of Alternative Fuels.* December 2003

- Natural gas is the *only* alternative fuel with potential for significant market share above 5% by 2020 in terms of economics and mature market scenario
- Broad market acceptance possible with tax & excise duty incentives
- Mature technology available but product diversity & services need improvement
- **Main driving force** for the large-scale introduction of natural gas as a motor fuel is concern for the **security of supply**

GREEN PAPER ON ENERGY POLICY MARCH 2006: SIX THEMES

- 1. *Proper implementation of the internal market for electricity and gas: diversity of sources***
- 2. *Security of Supply: transparency in ability to deliver fuel and maintain gas & oil supply***
- 3. *Energy mix: nuclear important but EU doesn't want to dictate to Member States***
- 4. *Climate Change: A more elaborate theme that address efficiency, energy savings and renewable resources. Biofuels seem to have caught a relatively higher attention than alternative fuels in general.***

GREEN PAPER ON ENERGY POLICY

MARCH 2006: SIX THEMES

- 5. *Technology has to be pushed:*** In US it's part of the policy; in Europe it is the *basis* for policy to meet future challenges ahead
- 6. *A coordinated foreign energy policy:*** How can the EU be more of a coordinated player (not necessarily harmonized) but be stronger in a number of relationships in the Middle East and Russia?

WHAT'S *NOT* IN THE GREEN PAPER ON ENERGY POLICY?

- **Diversification of Energy:**
 - Oil is 35% of EU mix
 - Gas is 25% of the EU mix and will go up
 - 15-20% nuclear but could go down and unbalance the mix
 - Renewables targeted at 12% to 2010...more realistically 7-8%
- **Diversity related to electricity sector where the risk is greatest**
- **Access to energy**
 - 25% of EU gas from Russia; security of supply not helped by Gazprom actions but, EU will remain Russia's most important customer. Mutual dependency must be managed in a balanced way
 - The proven gas resources are 70 times annual production and for oil we are at 40 times annual production, translated to about 30 years additional supply of gas. But it will be harder to replace oil than natural gas.

ADVANTAGES: WHY NGVs?

- **Natural gas as a motor fuel can reduce CO₂, and help car industry meet their voluntary agreement 140 g/km by 2008**
- **NGVs can pay off after 15,000 km driving.**
- **Natural gas resources are expected to last 30 years longer than oil and can provide much needed fuel diversification.**

WHY AREN'T THERE MORE NGVs ON THE ROAD TODAY?

- **Not sufficiently broad support from vehicle manufacturers which, on average seems luke warm.**
- **Even though the fuelling infrastructure is growing in some countries, broad support from the natural gas suppliers on a European scale also seems to be somewhat lacking.**

WHAT CAN BE DONE FOR THE FUTURE?

- **Take advantage of the Green Paper on Energy Policy**
- **Focus on the difference in natural gas prices and oil prices**
- **The use of natural gas in the transport sector has to be highlighted**
- **Focus on the annex to the Green Paper where specific policies are discussed**

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