Alternative Fuels Infrastructure

- The European Commission has announced an ambitious package of measures aimed at setting out common standards - design and use - for the build-up of alternative fuel stations across Europe.
- The Clean Power for Transport Package consists of a Communication on a European alternative fuels strategy which would result in €10 billion of alternative infrastructure investment.
- Creating an expensive infrastructure – a potential ‘white elephant’ – makes no sense at a time of economic recession.
- Decarbonisation of transport fuels should be based on practicable and achievable targets which will allow alternative fuels to grow progressively and find their own place in the market on a technology neutral basis.

Background

The European Commission announced on 24th January 2013 an ambitious package of measures aimed at setting out common standards - design and use - for the build-up of alternative fuel stations across Europe by 2020. The Proposal for an ‘Alternative Fuels Infrastructure’ Directive proposes binding targets on Member States for a minimum level of infrastructure for clean fuels such as electricity, hydrogen and natural gas, as well as EU-wide standards for equipment needed.

In brief, the measures proposed are for mandatory targets for electric charging stations and refuelling stations for hydrogen, liquefied natural gas (LNG) and compressed natural gas (CNG), as follows:

- **In the UK, 1.2 million charging points for electric vehicles to be put in place by 31st December 2020, of which 122,000 shall be publically accessible.**
- **Hydrogen refueling points to be available points at distances not exceeding 300km to allow the circulation of hydrogen vehicles within the entire national territory by 31st December 2020.**
- **CNG refueling to be available every 150km by 2020, while LNG should be available every 400km along Trans-European Core Network priority routes. LNG should also be available for ships in all 144 main maritime and inland ports of the EU by 2025.**

The proposal also specifies in Annex III that Petrol and Diesel shall meet the EN228 and EN 590 respectively.

The Commission’s estimated investment costs under the policy options provided by the impact assessment accompanying the Proposal range from €5.1 billion to €10.6 billion. The preferred policy option for the adoption of the proposal would result in an estimated investment cost of €10.1 billion. This states that ‘the EU will set out requirements for alternative fuels infrastructure for Member States. It will also set out basic criteria for minimum infrastructure coverage, together with binding targets for the most mature fuel technologies (electricity, and LNG for waterborne transport). For hydrogen and natural gas (LNG and CNG) for road transport, the targets would be indicative’.

The Proposal does not clearly set out how Member States may implement the policy in practice or the cost impact on both industry and consumers for each EU Member State and the EU as a whole. Ideally, the Proposal envisages Member States to mandate a particular sector - within each of their supply chains - to deliver the policy.

Impact

UK fuels’ marketing is a high volume/low margin business. Tough market conditions, coupled with a difficult economic climate, high competition and ever more stringent legislation, have already hastened the closure of many filling stations around the UK. Over
the last sixteen years, the number of filling stations in the UK has reduced dramatically from over 17,000 in 1992 to 8,608 at the end of 2012. Recently, around 420 filling stations on average have been closing each year and several oil majors have exited the retail market altogether. Indeed, 59% of all retail outlets in the UK are owned by independent retailers. Furthermore, the distribution of road transport fuels has been part of recent structural changes in the UK’s downstream sector, with delivery of fuel to service stations and commercial customers moving from oil company fleets to provision by specialist logistics companies, such as DHL, Hoyer, Suckling, Suttons, TDG, Turners and Wincanton.

The fragmentation of the supply and retail sector would add a great level of complexity in the identification the ‘correct’ sector to mandate. Indeed, no suggestion is given to the working practicalities of coordinating obligations across an extremely fragmented supply chain - petrol filling stations offer the only likely location for LNG, CNG and Hydrogen refuelling points - and costly investment obligations.

Given the diverse ownership of the service station and fuel supply network, an adequate approach that would ensure geographical representation of refuelling points would also be particularly problematic.

An infrastructure cost burden imposed on the transport fuel supply chain, with no guarantee of suitably adapted or new technology vehicles providing demand pull nor returns on investment, would prove extremely burdensome in an already squeezed supply and retail market, unless safety nets were to be put in place by Government. The proposal may inadvertently lead to increased market exit and reconsideration of viability of fuel retailing, particularly for those filling stations already facing increasing challenges of a tough economic climate, high overheads and low volumes of fuels sold.

Previous artificially imposed infrastructure projects do not have a good track record. The UK’s LPG initiative resulted in an estimated £150 million sunk-cost for retailers who voluntarily invested in equipment on the assumption that LPG’s popularity would grow via Government subsidies. In addition, the Government, on behalf of the taxpayer, invested £150 million in grants and duty incentives but brought the programme to a close as the environmental benefits of LPG powered vehicles versus traditional road fuels became less apparent, due to fuel and vehicle technology improvements. Thus, the policy resulted in unhappy consumers who had paid for converting their vehicles and service station owners who invested in storage and refuelling equipment.

The Alternative Fuels Infrastructure proposal’s impact assessment also fails to take into account the risk undertaken by Member States in creating costly infrastructures that may become obsolete if vehicle technologies do not match infrastructure.

The Commission’s paper states that the implementation of a chosen policy option can be carried out through a variety of measures, not necessarily involving public spending. This could result in the ~€10 billion investment cost to be inevitably be passed down to industry and the consumer. Also, UKPIA is concerned that the figure does not represent a total investment cost and is in fact misleading. For example, the cost estimate does not take into account indirect costs which would include the upgrading of electricity grids, import and storage facilities for LNG, and production and storage for H2, to name but a few.

Conclusion

UKPIA urges HMG not to adopt a policy proposal that carries an unknown monetary cost on its industries and consumers during what are already difficult economic circumstances. The downstream industry is already under severe pressure to balance inadequate margins with ever more stringent EU and UK legislative costs. The proposed Directive is particularly alarming especially under today’s economic climate, when consumers and fuel retailers are seeking to minimise their costs. Decarbonisation of transport should be based on practicable and achievable targets which will allow alternative fuels to grow progressively and find their own place in the market on a technology neutral basis.

Further, the proposal should not make any reference to the fuels standards, EN 228 and EN590, since fuel quality is already clearly defined in the Fuels Quality Directive.

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