

## Clean & Efficient Vehicles Directive: An Important Stimulant for European AFV Markets

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Amid the flurry of six directives that comprised the European Energy and Climate Package legislation in the last quarter of 2008 there was one additional policy initiative that was finalized in October 2008 before 'The Package,' and that could have the greatest impact on the growth of alternative fuel vehicles: the *Directive Promoting Clean and Energy Efficient Road Transport Vehicles*. For the first time energy consumption, CO<sub>2</sub> and pollutant emissions must be considered as mandatory award criteria for public procurement of vehicles. As a result, not only the price of a vehicle, but also the impact it creates during its lifetime for the environment must be reflected in the purchase decision.

This Directive requires governments in the European Union – national, regional, and municipalities -- “to take into account lifetime energy and environmental impacts, including energy consumption and emissions of CO<sub>2</sub> and of certain pollutants, when purchasing road transport vehicles with the aim of promoting and stimulating the market for clean and energy efficient vehicles and to improve the contribution of the transport sector to the environment, climate and energy policies of the European Union.” Furthermore the Directive “shall not prevent contracting authorities and contracting entities from giving preference to alternative fuels, for example hydrogen, Liquefied Petroleum Gas (LPG), Compressed Natural Gas (CNG) and biofuels, provided the lifetime energy and environmental impacts are taken into account. The Directive applies to passenger cars, light duty commercial vehicles, buses, coaches and trucks. It exempts specialty use vehicles for which alternative fuels might not apply or be available. It also applies to vehicles operated by private entities on behalf of or leased to governments. The intention is to stimulate and improve the market for alternative fuel vehicles by building a *critical mass* for original equipment manufactured vehicles as well as retrofit vehicles and replacement engines, which also are allowed under the new mandate.

If member states follow through on the mandate it should have a significant impact on building demand for alternative fuelled vehicles. Each year governments in the EU-25 purchase 110,000 passenger cars; 110,000 light duty commercial vehicles; 35,000 heavy duty vehicles; and 17,000 buses. It is assumed, however, that this Directive will not lead to the full replacement of gasoline and diesel vehicles. But it certainly puts alternative fuels squarely on the agenda of national and local governments on a European scale. Fuelling station considerations are not part of the Directive.

Two practical considerations of the methodology arise. The first is that fuel prices are difficult to quantify due to price volatility and sustainability into the future years of vehicle ownership. Second, because well-to-wheel factors of the 'cleaner' vehicles are not part of the consideration criteria (which would have been very difficult to achieve), the methodology tends to favor electric vehicles, which will have lower CO<sub>2</sub> and other emissions at their *point of use* compared to internal combustion engine vehicles. On the other hand, the guidelines provide enough flexibility for government procurement officers to enable them to make purchase

decisions based upon the vehicle application(s) and the fuel they will consume. The mandate stipulates that purchase decisions must *take into account* environmental considerations, fuel efficiency, and life-time cost but there is no requirement to rank vehicles competitively to select a 'best' vehicle fulfilling these criteria.

The European Commission will post on a new website a prescribed methodology and user-friendly tool to make the calculations and comparisons of fuels on an energy equivalent basis. The harmonized methodology is designed to 'monetize' the lifetime costs for energy consumption, CO<sub>2</sub> and pollutant emissions (NO<sub>x</sub>, particulates, and non-methane hydrocarbons). Additional pollutants can be added if so required by the government authority. The methodology enables a transparent comparison of vehicle investment costs with the costs linked to the operation of vehicles and the cost of the various emissions over its full life. The various parameters will be prescribed in tables provided by the Commission. After two years in force the Commission is required to re-evaluate the methodology to ensure that it is well-suited to the purpose of the legislation, so there will be latitude for adjustments if it is not working as intended.

This directive is scheduled to come into force in the first quarter of 2009. Member States must, at the latest, adopt their laws, regulations and administrative provisions necessary to comply with the Directive within 18 months from the date of entry into force of the Directive. Thereafter, government entities will be required every two years to report back to the Commission their progress in procuring clean and efficient vehicles.

In the interim, however, public authorities that wish to demonstrate their environmental leadership can anticipate the directive by applying the criteria earlier. Many cities have committed to reducing their carbon footprint and this new Directive is one very constructive way forward. Maybe the European Commission and European Parliament, both with their own vehicle fleets (including a handful of alternative fuel vehicles), should be among the first to step up and expand their fleet use of alternative fuels. After all, they wrote the Directive!

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