G A I N

Global Autogas Industry Network

GAIN Position on the European Commission's Proposed Strategy for Alternative Fuels for Road Transportation

About GAIN

GAIN members are comprised of top LP Gas industry executives from around the world. GAIN's mission is to lead actions aimed at promoting autogas to create a sustainable growth market for LP Gas as a motor fuel at the global level. GAIN forges and coordinates relationships with all industry stakeholders active in the autogas market to expand market growth, introduce new technologies, build infrastructure and seek harmonisation of existing regulations.

EU Alternative Fuels Strategy

Alternative, cleaner automative fuels have a key role to play in addressing worsening environmental problems caused by rising consumption of road transportation fuels. GAIN therefore supports the initiative taken by the European Commission in commencing the development of a coherent and comprehensive strategy for promoting alternative fuels at EU level. We believe that autogas (that is, LP Gas used as an automative fuel) has a key part to play in making any EU alternative fuels strategy become reality.

The Case for Autogas

Autogas has been rapidly establishing itself in many countries as one of the most important alternative fuels in helping governments and markets meet the serious challenges posed by worsening air pollution and climate change. With nearly 2 million autogas vehicles on the road in the EU, one of the main reasons for this is that it possesses inherent environmental benefits as well as practical and cost advantages. We therefore believe that tremendous scope exists for expanding the use of autogas as part of a least-cost strategy of limiting the environmental impact of road transport as well as assisting Europe in meeting its security of energy supply obligations. In response to the Commission's recent proposals *"on alternative fuels for road transportation and on a set of measures to promote the use of biofuels"*, GAIN would therefore like to take this opportunity to present the case for promoting autogas in any alternative fuels strategy agreed by the European Parliament and EU Governments.

Autogas enjoys concrete and proven environmental benefits

The case for autogas rests primarily on its local, regional and global environmental advantages. Air-borne emissions of the principal regulated noxious gases from autogas use are among the lowest of all automative fuels available today. Compared to gasoline, autogas yields 50% less carbon monoxide, 40% less hydrocarbons, 35% less nitrous oxide (NOx) and 50% less ozone forming potential. The promotion and use of autogas is therefore consistent with the Commission's Communication which states that "it must be required that alternatives permit a continued reduction in emission of 'conventional' air pollutants from the vehicles".

The environmental advantages of autogas over conventional and other alternative fuels are even greater with respect to unregulated emissions, including air toxics. Autogas emissions of benzene and butadiene are particularly low compared with gasoline and diesel. In comparison with CNG, methanol and ethanol emissions of acetaldehyde and formaldehyde are extremely low.[1]

[1] Source: Argonne National Laboratory Center for Transportation Research

Autogas also helps meet the aim of reducing greenhouse gas emissions as outlined in the Commission Communication. Autogas (both field and refinery LP Gas) produces on average 24% less CO2 compared to gasoline, based on the full life cycle analysis not just of tail pipe emissions, but also the energy used and related emissions in the production and supply of the fuel.[2] The environmental benefits of autogas are therefore not only apparent in its use but also during its production and distribution.

Finally, an added environmental benefit is that in the event of fuel spill, autogas quickly dissipates into the air. Therefore, in contrast to gasoline and diesel, there is never a risk of ground or water contamination. Moreover, autogas vehicles are significantly less noisy than diesel powered light and heavy duty vehicles.

In all, autogas therefore presents a real and immediately available solution to most of the environmental problems associated with road transportation fuel. GAIN therefore strongly believes that autogas' environmental benefits should be carefully taken into account in any future agreed EU strategy on alternative fuels for road transportation.

Autogas is readily available and is safe

Autogas is made up predominantly of propane and butane and generally ranges from a 30% to 99% propane. It is derived either as a product from crude oil refining or from natural gas or oil processing. There is an abundant supply of autogas from a diversity of sources around the world. In addition to proven reserves in oil and gas fields, the flexibility of modern refining processes offers considerable potential for expanding supply to meet demand from the transport sector. Therefore, the fact that approximately 60% of autogas originates from natural gas production and that autogas demand in Europe can be met by supply within Europe means that autogas can help meet Europe's aim of improving security of energy supply. Promoting autogas can therefore help ensure the availability of a diverse energy mix and reduce Europe's dependency on oil imports from Middle East OPEC members.

Indeed, autogas has already been helping Europe meet its energy demands from road transportation for many years. Autogas has already established itself in many countries – for example, Italy (1.2 million vehicles), Netherlands (325, 000 vehicles), France (180, 000 vehicles), UK (18, 000 vehicles) and Belgium (80, 000 vehicles) - as a leading alternative fuel. Market penetration in Europe of autogas is therefore significant but could be better assisted via a European wide alternative fuels strategy that promotes autogas. As with all alternative fuels, autogas faces several hurdles in penetrating automotive fuel markets and competing against gasoline and diesel. The principal market barriers include the need to compensate for the initial cost of converting vehicles and installing distribution infrastructure as well as the need to establish a network of refuelling sites across Europe.

Autogas is also safe. The safety record of autogas use in practice is at least as good if not better than gasoline or diesel. A risk assessment study carried out be TNO, the Dutch research institute, in 1998 concluded that the safety of modern autogas vehicles was in fact marginally better than for gasoline vehicles. Other recent studies by the Belgian research organisation, DNV, have demonstrated that the risk of tank rupture is higher for gasoline than for autogas.

In all, autogas therefore presents EU governments and markets with a tried and tested option for developing a comprehensive and coherent alternative fuels strategy for the EU.

GAIN therefore agrees with the Commission's Communication that the penetration potential for any alternative fuel for the future has to be evaluated against such practical criteria. However, it would also like to bring to the attention of EU decision-makers that through co-operation with fuel providers, vehicle manufacturers and converters, many EU governments have already helped autogas to overcome these barriers and realise tangible environmental benefits. By promoting autogas more proactively in its alternative fuels strategy for the EU, EU decision-makers can also do the same.

[2] Source: International Energy Agency Automotive Fuels Information Service; M. Delucchi, Institute of Transportation Studies, University of California.

Autogas has economic advantages

From an economic perspective, autogas is the most cost-effective alternative to conventional automotive fuels taking account of pre-tax fuel costs as well as the cost of establishing the distribution infrastructure and converting vehicles. On an energy-content basis, the cost of bulk autogas delivered to service stations is roughly comparable to gasoline. Given abundant supplies, any rise in demand for autogas is not expected significantly to raise the cost of autogas.

Since autogas generally makes use of the existing service-station infrastructure for distribution of conventional fuels, additional costs for autogas dispensing are low relative to some other alternative fuels. For example, the cost of installing a standard tank, pump and metering equipment for autogas alongside existing gasoline and diesel facilities is typically about one third of the cost of installing dispensing facilities for CNG with the same capacity and performance.

Conclusions

GAIN believes that there are compelling environmental, operational, resource and economic reasons for including autogas in any EU strategy aimed at promoting alternative fuels for road transport. In supporting the Commission's efforts at developing an EU alternative fuels strategy, we strongly believe that autogas should be promoted for the reasons outlined above.

Policy and regulatory support is critical to the establishment of a sustainable alternative fuels market. Such support should utilise the full range of policy tools available in the policy toolbox and ensure that a coherent, consistent and stable long-term commitment to alternative fuels - as a central component of a market-based environmental policy - is designed and implemented. However, given the unpredictable dynamics of fuel and transportation technology development, public policy strategies should aim to establish a level playing field that gives every alternative fuel the opportunity to demonstrate its comparative benefits.

GAIN, as representative of the global autogas industry is fully committed to playing a proactive role in assisting EU policy-makers develop such a strategy for alternative fuels in Europe. Please visit our website at www.worldlpgas.com/gain, or contact:

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