Call for Evidence Response

22 February 2019

REA Bioenergy Strategy

Call for evidence

The Natural Gas Vehicle Network (NGV Network) is an established trade body which represents a diverse range of businesses involved in the production of gas-derived fuels and gas-powered vehicles, particularly heavy goods vehicles. Given that air pollution, and related preventable deaths, are at unacceptably high levels, the work of our members is vital in developing the next generation of cleaner transport fuels and vehicles.

The NGV Network is one of the six divisions of the Energy and Utilities Alliance (EUA). Energy and Utilities Alliance (EUA). A company limited by guarantee and registered in England. Company number: 10461234, VAT number: 254 3805 07, registered address: Camden House, 201 Warwick Road, Kenilworth, Warwickshire, CV8 1TH.

Part One: Bioenergy Technology Deployment in the UK

1. What do you believe to be the primary issues holding back further economic growth in the bioenergy sector? *Answers may relate to a specific technology or the bioenergy sector in general*

We believe that the primary issue restraining the bioenergy sector is uncertainty surrounding the Government's future approach in terms of subsidies and overall stances on the future energy system. Although the Renewable Transport Fuel Obligation (RTFO) incentivises the usage of biomethane in transport, the Department for Transport continues to state that biogases may be better used in heating, leaving its future role in transport in doubt. Furthermore, the Government is yet to decide on whether biogas has a long term future in Britain's energy system. These policy uncertainties are undoubtedly holding back investment in fuels that have significant potential to decarbonise our energy supplies whilst simultaneously tackling other challenges such as what to do with our waste.

The member companies of the NGV Network also believe that a lack of commitment to the infrastructure needed to unlock the environmental and economic potential of bioenergy is restricting the sector. Many other sectors benefit from significant Government investment, for example in grid and charging infrastructure for electric vehicles, whilst other pressing and unaddressed priorities, such as reducing emissions from heavy goods vehicles, are overlooked. This is echoed across many parts of the bioenergy sector and points to a need for the Government to put an increased emphasis on supporting infrastructure that will stimulate private sector investment in this sector which has so much potential.

2. What do you believe to be the primary benefits bioenergy brings to the future decarbonised energy system? *Answers may relate to a specific technology or the Bioenergy sector in general*

Bioenergy is beneficial to our energy system as it often replaces carbon-intense fuels with sustainably produced alternatives. In the case of biomethane in transport, waste feedstocks can be put to good use producing a fuel which delivers exactly the same benefits as its fossil

counterparts but also provides significant carbon dioxide emissions savings over diesel. Bioenergy also opens the door for fuels that make a positive contribution to our overall emissions reduction targets; this is particularly true for waste-derived fuels which, if paired with carbon capture and storage technologies in the future, could produce negative emissions.

In the case of transport, biogas is the only viable alternative to diesel for HGVs; proposals for all-electric models revolve around extremely costly and disruptive infrastructure upgrades and are not suitable for the drive cycles that the business models of freight operators and haulage firms are built on. Biogas offers them a way to significantly cut their CO_2 emissions, alongside a range of other pollutants being rightly targeted by the Government, whilst ensuring their fleets are still made up of vehicles that they can rely on and that are familiar to their drivers.

3. What are the key Government policy and regulatory changes you would like to see happen to enable further deployment of bioenergy technologies in the UK?

The Government have made some positive steps in terms of valuing the role of gas in transport, particularly the recent announcement that the fuel duty differential with diesel will be maintained until 2032. However, for the biogas and bioenergy sector as a whole to thrive, the Government needs to signal its ongoing support for its use across the energy system. Stating this fact will give the industry a great deal of much needed certainty but this also needs to be backed up by concrete policies that demonstrate where the Government believes bioenergy is best placed in the energy system.

The Department for Transport is currently agnostic in its approach to Euro 6 gas versus Euro 6 diesel which ignores the contribution that waste-derived biogases can make in a notoriously difficult to decarbonise sector. We believe that if the Department acknowledged the significant reductions in pollutants, such as nitrous oxides and particulate matter, as well as the large CO_2 savings that gas can deliver then this would enable biogas to be deployed more widely in the transport sector.

4. What do you believe to be the primary benefits bioenergy brings to the future decarbonised energy system? *Answers may relate to a specific technology or the Bioenergy sector in general*

As previously alluded to, bioenergy typically enables decarbonisation in various sectors without the need for huge investments in new infrastructure or the introduction of technologies that are unfamiliar to end users. Companies which have fully or partially switched their fleets to gas find that they are able to maintain their typical drive cycles and will often see a variety of benefits over diesel HGVs. If they were forced to use an electric alternative, for example, they would face higher upfront costs and would be restricted by the availability of charging or direct current infrastructure.

Bioenergy often offers the same performance as the fuels it replaces and avoids the need for consumers to completely change their behaviour and/or the type of product they are using. This is borne out in transport where the changes for fleet operators moving from diesel to biomethane are minimal.

Part Two: Ensuring Sustainability in the Bioenergy Sector

1. What needs to be done by a) Industry and b) Government/regulators to further sustainability requirements in relation to
    - *sourcing of feedstock*
    - *impact on domestic and international forests*
    - *full life cycle analysis of greenhouse gas emissions*
    - *direct and indirect land use change*
    - *air quality*

The industry needs to ensure that any carbon emissions resulting from production and transmission in the biogas supply chain are minimised so that the large emissions reducing potential of the fuel is not offset. The industry also needs to continue to participate in trials and demonstrations of the latest advancements in gas HGVs. We believe that the Government has a duty to examine the benefits for air quality of gas and to incentivise freight operators to make the switch from diesel, especially in areas with unacceptably high levels of air pollution; ensuring gas HGVs are exempt from any charges in newly created Clean Air Zones would be an easy first step.

2. What are the main environmental, economic and social benefits that bioenergy can deliver in the UK in line with the UN Sustainable Development Goals?

We believe that bioenergy can clearly deliver tangible benefits towards the Sustainable Development Goals of climate action and responsible production and consumption. Bioenergy has a major role to play in a future circular economy where dealing with waste and producing sustainable energy increasingly go hand-in-hand. We believe that the goal of securing affordable and clean energy would also be delivered by an enlarged bioenergy sector as alternatives could necessitate costly upgrades to electricity production and transmission infrastructure.

Part Three: Bioenergy in the Bioeconomy

1. What areas of innovation within bioenergy are you expecting to be commercially deliverable by 2030?

We have no comment to make.

2. Which regional areas of the UK are likely to benefit most from growth in the bioenergy sector?

In the context of transport, we believe that all regions of the UK could benefit from growth in the bioenergy sector. The benefits of gas in transport, such as significantly reduced air pollutants, would be of particular benefit to urban areas.

3. What Government policies could further support world-leading innovation and commercialisation of new bioenergy technologies in the UK?

The Government could offer increased support for innovative new sources of biogas which are currently less developed than conventional production processes such as anaerobic digestion but could increase the volume of biogas available for usage across the energy system. These new sources could include gasification of inorganic feedstocks that would otherwise not be used to produce energy.

4. How could Government and Industry increase the UK export potential of bioenergy technologies and expertise?

We have no comment to make.