



# **Inquiry on the Introduction of E10 in the UK**

**A report by the APPG for  
British Bioethanol – July 2019**

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## **FINAL REPORT**

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**Foreword by Nic Dakin MP  
Chair of the APPG for British  
Bioethanol**



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# KEY FINDINGS

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1. The UK economy will likely soon lose a vital and valuable £1 billion bioethanol industry. Without the swift introduction of E10 - by 2020 at the latest - the British Bioethanol Industry will continue to decline and likely disappear forever resulting in the loss of thousands of jobs.
2. Introducing E10 would assist in the UK achieving its GHG reduction targets – saving the equivalent emissions of taking 700,000 cars off the road – while also being delivered at a low carbon cost relative to other options.
3. Petrol fuel sales volumes in the UK are now *increasing*. This is due to the diminishing popularity of diesel cars (which themselves have a greater thermal efficiency than petrol engines, equating to a lower fuel consumption) as well as a trend for bigger, less fuel efficient petrol cars like SUVs. With widespread adoption of electric vehicles decades away, using increasing levels of biofuels in petrol to make the tens of millions of petrol cars on the roads greener and cleaner *must* be a top priority.
4. E10 (or a higher blend of bioethanol) could assist in addressing the UK’s serious air quality problems and the many health issues caused by high particulate levels, including strokes, heart disease, lung cancer and respiratory infections.
5. If the British Bioethanol Industry is lost, the UK is unlikely to attract further investment - including for the next generation of biofuels and enhanced animal feed co-products - which would deliver further economic and environmental benefits for the UK.
6. If the British Bioethanol Industry is lost, the UK will likely become dependent on increasingly scarce and less sustainable biofuel from abroad including Used Cooking Oil (UCO) from China .<sup>1</sup>
7. If the British Bioethanol Industry is lost, British farmers will need to purchase an increasing volume of animal feed from less sustainable sources, in particular soya based feed from regions in South America, further exacerbating the issue of deforestation. British farmers will also lose an important domestic market for surplus feed wheat.

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[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/800111/rtfo-year-11-report-3.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/800111/rtfo-year-11-report-3.pdf)















The Inquiry heard of other research which is currently being undertaken in other countries which could and arguably should be taking place in the UK, and which would further enhance the domestic bioethanol industry and the many economic and environmental benefits it would deliver. Glencore Agricultural UK highlighted in their written evidence how they had recently visited the PannoniaBio facility in Hungary to see the investments being made to bring the co-product of ethanol production, Distillers Dark Grain with Solubles (DDGS) improve its typical protein of approximately 30% to 40%.

**Low Carbon Vehicle Partnership (LowCVP)**

**Oral stakeholder evidence**

**Andy Eastlake, Managing Director**

***“One of the key benefits of clear, consistent and progressive policy is to give that confidence to the investment community to take risks with the next generation of innovative technology.” – 1st May 2019***







# ENVIRONMENT - AIR QUALITY

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The UK has a serious air quality problem which requires urgent attention. The World Health Organisation has estimated that 30 areas in the UK have fine-particle air pollution levels above 10 micrograms per cubic metre, with another 17 at that limit. The Mayor of London's office published data in 2018 which found the average roadside PM2.5 levels in the city reached 18 micrograms per cubic meter.<sup>3</sup> This type of fine-particle air pollution is serious public health issue, with particulates penetrating deep into the lungs and cardiovascular system, causing diseases including stroke, heart disease, lung cancer and respiratory infections.

**NNFCC – The Bioeconomy Consultants**

**Written stakeholder evidence**

***“Increased concentrations of fine particulate matter (PM<sub>2.5</sub>) in populated areas has serious implications for public health, with small particles having the greatest potential to penetrate deep into the respiratory system. The most susceptible members of the public are the old and the young; there are implications that increased exposure to air pollution can potentially impact the lung function of adolescent children.” – May 2019***

**The APPG was persuaded that the introduction of E10 could make a significant contribution in addressing the UK's serious air quality problem in the short to medium term (which poses a serious threat to public health) and to do this ahead of a possible mass move by motorists from petrol to electric vehicles over the longer term which itself would require a major infrastructure investment by the Government.**

**APPG comment**

The APPG also received evidence from the Urban Air Initiative that while policy makers should rightly consider and prioritise the reduction of particulate matter, the reduction of toxic emissions, including benzene, Polycyclic Aromatic Hydrocarbons (PAH's), Ultra-Fine Particulates (UFP's) should also be a priority. Encouragingly, the Group also heard that the UK would have a lower cost petrol that also makes significant reductions to multiple toxic related emissions from aromatics by introducing E10 while also controlling the aromatic content.

**Urban Air Initiative**

**Written stakeholder evidence**

***“UK annual petrol sales is 12 million tons or roughly 16.2 billion liters (4.2 billion gallons). Since ethanol has the highest octane blending value of any gasoline component, one should expect E10 could easily displace over 400 million gallons of toxic aromatics annually from the UK gasoline market.” – July 2019***

<sup>3</sup> <https://www.telegraph.co.uk/science/2018/08/03/uk-safe-pollution-threshold-should-halved-heart-experts-warn/>



*“Increased ratios of biodiesel blends could help reduce PM when compared to fossil-derived diesel, however this will not completely negate PM emissions – especially in older vehicles – and will still cause pollution.” – May 2019*



























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