

Questionnaire on Changes to Gas Quality – Impact on Industrial and Commercial Users

Response from the Energy Intensive Users Group

The Energy Intensive Users Group (EIUG) represents the UK's energy intensive industries (EIs) including manufacturers of steel, chemicals, fertilisers, paper, cement, lime, glass, ceramics, gypsum, glass, aluminium and industrial gases. These industries depend on access to secure, internationally competitive energy supplies to remain in business. They use large quantities of gas for industrial heat processes, auto generation and as a chemical feedstock.

We hope that a number of companies in these sectors will be able to respond to this survey, but are concerned that DNV GL's questionnaire may not have been seen by all relevant EI gas users. There is consequently a risk that the responses may not adequately reflect the full range of gas use in industry. EIUG, MEUC and various industrial trade associations have urged companies to respond individually, but it would have been helpful to have more time in which to do so. EIUG would therefore request that the 15th December deadline be extended into the New Year to enable a wider range of companies to respond.

EIUG has no objection to the principle of changing gas specifications to reflect changing gas sources or to facilitate hydrogen enrichment, so long as the likely impact on EIs is properly understood. Unfortunately industrial gas use is highly process specific – there is no 'typical' use of the sort more commonly found in the heating of commercial buildings or domestic premises. Even companies manufacturing apparently similar products may use gas very differently, operating furnaces or other equipment with different tolerances, temperature and safety requirements. It cannot therefore be assumed that changes to gas specifications will be benign for all companies within a sector, even where there is evidence this is unproblematic for most.

EIUG is not able to comment on these issues in technical detail. We hope companies will be able to provide such information directly, assuming they have the technical expertise to do so. It is certainly hard for trade associations to do so generically. Nevertheless, several EI sectors have identified a range of technical issues including (but not limited to) flame luminosity, heat transfer, burner location as well as practicality and cost of replacement that would need to be addressed in any technical or economic impact assessment.

EIUG notes that our contacts in EIs tend to be fuel buyers who do not necessarily have technical expertise in this area, and may need to obtain relevant information from the suppliers of furnaces, industrial boilers or gas turbines used by their company. It may be more efficient for IGEM to approach these suppliers directly, if this has not already been done.

EIUG would draw particular attention to the needs of gas feedstock users in the chemical industry, where quality concerns are again highly process specific and price impact is a critical sensitivity. To take one example, gas represents around 70% of the variable cost of manufacturing ammonia, so any cost impact here would be very significant. Blended hydrogen in the gas supply could be good for this industry, in principle, but this would partly depend on the stability of the hydrogen level and CV. It will be important to develop an understanding of the likely capital and operating cost impacts of gas quality changes for this and other chemical feedstock uses.

We trust that IGEM will reflect on these points and consider how the survey might best be extended and/or expanded to ensure it provides a sufficiently comprehensive overview of the likely impacts of potential changes to gas quality on the full range of EIs present in the UK.