

**BioGroup Ltd response to Ofgem: “Consultation on strategy for the next gas distribution price control – RIIO-GD1 Overview Paper”, dated 17.12.2010**

BioGroup Ltd is a developer and operator of anaerobic digestion (AD) projects, using organic waste from local areas to generate biomethane for gas-to-grid (BtG) projects. We have reviewed the Ofgem document titled “Consultation on strategy for the next gas distribution price control – RIIO-GD1 Overview Paper”, dated the 17th of December 2010. We summarise our position on this Paper below.

**1. Encouraged by positive stance towards bio-methane for grid**

*Ref: “1.5. Bio-methane could potentially play a significant role in meeting our carbon emission targets and network companies will need to meet the needs of this new customer group”*

*Ref: “2.18. We are committed to ensuring that GDNs facilitate the potential growth of bio-methane”*

We welcome Ofgem’s recognition of BtG as a potentially significant and emerging renewable source of energy. However, we stress the need for real and tangible regulatory support from Ofgem for this nascent sector if it to overcome the significant developmental challenges it faces. At present, there are only two BtG facilities in operation in the UK. The BtG sector is in its infancy, and unlike the UK's established power & utility sector which is dominated by the 'Big 6', it is predominantly small-to-medium businesses that are trying to emerge as players in this new area. As a result, such SMEs face unique and significant challenges trying to break into this market including notable challenges in securing project finance, high delivery costs, high R&D and design costs, an uncertain and evolving regulatory and public policy framework (eg. continued uncertainty as to the value of the proposed RHI, the shape of the ROI/ROC framework in the future and the existence and determination of a carbon floor price) and evolving waste sector framework (Defra Waste Review – ongoing). These factors have a crucial impact on the financial return and feasibility of a project and the bottom line of a SME company. Unless real and effective support is given to address these challenges, the growth of this sector and its ability to achieve its full renewable energy potential will be impeded.

**2. We believe, for 2 key reasons detailed below, that National Grid is best placed to be the installers of gas-to-grid connection, not the anaerobic digestion operators**

*Ref “4.19. We also propose to require GDNs to report the capacity of bio-methane connected. However, we do not propose any associated financial rewards or penalties associated with the connection of bio-methane, because the industry is in its infancy (there are currently only 2 bio-methane plants injecting into the grid in the UK), and because the companies have only limited control over the connection of bio-methane. The primary determinant will be the government’s decision on support available under the RHI”*

*Ref “4.27. We are also proposing the extension of existing standards to distributed gas, including bio-methane producers, as part of our package of measures to ensure this new category of customers receives a good service when seeking a connection”*

**(i) Financial argument**

BtG as a sector is in its infancy in the UK. The capital investment of typical project with a capacity of processing 25,000 tonnes of waste per annum is in the range of £6-8m. The cost of equipment for gas injection (including gas quality monitoring, metering, pressure control, etc) would add approximately a further £1m to this investment cost, or just under 20%. For a project of half this scale, i.e. a 12,500 tonne processing plant with a capital cost of circa £3m-£4m, the grid injection cost is not reduced proportionately by the change in scale of the facility, and so would add approximately 30% to the cost of the investment.

The cost of self-financing the cost of grid injection by a SME project developer therefore has several consequences. Firstly, it becomes a significant proportion of the developer's CAPEX, and effectively reduces the attractiveness of BtG as an industry to invest in because it significantly affects the rate of return of a project, and will in most cases make such a project completely unviable.

The RHI cannot resolve this. In the first instance, the RHI is in the process of being curtailed. Secondly, it does not factor in such costs into the calculation of RHI levels in an adequate manner. In addition, the RHI does not provide the upfront capital required by a developer, which does not therefore assist in roll out of BtG projects.

The Coalition has set out a clear objective of maximising the growth of the BtG sector and enabling it to realise its full renewable energy potential - we believe that socialising the costs of the injection equipment is the only way in which this can be achieved.

## **(ii) Operational argument**

National Grid should maintain design control of all connection points into the gas network. This is because National Grid has an overall understanding of the design and quality assessment requirements of gas connection equipment. This also ties into the fact that National Grid has overall responsibility of ensuring that gas injected into the grid meets the quality specifications of the GSMR. Moreover, National Grid also has an overall understanding of other connections in the local and regional area.

On the other hand, the players in the BtG market are anaerobic digestion (AD) players - who are neither seeking to, nor are positioned to be experts in the technical aspects of Grid supply and transmission. Even assuming it was cost effective to do so, requiring AD companies to develop the in-house capability to be expert enough to design, source and install injection equipment will further add to the cost of grid injection and its impact on business viability and investment in the industry. We therefore believe that National Grid is far better placed to be the organisation responsible for the bio-methane to grid connection.

With this approach in mind, we consider the role of the regulator as key to ensuring a proper framework that encourages National Grid to seek appropriate design for BtG injection kit at more competitive pricing than the use of high-cost natural gas equipment.

## **3. The operational and financial model we propose**

We therefore would like to encourage Ofgem to consider the following model: we would like to see National Grid as the installer and operator of BtG connection equipment. We also see National Grid installing and operating such equipment on a socialised cost basis. We envisage a key role for Ofgem in ensuring appropriate gas to grid injection is used for biomethane, and downward pressure on the price of hardware exists (possibly by opening the area up to competition through sub-contracting). In this way, Ofgem can ensure consumer welfare is maximised, while cost structure makes the development of BtG projects viable for developers. There is also a key role in ensuring that specific equipment and protocols are quickly developed to ensure that BtG equipment is commensurate with the size and scale of BtG facilities and is not simply based on the transfer of existing equipment and protocols from large scale natural gas facilities – effectively ensuring that small developers and small scale facilities are not penalised by disproportionately bearing equipment costs when compared with large natural gas facilities. This is plainly wholly uncompetitive and clearly very damaging to a new industry.