

Greening the Gas Incentive Proposal

1. Introduction

The development of sustainable, renewable and low carbon sources of gas is key to meeting the Government's targets, and we consider that distributed gas has a major role to play in the future energy market in the UK. The development and injection of green gas will minimise costs to customers by utilising the existing gas infrastructure, while helping towards the transition to a low carbon economy. For Scotia Gas Networks, greening the gas is key to our long term strategy. As the Gas Transporters (GDNs) are so vital in developing this technology, we believe that an incentive for the networks is the best way to deliver distributed gas to the grid.

The injection of distributed gas into the network will reduce the carbon footprint of the gas industry and help the government to meet its renewable energy and climate change targets. GDNs have a vital role to play in facilitating the connection of new renewable gas supplies and we are working with the industry to bring down costs and to make the connection process easier.

Our gas distribution licence requires us to provide a connection to the distribution system where this is requested and the producer funds its development. Over and above this licence requirement, there is currently nothing to incentivise GDNs to assist green gas producers to deliver distributed gas onto the system. As the GDNs are central to facilitating the development of green gas injection, we feel that some kind of incentive is required in order to develop the market.

Only two green gas producers have been connected to the UK distribution system and we know of two that are currently being developed. It is clear that help is needed to encourage growth in this area. Distributed generation in electricity has seen a huge increase, with tens of thousands of generators connecting to the distribution system with solar photo voltaic or turbines for example but this would not have happened without regulatory change associated with the networks.

Feedback from our stakeholder engagement has helped to give us a good understanding of the issues facing green gas producers.

Ofgem's proposal to consider changing the connection boundary if or when a Unified Network Code modification request is proposed will help this emerging market, but only if the boundary is subsequently changed. However, it is clear to us that much more is needed to kick-start this emerging market.

An incentive to encourage GDNs to assist green gas producers in both promoting their products and then facilitating the whole process of getting connected to the system is essential if green gas is to become part of the transition to a low carbon economy.

2. Incentive Proposal

Our incentive package comprises two parts:

- Support GDNs in their work with producers to develop & promote an emerging market thus facilitating the connection of green gas; and
- Incentivise GDNs to manage the network to provide entry capacity.

Develop & promote green gas

In order to promote and kick start the generation of green gas we propose an incentive for the GDNs based on the number of green gas producers connected to the system through a one off payment of £100,000 for each connection. This payment is intended to cover the set up and lifetime operational & maintenance costs for the network extension.

The upfront payment of these costs will encourage GDNs to work with developers to convert these enquiries into network connections and deliver green gas onto the network. The more connections that are made, the more this will encourage developers to take this option and show that green gas is a viable product that has long term potential. We would aim to reduce the regulatory barriers and the costs of network entry, promote the upgrading of biogas to biomethane, encourage innovative ways to produce renewable energy, to develop the potential for injecting hydrogen into the system and to deliver a more effective use of these important resources.

In addition we would strongly advocate a move to a shallow or ultra-shallow connection policy. This will help to reduce the upfront costs to developers and help to provide the necessary stimulus to facilitate such connections. GDNs will need to provide a robust business case (including CBA) for each connection to prove viability.

Reducing carbon and creating capacity

Green gas reduces carbon emissions and based on our forecast for the number of connections in GD1 the potential for carbon saving is 2m tonnes. Based on the carbon value of £80 a tonne the cost of carbon saved is £160m.

Once the developer has completed their investment onto the network, GDNs will have to manage the network to enable the gas to flow, changing the way our network operates in order to allow gas to enter the network, this will use resources that could be focused elsewhere. This part of the incentive would fund the management of the network and provide resources to work with developers promoting the flow of green gas to customers.

Our proposal is that we should be incentivised during GD1 for every kWh (0.25p/kWh) of green gas delivered onto the network from embedded renewable sources.

3. Potential Impact

With our proposed incentive a GDN will receive for each connection:

£100,000 + 0.25 pence per kWh

Based on this proposal for the incentive, connecting one Biomethane plant similar to the proposed development at Poundbury (that produces 400scm/hr) would provide the GDN £185k in that year and £85k p.a. for the lifetime of the plant.

Using the same scenario but if the plant produced 700scm/hr, the GDN would receive £250k in that year and £150k p.a. for the lifetime of the plant.