

Gas Network Innovation Competition Full Submission
Supplementary Answer Form

Project: Commercial BioSNG Demonstration Plant

Tick if this answer has been provided verbally: ☐

Project code	NGGDGN02/1	Question Number	5
Question date	25/8/2015	Answer date	27/8/2015
Submission section question relates to	3.1		
Topic			
Question	Have the project partners got a gauge on the confidence of private investors for this type of long term investment even after this small scale commercial plant is completed? How will that confidence be assured? By validating the current cost model (currently predict a loss)?		
Notes on question			
Answer	<p>APP and PEL have engaged with a large range of private investors to discuss energy from waste projects and have developed a good understanding of funders' requirements and perception of risk. In theory, funders do not take a binary approach in assessing projects. Instead, they take an holistic approach that considers the following factors:</p> <ul style="list-style-type: none">• Feedstock security of supply and price.• Certainty of off-take arrangements.• Guarantees on plant performance, cost and delivery.• Guarantees of plant availability in operation.• Experience of developers.• Availability of consents. <p>Discussions with institutions such as Deutsche Bank, Macquarie and Credit Suisse has shown that funders will not consider project that do not have long term waste and gas off-take arrangements, a turn-key lump sum EPC contract and a reputable O & M contractor. Most types of funders (examples including Green Investment Bank, Suez and Linde) will refuse to consider projects that do not have reference facilities operating on a full-time basis in a commercial environment.</p>		

	<p>The Demonstration Project will deliver the required reference facility which will provide EPC and O & M contractors with the evidence they require to provide appropriate guarantees to projects. In addition, it will validate the technical and economic models of the process increasing confidence in the expected performance of larger facilities.</p> <p>The scale of the Project has been selected to ensure that the process flow matches a full-scale facility and that the move to a full scale facility only requires an increase in size of equipment rather than change in design or functionality. This means that the Commercial Demonstrator provides direct evidence that a full-scale facility will operate reliably at the expected performance.</p> <p>Evidence that the commercial demonstration plant will provide sufficient comfort for investors is provided by the experience of other technologies. Similarly sized commercial waste to energy demonstration facilities developed by Energos, AlterNRG, Enerkem and Nextera have all led to the funding and delivery of full-scale facilities.</p>
Attachments	