REA Response:
Biomethane from Waste – Quality Protocol call for evidence

The Association for Renewable Energy and Clean Technology (the REA) is a not-for-profit trade association, representing British renewable energy producers and clean technology and promoting the use of renewable energy in the UK. It has around 550 corporate members, making it the largest renewable energy trade association in the UK.
The REA's Organics and its Green Gas forum together comprise 422 members, numerous of which operate commercial composting facilities, commercial scale anaerobic digestion (AD) facilities and recycle organics to land. More info available at www.r-e-a.net

REA welcome the opportunity to respond to the Biomethane Quality Protocol call for evidence.

1. Issues of clarity - Is the text of the QP clear?
    - Yes

2. Any abuse of the QP that you are aware of - Please specify what the abuse is and if possible provide evidence.
    - Not that we are aware of.

3. Are there any aspects of the QP that you find onerous to meet and why?
    - We have not had any feedback from members regarding aspects of the QP they find too onerous.

4. Are there any aspects of the QPs that you find too lenient and why?
    - No. The QP covers the aspects that it needs to. The gas network operators have very strict controls for gas injection and the Health and Safety Executive control the Gas safety management regulations (GSMR).

5. As it stands, do you think that even if the QP is followed it nevertheless creates a risk to the environment and/or human health, if so why? E.g., gas management and compliance with The Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR). Can you provide any evidence?
    - The QP does not create a risk to the environment or human health. There are other pieces of legislation such as GSMR and DSEAR that are in place that sites must comply with regardless if they are also complying with the QP.

6. Are there developing or new waste processing technologies that could be included in the QP? These could be newly emerging technologies which have developed after the QP was published, or pre-existing technologies that were not included in the original QP design. Please provide evidence of their efficacy and end market.

- None that we are aware of.

7. In relation to the QP are there any uses and/or new end product markets that have developed since original publication which could be added now?
    - The QP covers injection to grid and use in appliances including vehicles. We are not aware of any new end product markets that should be added.

8. In relation to the QP has there been any revision of or developments relating to the product standards set out in the QP relevant to the use(s)? Have there been any new product standards published since original publication of the QP which you believe should be included?
    - Not that we are aware of. As before the gas network operators have very strict controls for gas injection into the grid,

9. Are there any other relevant issues you wish to raise in relation to the QP?
    - None.

At this point no decision has been made as to whether we will continue or withdraw our support for this QP. We would like your input so we can take this into account when we make that decision.

REA support the retention of the QP and feel it plays an important role in the circular economy and facilitating the production of renewable gas.

As well as the responses to the above questions, we would appreciate your views on the QP specific issues previously raised by Environment Agency staff below. Any evidence you can provide to support your views would also be welcomed.

Biomethane from waste QP:

1. Do you think the remote injection of gas to the national gas transmission system at hub sites should be added to the Quality Protocol? If so, please give your reasoning.
    - We interpret this question as relating to situation where biogas is produced and upgraded at one site but injected to the gas grids at a different site. On the face of it, this appears to be covered by the existing QP as the input materials, processing and end use will be the same as if injection occurred at the site of production. The only significant difference in a hub model is the need for a compressor and upload stanchion for a trailer at the gas production/upgrading site. This would have implications for planning and permitting consents but not necessarily for the QP. The QP is clear that 'the gas grid includes the national gas transmission systems, local gas transmission systems and local gas distribution networks' (section 4.1.1)

2. Do you think measures requiring provision for increased gas storage at sites should be added to the Quality Protocol to prevent disposal at times of low demand? If so, please give your reasoning.

- No – if a site is injecting to network there is no need for storage. Additional storage is very expensive and should not be mandatory, it should be purely assessed on an individual site need. Digesters and other gas storage systems will provide some on-site storage anyway and there is unlikely to be a need for further storage. Gas is valuable so unlikely to be 'disposed' of, it is in the operators interest to do everything they can to ensure the gas is used. There are already controls in place in permits with regards to emissions, venting and flaring – restricting the emissions of gas.
- Given the costs of storage and the strong economic drivers to use/sell the biomethane, it is extremely unlikely that anyone would store biomethane indefinitely at a site – which would risk something that had otherwise achieved end of waste status under the QP reverting to being waste.

3. Are you aware of whether the Quality Protocol is currently being utilised or may be utilised in the future by the landfill sector? If so, please provide details.
    - We are not aware of any landfill operators who are currently using it, however there are technology providers who are hoping to see it deployed in the near future. This could include both injection into the grid and use in an appliance (primarily a vehicle) and therefore should not be excluded. The net zero targets require every opportunity for renewable energy to be exploited so we should not be closing off a sector that is currently covered by the QP.

4. Do you think the scope of the Quality Protocol should be altered to exclude biomethane arising from landfill sites? If so, does this raise additional considerations that would need to be considered as part of this review? If so, please provide details.
    - No, as above. Although we are not aware of sites using it for biomethane from landfill currently, we are aware of plans for this to happen in the future. As this sector is currently covered by the QP we do not anticipate the retention of this leading to additional considerations.

5. Within the scope of this review, we are examining Regulatory Position Statement 255 which relates to treating, storing, and using carbon dioxide from anaerobic digestion. Treating, storing, and using carbon dioxide from anaerobic digestion: RPS 255 - GOV.UK (www.gov.uk). Are you aware of whether this RPS is being used, and if so please provide evidence?
    - Yes we have had feedback from a member who is using this RPS at three of their AD sites. They have produced a total of 17,291 tonnes of CO2 at site 1, 2,821 tonnes at site 2 and 15,252 tonnes at site 3 since 2018.

6. The Environment Agency is considering withdrawing Regulatory Position Statement 255 and instead incorporating the provisions relating to carbon dioxide into the Biomethane Quality Protocol. Would you support this? Do you think a specification for carbon dioxide should be set as part of this?

- We support the inclusion of the provisions of RP255 within the QP as it will give more long-term certainty to operators. There is a timing issue that needs to be considered, the RPS covers the treatment, storage and use of CO_2 so the QP either needs to replicate this or if the QP will only cover the use, then time needs to be given to revisions to permits (standard rules and bespoke) to include the production and storage. There needs to be confirmation from the EA that RPS255 will not be withdrawn until new framework and the permit revisions are in place.
- There is no need to include a specification for CO_2 as there are already industry standards in place for both food and beverage grade CO_2 and industrial grade CO2. It would make more sense for the QP to refer to these industry specifications, similar to the current requirements of RPS255.