Biomethane and CO2

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Biomethane CO2 Background

- Anaerobic Digestion well established technology for producing renewable gas from organic feedstocks;
- This gas can be upgraded to biomethane and injected into the gas grid;
- Some upgrading technologies produce high purity CO2 as a by-product;
- The majority of plants do not capture this CO2, although interest is growing;

Biomethane in the UK

- UK has approximately 700 AD plants;
- About 120 of these upgrade to biomethane, although the majority do not capture CO2;
- Individual plants could produce from 8 to 25+ ktpa.
- The total readily capturable CO2 from existing UK biomethane plants in the region of 700ktpa;
- Interest in carbon capture building over 2021;
  - Initially for long term sequestration, more recently for usage purposes

GGSS

- Green Gas Support Scheme opened on 30 November
- The scheme ends on November 2025
- The scheme will support new AD plants that inject biomethane into the grid;
- Scheme is silent on CO2 capture, although it is likely that plants will be considering this in their initial design.

CO2 from AD - Summary

- Overall significant potential
- Clearest opportunity for biomethane plants with right technology
- Could cover substantial proportion of the UK’s usage demand
- New plants coming onstream could add further potential