

Support Options for Smaller On-site Biogas Plants

There is potential to increase biogas output based on a range of industrial and farming bio-residues that have not yet been fully accessed. After the demise of the RHI there is no support for smaller or off-grid biogas production. This is skewing the AD sector towards larger plants (including crop fed) rather than on-site biogas, on farms and food processing sites, treating wastes and process residues.

One of the main limitations of the Green Gas Support Scheme excludes smaller off-grid AD plants, is that it is encouraging the use of more purpose grown crops, at a time of heightened concerns about global grain supplies, re-igniting the food or fuel debate. Hopefully this omission can be addressed.

Exclusion from the GGSS for smaller scale or on-site biogas plants has curtailed recent investment in on-site biogas plants. BrewDog's on-site project is the last to qualify for the gas to grid RHI. Other off grid plants will meet the extended deadline. Given the need to curb rural emissions (inc. methane – post COP26), BEIS and DEFRA may need to review plans to boost rural and agri-food bio-energy.

There may be a number of ways that BEIS could explore to boost support for smaller and off-grid biogas plants, while also seeking to ensure good value for money for the taxpayer. These include:

- **Incentives:** the RHI and FIT have worked well but have also helped distort the biogas sector to larger plants. Also, the schemes have increasingly been distorted against smaller plants, under 1MWhr thermal output. Most on-site farm and factory plants will be under this level and hence unsuited to biomethane grid injection. Given the exclusion of off-grid plants from the GGSS, a case could be made for an incentive scheme for new sub 1MWth biogas plants.
- **Capital Grants:** it may be possible to work with existing grant schemes such as the industrial energy transformation fund (IETF) but based on experience with the Scottish SEITF, few AD plants are being funded. It is unclear whether any biogas projects have been submitted to or funded by IETF. There might be a case for a agri-food specific biogas / biomethane funding programme within the IETF or through the regional Net Zero Hubs (the Midlands Hub was a funder of the RASE report), that could support farm and agri-food bioenergy in their region.
- **Soft loans:** unlike AD developers, businesses (inc. farms) have other demands on capital for investment. Project ROI/payback is crucial - for some, over 20%. A cost-effective option may be to set up a 'fund' to provide soft loans (maybe with a 50% or £500k limit) to help co-fund bioenergy projects linked to agri-food decarbonisation. Perhaps this could be set up with a funder like NFU Mutual (for farms) or by working with the Net Zero hubs or WRAP. Once set up, if loans are limited to under 5 years, funds may be used for successive projects.
- **Innovation:** in the past, through bodies like WRAP, there have been funding competitions to support innovative projects (e.g. BV Dairy). This could be repeated but with a focus on use of biogas for rural heating projects or for vehicle fuel supply (i.e. rural diesel replacement). Incidentally, it is bizarre that agricultural vehicles are excluded from DTF funding activity for innovation on novel fuels to replace diesel in other off-road sectors like construction.
- **Levelling Up:** Is there an opportunity to assist businesses that want to invest in bioenergy under the levelling-up agenda? If funding was available under regional development policy for investment in decarbonisation for rural areas (to help low carbon technology adoption) this could be channelled through the Net Zero Hubs or local enterprise partnerships (LEPs) – to support plans to stimulate smaller scale rural and industrial decarbonisation projects.

If these ideas could be explored, as part of addressing future low carbon heat and fuel supplies in rural Britain, it will be possible to expand rural biogas supplies. In addition, existing rural AD plants could gradually switch from power supply to delivering off-grid biomethane for rural heating and the supply of clean fuel for agri-food product transport. This will facilitate early diesel replacement.