

Annual Environmental Report for Bryn Pica AD Plant for 2021
Permit No: EPR/SP3537VQ

This report covers the period from 1st January 2021 to 31st December 2021.

The site has one CHP engine: a 1,189KWe Jenbacher CHP. The engines emissions test was carried out in November 2021. All parameters were compliant and passed within the required limits.

Gas quality is measured as part of the daily monitoring checks carried out at the plant. The average methane content of the biogas during the reporting period (2021) was 60.3% and this indicates the process is working well and producing a good quality biogas for combustion through the CHP.

The engine ran for a total of 8,558 hours (97.6% availability) during the period. The site also has a standby boiler which is used as a back-up to the engine and to utilise any surplus biogas to supplement heating of the process. The surplus gas burner was utilised for 167 hours which equates to 1.91% of the total available operational hours for the year.

The site generated a total of 9837.7 MWh compared to 9760.4 MWh (2020); an improvement on total generation year on year.

The plant exported 9076.2 MWh compared to 8889.1 MWh (2020) with a parasitic load of 240.9 MWh used on site, equating to 2.45% of the total generation.

The total water usage at the facility was 2008m³; this was comprised of 205m³ from the main water supply and 1803 m³ of water which was harvested rainwater which was reused in the process.

Bryn Pica continues to maintain its PAS 110, ISO 14001, ISO 9001 and ISO 45001 standards. The site is certified to the Competence management scheme (CMS) V4 standard certification. Internal and external surveillance audits continue to be regularly carried out.