

Annual Environmental Report for Bryn Pica AD Plant for 2020
Permit No: EPR/SP3537VQ

This report covers the period from 1st January 2020 to 31st December 2020

The site has one CHP engine: a 1,189KWe Jenbacher CHP. The engines emissions test was carried out in October 2020. All parameters were compliant 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 (2020) was 62.2% 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 8,465 hours (96.4% 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 304 hours which equates to 3.46% of the total available operational hours for the year.

The site generated a total of 9670.4MWh compared to 8811.01 MWh (2019); which means site performed better in generation.

The plant exported 8889.1 MWh compared to 8121.2 MWh (2019) with a parasitic load of 216.6 MWh, used on site equating to 2.43% of the total generation

Rainwater is harvested and used within the process and site also has a mains water connection. The total water usage at the facility from the process bund (dirty) and storage bund (clean) for the period are 351m³ and 711.0m³ respectively while 455m³ is the volume of mains water for domestic usage on site.

Bryn Pica continues to maintain its PAS 110, ISO 14001, ISO 9001, migrated to ISO 45001 standards and Competence management scheme (CMS) V4 standard certification during year 2020; internal and external surveillance audits continue to be regularly carried out.