

Annual Environmental Report for Bryn Pica AD Plant for 2023
Permit No: EPR/SP3537VQ

This report covers the period from 1st January 2023 to 31st December 2023.

The site has one CHP engine: a 1,189KWe Jenbacher CHP. The engines emissions test was carried out in October 2023. 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 (2023) was 60.9% 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 8577 hours (97.9% availability) during the period (2023) compared to 7,618 hours in 2022. 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 126 hours which equates to 1% of the total available operational hours for the year.

The site generated a total of 10125.17MWh in the reporting period (2023) compared to 8801.1 MWh in 2022.

The plant exported 9374 MWh (2023) compared to 8083 MWh in 2022 with a parasitic load of 221.02 MWh used on site, equating to 2.18% of the total generation.

The total water usage at the facility was 1410m³; of this, 585m³ was from the main water supply. The remainder 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) V5 standard certification. Internal and external surveillance audits continue to be regularly carried out.