

Transport Fact Sheet

Traffic Impact Assessments have been carried out for the proposed green hydrogen production facility at Brynmenyn and solar farm at Bryncethin, with potential impacts during construction and operation being assessed and mitigation measures identified, where appropriate.

During construction

During the 21-month construction period for the green hydrogen facility at Brynmenyn, 20 HGV trips (10 inbound and 10 outbound) and 50 staff movements (25 inbound and 25 outbound) are anticipated each day.

Access to the site during construction will initially be via Chilcott Avenue, through a simple extension of the existing route, until the site access off Squire Drive is constructed. Once constructed, Squire Drive will be used to access the site.

During the 6-month construction phase for the solar farm at Bryncethin, 12 HGV trips (six inbound and six outbound) and 40 staff movements (20 inbound and 20 outbound) are anticipated each day.

For both sites, HGVs will avoid the peak times of 8am-9am and 4pm-6pm where possible to benefit the wider Bryncethin road network. All vehicles associated with the construction will have designated off-street parking within a construction compound.

A Construction Environmental Management Plan (CEMP) and a Construction Traffic Management Plan (CTMP) have been prepared for each site, which will be submitted as part of the planning application. Expected mitigation measures include phased deliveries to site, traffic marshalling, vehicle mud-wash facilities and backloading (delivery vehicles utilised to remove material from site).

Subject to planning permission being granted, a contractor will be appointed and a detailed construction programme submitted to the Council for approval.



During operation

Once the green hydrogen facility at Brynmenyn is operational, 56 large vehicle trips (28 inbound and 28 outbound) – comprising single decker buses, HGVs, and single chassis tube trailers - and 10 staff movements (5 inbound and 5 outbound) are anticipated each day.

This is not considered significant, especially as most of the large vehicle trips associated with this development will already be on the surrounding network; as potentially public buses would have been converted for green hydrogen fuel from the existing diesel fleet. The only 'new trips' will be associated with staff, the hydrogen tube trailers and few HGV movements. It should be noted that only up to four tube trailers are expected on site each day.

Access to the site is proposed from Squire Drive. A full swept path analysis, which calculates the space required by the vehicle body as well as the path travelled by each wheel during the turn, has been conducted. This confirms that Squire Drive is suitable for the vehicles associated with the development.

Onsite parking at the green hydrogen facility will be provided to meet the needs of staff and visitors. There are currently no proposals to amend the on street parking available on Squire Drive.

When the solar farm at Bryncethin is operational, occasional access will be required for maintenance, but this will be infrequent and will have negligible impact on traffic in the surrounding area.



Typical examples of vehicles/HGVs



Hygen is already delivering low-carbon hydrogen from its Tyseley Energy Park in Birmingham, using proven, real-world experience to support the energy transition. Backed by the HydraB Group, it operates across the full hydrogen value chain, from production to end use through partners such as Wrightbus and Ryze Power. With projects including the DESNZ-approved Bradford Low Carbon Hydrogen facility, Hygen aims to scale low-carbon hydrogen to support industry, transport, and the UK's 2050 net-zero goals.

You can view all the fact sheets, background information and plans for the project online by visiting:

www.hybont.co.uk

