



Global Centre of Rail Excellence

Q&A

General

What is the Global Centre of Rail Excellence?

- The Global Centre of Rail Excellence (GCRE) will be a site for world class rail research, testing and innovation. It will be a home for testing of new trains and all the products and technologies that go into making the railway work – everything from new track and signalling systems to new bridges, drones and communications systems.
- The core of the facility will include two, 7km electrified testing loops; a maintenance shed and rolling stock storage sidings. In time we will develop an on-site hotel; a technology park and a headquarters building.
- There is currently no facility like GCRE anywhere in the UK or Europe.

What are GCRE's aims?

- GCRE has four central missions:

- **Rebuild Local Prosperity:** GCRE will create long-term jobs and prosperity in a community impacted by more than four decades of de-industrialisation, rebuilding hope identity and pride for this and future generations.
- **Make Transport Better:** GCRE will become an internationally unique facility for innovation in rail and sustainable mobility supporting the development of stronger greener and more affordable transport systems right across the world.
- **Establish a Net Zero railway:** By building the U.K.'s first net zero railway powered from on-site renewables and largely constructed from reused or recycled materials, GCRE will break new ground in the development of more sustainable infrastructure.
- **Renew an amazing place:** GCRE will regenerate a former coalfield site and enhance biodiversity to help establish an attractive destination for the community and visitors in a way that links its history with its bright future.

What is GCRE Limited and who is it owned by?

- GCRE Limited is the company taking forward the Global Centre of Rail Excellence development and is currently 100% owned by the Welsh Government.

When will the site open?

- Once private investment is secured, the build phase for the first elements of GCRE (the two test tracks and the storage/maintenance facilities) will take three years.

When will construction begin?

- Construction will not begin until private investment has been secured. That process is taking longer than originally planned, but a decision on the GCRE rail project will be made later in 2026.

How much is this costing?

- GCRE is a £400m+ development. £70m has already been provided through public seed funding (£50m from Welsh Government and £20m from UK Government).
- GCRE is currently in the process of securing private investment for the remainder of the funding needed for the rail project. That process is taking longer than originally planned, but GCRE remain positive.
- Welsh Government [indicated in December 2025](#) that it is prepared to explore how the GCRE project can be further de-risked by virtue of additional public funding or the

provision of a guarantee in order to secure the private capital funding necessary to take the project forward. No decision on this has been made, it is now for the Welsh Government elected in May 2026 to decide on a way forward.

Is GCRE definitely going ahead?

- GCRE is a great idea but we are being realistic about the hurdles ahead. If we cannot raise the finance that we need to move forward to construction, then the development cannot go ahead, we have been clear about that from the start.

Have you changed the design of the loops?

- GCRE will have two loops – one for testing rolling stock (trains) and one for testing infrastructure (everything that sits around the train – e.g. signalling, track etc.)
- As part of a value engineering exercise to ensure the build of the loops is undertaken in as cost-effective a way as possible, we undertook a re-design of the infrastructure loop in Summer 2023. Previously this was to be 4km loop in a kidney shape within the rolling stock testing loop. We will now build both testing tracks, side by side, on the same outer trace. They will both be 7km in length.
- This re-design also involved a change in alignment to the Northern section of the proposed track and allows the line to more sympathetically follow the existing site contours, whilst not compromising the design requirements.
- This will result in significantly reducing the impact of the originally planned high embankment. This reduced embankment profile will mean less disturbance to the surrounding area, significantly reducing the ecological and visual impact as well as ensuring the retention of the cycle track within its current location.

How does this re-design impact drainage?

- The change in design will also incorporate a revised drainage design that will need to demonstrate its compliance with the stringent requirements of the Sustainable Drainage Approval Body (SAB). The drainage will be designed to attenuate flows to levels that will not cause any downstream flooding or risks to property.
- This design work will be carried out by AtkinsRealis (Formerly Atkins) who are one of the largest multi-disciplinary consultancies in the world. They will be liaising with the SAB (Local Authority Drainage Teams) to ensure that any design meets their requirements.
- Until the SAB Approval is in place construction works will not be able to commence.

Is GCRE just a rail development?

- GCRE is, at its core, a rail testing and research facility. But in order to support investment into the project, we are exploring how a portion of the site around the rail project can be used to develop renewable energy assets and be a location for a data centre.
- Over the last few months GCRE has therefore been searching for an Energy and Data Centre Partner (EDCP) to develop this infrastructure.
- The GCRE site's size, power arrangements, and telecoms connectivity make it attractive for the current boom in data centre development.
- GCRE published [an update on this work in March 2026](#). Several bidders have expressed an interest in developing EDCP assets on the GCRE site. A process is now underway with those parties and GCRE will provide further progress updates on that work later in 2026.

Who will be using GCRE?

- GCRE is already attracting interest from customers wanting to use the facility once it is open. This interest has come through partnerships developed with Hitachi Rail, Transport for Wales, CAF, HS1, Thales, Ricardo, Frauscher, the Connected Places Catapult, Getzner and Swansea University. More detail of these partnerships can be found on our website: www.gcre.wales
- We expect other rail operators to also undertake testing and research here, from across Europe, the Middle East and beyond. This is not just a UK facility.
- We also expect wider innovation to be undertaken at the site beyond rail – including energy innovation, drone testing, battery technology development etc.

How much of the site does GCRE currently own?

- GCRE Limited owns all 700 hectares of the site. The site is the same size as Gibraltar or Gatwick Airport.
- GCRE also owns some parcels of land nearby for carbon and open access offsetting. This includes some of the former Selar opencast mine site near to Glynneath.

Are Celtic Energy involved in this development?

- No. Celtic Energy do not have any association with GCRE.

- GCRE purchased the land from Celtic Energy in September 2022 and Celtic Energy have no involvement in the development or in GCRE Limited.
- As a condition of the deal to acquire the GCRE site, Celtic Energy had the right to appoint a director to the GCRE Limited board. That right came to an end once the land deal completed and the Celtic Energy director stood down immediately afterwards.
- Some of the permanent employees of GCRE Limited are former staff that used to work on the open cast site.

Does this site have all necessary planning consents?

- GCRE obtained outline planning consent for the facility in 2021. This was to construct and operate the two testing loops and the rail maintenance shed.
- However, as a result of feedback from the community and to help incorporate plans from an Energy and Data Centre Partner (EDCP), GCRE intends to bring forward a new planning application. This will help to capture the changes (such as changes to the testing loops and to the embankments) in a new application and include the EDCP development.
- A new application is likely to be submitted in 2027, once more detail has been worked through with the Energy and Data Centre Partner (EDCP).
- This will be a clear statutory process and as part of this there will be opportunities for community engagement, comment and consultation.

What is the planning status of the proposed Cwm Mawr Technology Park?

- The Cwm Mawr Technology Park is one of the proposed future developments of the site that does not currently have planning permission.
- We think this is an important element of the site, but it will have to go through a separate, future planning process of its own. As part of this there will be opportunities for consultation.

What if you cannot find investment for the rail project at GCRE?

- A decision on whether or not to proceed with the rail project is expected from Welsh Government in the Autumn of 2026. From this, a pathway to final funding will be decided.

- Should the rail element of the project not proceed, it is possible that the EDCP development on the site could be taken forward as a stand-alone project. But at present, the plan is to develop both the rail and EDCP elements of GCRE, together.

What are the main benefits of GCRE to the local area?

- An economic appraisal undertaken by PWC has highlighted that GCRE is a 'very high' value for money project that has the potential to create 1,100 jobs and contribute £300m GVA uplift to the local economy over the next decade and a total of £1,210m of benefits to the economy over its lifetime.
- The report highlighted that for every £1 spent on GCRE, the facility will deliver £15 of wider benefits. GCRE is a place-based intervention capable of supporting a new industrial cluster in a part of the world in need of new jobs and investment.

Are you making sure the development benefits the local community?

- Prospective investors in GCRE will be judged against financial and technical criteria, as well as social value measures approved with Welsh Government.
- This means that anybody wanting to buy into GCRE also has to demonstrate what it will put back into the community in terms of:
 - Skills and training
 - Community engagement
 - Promotion of STEM locally
 - Social infrastructure
 - Public access of the site and its facilities to local people

Will members of the public be able to use the GCRE Hotel and restaurant?

- Yes.
- The hotel and restaurant will support the research and testing teams staying on site for extended periods, but additional capacity in the hotel and restaurant will be available for members of the public to book. Indeed, we hope the facilities will support tourism in the local area.
- However, we also want to work with providers of accommodation and restaurants locally to ensure that visitors to our site know of other, quality accommodation and places to eat in the surrounding area when they stay at GCRE.

How will GCRE impact on the National Park's Dark Sky Zone?

- GCRE will play its part with the dark skies area.
- GCRE does not intend to illuminate the loops and track as a normal railway and lighting of all trains tested at night will be kept to a minimum – for example there will be no regular lighting of carriages.

How will trains get to and from the GCRE site?

- Trains tested at the GCRE site are likely to be brought to site in a variety of ways – owing to the specific nature of the rolling stock being tested.
- It is likely that UK trains (with a UK gauge) will come via the south Wales mainline and up to site via the Neath and Brecon branch line.
- European rolling stock or larger double-decker train vehicles will need to come in on road – potentially via ports in south Wales.

Noise

How noisy will GCRE be?

- GCRE intends to be a respectful and understanding neighbour for the local community.
- The reality is that most of the trains being tested on site will be some of the most advanced and modern traction technologies available, so noise will be lower than traditional vehicles.
- However, this testing is an industrial process and there will be noise from trains being tested and developed as they run around our track, but we intend to keep this noise to as low a level as we can.
- As part of the 2021 planning permissions, clear limits regulate the noise levels once GCRE is operational. These are publicly available, for instance via the Powys County Council website, and will be monitored regularly to ensure compliance.
- The permissible noise thresholds are defined at about a dozen points around the GCRE site. The permissible thresholds vary by time of day, so less noise is allowed at night than by day, for example.

What is GCRE doing to minimise noise?

- As part of the design of the site, GCRE will mitigate the noise in areas close to residential areas and to stay within requirements set in the planning conditions.
- We are doing this in a variety of ways – earthworks embankments, additional tree planting and through noise mitigation fencing.

Will GCRE have trains running 24 hours a day, every day?

- The 2021 planning permission allows GCRE to potentially operate trains 24 hours a day; seven days a week. However, this will be dependent on demand.

Impact on Local Housing

Will this impact house prices in the area?

- There is no evidence that the GCRE development is having a negative impact on house prices in the area.
- We want GCRE to have a positive impact on the local economy and communities and will work with the local authorities and others to ensure that local infrastructure in the area successfully supports the world class research and development facility we are constructing.

Will GCRE acquire any properties by Compulsory Purchase?

- No.
- GCRE has **absolutely no plans whatsoever** to compulsory purchase any homes or businesses in the local area.

(For background: There have been rumours circulating previously about GCRE plans to compulsory purchase homes on Price's Row which is wholly inaccurate and without basis in fact).

Energy

Does GCRE plan to install renewable energy generation on the site?

- As outlined above, GCRE is seeking an Energy and Data Centre Partner (EDCP) to develop renewable energy assets and data centre infrastructure on the site.
- GCRE published [an update on this work in March 2026](#). GCRE will provide further progress updates on the competition later in 2026.

- GCRE will be the UK's first net zero in operation railway and the energy needed to operate the site will be generated renewably.
- Any renewable energy generation infrastructure on site will need planning permission. At the appropriate time that will have to go through clear statutory processes and as part of this there will be opportunities for consultation.

Is GCRE dependent upon EDF's Hirfyndd development taking place?

- No.
- GCRE has no connection at all to the Hirfyndd development and is a separate project.

Jobs

How many jobs will there be?

- A recent economic appraisal by PWC highlighted that GCRE was a 'very high' value for money project that has the potential to create 1,100 jobs over its first decade.
- The report highlighted that the development could contribute £300m GVA uplift to the local economy over the next decade.
- The report said that for every £1 invested in GCRE, there will be £15 of return to the economy, communities and wider rail industry.

Will you be working with local businesses?

- Yes. Where we can use local suppliers and contractors we want to build a strong supply chain.
- We have already held a series of 'Meet the Buyer' events, and we will hold more when private funding is secured.
- We suggest all businesses register on Sell to Wales. Procurement opportunities will be posted on there: www.sell2wales.gov.wales

Where will I be able to find jobs at GCRE?

- All of the direct jobs created at GCRE will be posted on our website: www.gcre.wales

How do local people get training for these jobs?

- We intend to work with local Further Education Colleges and Universities to support the development of a pipeline of skills for the site. We intend to publish a Skills Plan at the appropriate time, once our investment future is clearer.
- We want individuals and young people from this area to have the opportunity to access the engineering and research jobs we will have on site.
- More detail of this will be put on our website.

Will jobs be available to support those losing their jobs at Tata?

- From the very start GCRE has been a development with a clear economic development focus. The core aim of Welsh Government support has been to help create new jobs and skills opportunities in a heads of the valley community.
- Critically, GCRE lies just 15 miles from the Tata Steelworks in Port Talbot, which has suffered from more than 2,000 job losses, with many more gone across the supply chain. GCRE is a scheme able to be taken forward as soon as investment is secured.
- GCRE will provide an important source of alternative employment both at the facility itself through roles created directly at GCRE as well as through partners operating at the site. GCRE offers the opportunity to help diversify the economy of South West Wales and add new strength as Europe's leading hub for rail innovation.

How are you working with local schools?

- As part of the development, the Global Centre of Rail Excellence is committed to building a pipeline of local skills and training opportunities. Engagement activity with local schools has already begun to get young people interested in the new facility coming to their community.
- The Global Centre of Rail Excellence recently ran a project with 14 primary schools from the area alongside Primary Engineer. The programme involves fully funded training for teachers and an engineering project in local schools where young people construct a train a learn about the importance of STEM.
- Nearly 800 young people from the area took part and an output report from the work can be [found here](#).
- If you would like GCRE to visit your local school and to talk to young people and teachers about the new facility being built, get in touch with the team: enquiries@gcre.wales

Construction

Where can I make complaints during construction (about noise, dust etc)?

- Clearly, this will be a working construction site, but we are taking every step to ensure that noise, dust and disruption are kept to a minimum.
- Anybody with a question or a complaint about GCRE can email enquiries@gcre.wales

What is GCRE's relationship with the Walters Group?

- Walters Group won a publicly tendered contract for earthworks on site.

Contact

Do you have a website?

- Yes, we do. You can find us at: www.gcre.wales
- You can also follow us on:
 - LinkedIn [@gcreinnovation](https://www.linkedin.com/company/gcreinnovation)
 - Facebook: [@GCREInnovation](https://www.facebook.com/GCREInnovation)
 - YouTube: [@gcreinnovation](https://www.youtube.com/channel/UCgcreinnovation)

How are you engaging with the local community?

- We are engaging in a number of ways, including through our GCRE Regional Committee to engage with local elected representatives. The group is chaired by former Welsh Government Minister and Brecon and Radnorshire Member of the Senedd, Kirsty Williams.
- Membership of the Regional Committee comprises of:
 - Independent Chair - Kirsty Williams CBE
 - Members of the Welsh Parliament for Brycheiniog Tawe Nedd (6 members in all)
 - Member of UK Parliament for Neath and Swansea East – Carolyn Harris MP
 - Member of UK Parliament for Brecon, Radnor and Cwm Tawe – David Chadwick MP
 - Leader of Powys County Council nominated deputy – Cllr David Thomas
 - Leader of Neath Port Talbot County Borough Council – Cllr Steve Hunt
 - GCRE sponsoring official representing the Climate Change and Economy Ministers from Welsh Government
 - GCRE sponsoring official representing the Secretary of State for Wales
 - Nominated lead official of Powys County Council – Diane Reynolds

- Nominated lead official of Neath and Port Talbot County Borough Council – Nicola Pearce
 - Plus representatives of the GCRE executive team as invited by the Chair and committee
- Minutes of Regional Committee meetings can be found here: <https://www.gcre.wales/community/>
 - We are also engaging through our GCRE Local Liaison Group. Membership of the group comprises of:
 - 2x Independent Co-Chairs
 - Elected members of Powys County Council representing adjacent wards
 - Elected members of Neath Port Talbot County Borough Council representing adjacent wards
 - One nominated representative from each of the adjacent community councils in Powys
 - One nominated representative from each of the adjacent community councils in Neath Port Talbot
 - Two independent representatives, decided by the Regional Committee
 - One nominated representative of the Commoners Association
 - We will hold further ‘Roadshow’ sessions with the local community as part of the new planning application process.
 - We hold regular sessions with Commoners to discuss the issues with Common Land relating to the site.
 - We make all news relating to the site available on our social media and website.

I have other questions, how do I raise them?

- There are lots of ways to interact with us. Via elected representatives and the Regional Committee, through the Local Liaison Group, via our community events as well as Meet the Buyer events, via LinkedIn and Facebook, or through email to enquiries@gcre.wales

Access

What’s happening to the Onllwyn Road Bridge?

- As part of the GCRE development, we need to raise the level of the existing railway track bed and to install overhead electrification cabling above the railway track. As a result the Onllwyn Road Bridge will need to be replaced.
- The bridge is crucial in providing a gateway to site and our facilities. We recognise the bridge is important to the local community.
- There will be a period when the bridge is out of service, but we can confirm that **the bridge will be replaced.**

Cycleways/Rights of Way

- Our ambition is to use this development to improve connections between communities and to encourage active travel (walking and cycling) in the area.
- We are keen to get local feedback and ideas on how these can be improved further. Please let us know at enquiries@gcre.wales

What is happening to the Commoners?

- Our site includes some areas where individuals have common land and grazing rights.
- Changes are being made to the location of some of these areas to accommodate our facility and we are working with these Commoners to make available suitable replacement land.
- If you are a common land holder and have questions, please contact enquiries@gcre.wales and one of our team will get in touch.

Can the local public get a tour of the site?

- For the next few of years the site is a working construction site – so it is not possible to offer public tours of the site during this time.
- However, once construction is completed and we are operational, we are keen to have some organised ‘Open Days’ where people living locally and those interested in the site can come along and access the facility and see what goes on.
- We are also committed to reopening public rights of way through the site that were suspended for open cast coal extraction. The routes will vary from the original alignments, but allowing the public controlled access is an important principle we have established in our plans for the site.

What are you going to do with the Neath and Brecon branch line?

- The branch line to Neath is an important piece of infrastructure for GCRE and was one of the deciding factors when we selected this site. We want to use it both during construction of the site to help transport materials, but also when we are operational to allow us to bring trains to test on site, up the line.
- We are not a transport authority, so we currently have no current plans to turn the branch line into a passenger line. However, if we are successful our activities will ensure that the line remains safeguarded and operational for the long term. This may give transport authorities the option in future to consider passenger operations should demand develop. However, this will be a future decision for its owners and government.

Restoration

What is GCRE doing about the “Wedding Cake” spoil tip?

- We have announced that the spoil tip known as the ‘Wedding Cake’ will be restored in line with the agreed Planning Approval.
- When we took ownership of the site in September 2022, we also inherited the challenge of the spoil tip. At that stage, restoration work had not been undertaken on the tip and it was not clear there was sufficient legacy funding to reduce the height of the tip in line with the obligations set out in the planning permission.
- Since we acquired the site we listened to the local community and heard their very clear desire to see this tip reduced. But we also grappled with the challenge of how we could sustainably fund that restoration work.
- After working with both Neath and Port Talbot and Powys councils, we are now in a position to make a commitment that the overburden mound will be reduced. Work will commence once wider construction earthworks on the site begins.

How much will you be taking off the Wedding Cake?

- We will be taking around 12 metres off the top of the spoil tip.

What is GCRE doing about drainage? Will your work cause localised flooding or changes to local watercourses?

- GCRE have to provide a Sustainable Drainage Scheme (SuDS) to the Local Authority SuDS Approving Body.

- The Drainage Scheme demonstrates how the drainage proposals will prevent flooding and ensure that water quality is maintained during construction and when works are completed.
- This approval has to be in place before development can take place around the site.
- Planning Conditions also require this to be demonstrated before work can commence.

What is the latest with the restoration?

- In February 2025 GCRE submitted a 'Screening Opinion Request' to the local authority regarding proposed changes to the restoration. The submission is publicly available in the link: [25/0320/SO | EIA Screening Opinion under Regulation 6\(1\) of Town & County Planning \(Environmental Impact Assessment\) \(Wales\) Regulations 2017 in relation to a Section 73 application seeking to vary conditions associated with the approved planning permission 19/1899/REM \(alterations to the restoration strategy\) | Nant Helen Surface Mine Coelbren Neath Powys](#)
- The submission is not a planning application, but the first stage of engagement with the authority about how to approach such changes and the consultation that will be needed.
- As set out in the documentation above, the key aspects of the revised proposal include:
 - ***Modifications to the restoration contours and landform to enhance drainage and biodiversity and to accommodate future development;***
 - ***Creation of priority habitats, including wetlands, grasslands, and additional native woodland;***
 - ***Alterations to public access, such as the provision of new footpaths and viewpoints.***
 - ***Phasing changes to enable more efficient restoration delivery when considered alongside other consented developments.***
 - ***Minor adjustments to aftercare and management provisions.***

I'd like to report maintenance issues on the site (broken fencing etc) – how do I do that?

- Please get in touch with the GCRE Site team and we will be happy to discuss these with you.
- Or contact: enquiries@gcre.wales

Usage

What activity is taking place at the GCRE site before construction begins?

- While GCRE's primary focus is to raise investment for the construction of the main facilities at the site, we have worked with partners to undertake some small-scale testing and innovation.

- For example, over the last couple of years, GCRE has played host to an 'Innovation in Railway Construction' competition run by IUK and funded by the Department for Business and Trade in the UK Government. The £7.4m programme has focused on trying to imagine what the greener, more affordable and more reliable railway infrastructure of tomorrow looks like. An initial 24 projects (involving 50 teams) were funded to develop a business case. From this list, the best 12 were supported through to prototype stage at GCRE.

- Those 12 teams showcased their ideas at a demonstration day on the GCRE site in March 2025. GCRE had over 200 individuals attend the event, which was a live demonstration of the creative ideas funded through the competition.

- More background of that competition can be found in the links here:
 - **IIRC Demo Day Video:** <https://www.youtube.com/watch?v=cKca1NFu1EM>
 - **Demo Day Background:** <https://www.gcre.wales/press-releases/companies-already-winning-contracts-and-finding-new-investment-as-a-result-of-the-programme/>
 - **Demo Day Project Case Studies:** <https://www.gcre.wales/wp-content/uploads/2025/03/Project-Information.pdf>

- What has perhaps been most pleasing is seeing companies like Universal Signalling who were funded through the programme go public with new contracts and equity investment in their company as a result of the programme. Example here: <https://www.globalrailwayreview.com/news/200677/universal-signalling-closes-funding-round/>

Does GCRE have support of local elected representatives and government?

- We have been very proud to have the support of a range of government Ministers and elected representatives.

Examples of their support can be found on our You Tube Channel: <https://www.youtube.com/channel/UCp7FMQcg4bRiED-L8Lk1DVQ>

Are there any case studies telling the story of how companies see value in GCRE?

Recent Projects Supported at GCRE include:
GCRE hosted the £7.4m Innovation in Railway Construction (IIRC) competition supporting a dozen companies take projects to demonstration phase on the site. Demo Day Projects Overview
GCRE supported the Swiss company Furrer+Frey with its CODES project aimed at lowering the costs of rail electrification. Case Study
GCRE supported start-up Mimicrete with its self-healing concrete technology, providing a site for testing and monitoring. Case Study
GCRE supported SME Concretene with the development of its low-carbon rail sleeper, installed trackside at the site. Case Study
GCRE supported the fast-growing Universal Signalling with live-site facilities for testing of its lower cost signalling technology. Case Study
GCRE supports companies such as Concrete Canvas wanting to showcase new and innovative technologies at its site for use on the railway. Case Study
GCRE supported Rasic/BridgeBouncer with testing and demonstration activity on site as part of DfT's FOAK programme. Case Study
GCRE supported Dronecloud/RUAS with testing and demonstration activity on site as part of Beyond Visual Line of Sight (BVLOS) R&D. Case Study
GCRE supported Biofoundry Energy Ltd with trackside testing on its Platform Train Interaction (PTI) ramp as part of Innovate UK funded work. Case Study