

Y GWELTHFYDD THE WORKS

EBBW VALE GLYN EBWY



the regain building
adeilad regain



the regain building adeilad regain



01



02



03

Réduire l'Effet de serre grâce à une Gestion Alternative des territoires Industriels dans le Nord-Ouest de l'Europe.

Reducing the Effect of Greenhouse gases through Alternative management of Industrial facilities in North West Europe.

Gostwng effaith nwyon tŷ gwyrdr drwy reolaeth amgen o gyfleusterau diwydiannol yng Ngogledd Orllewin Ewrop.

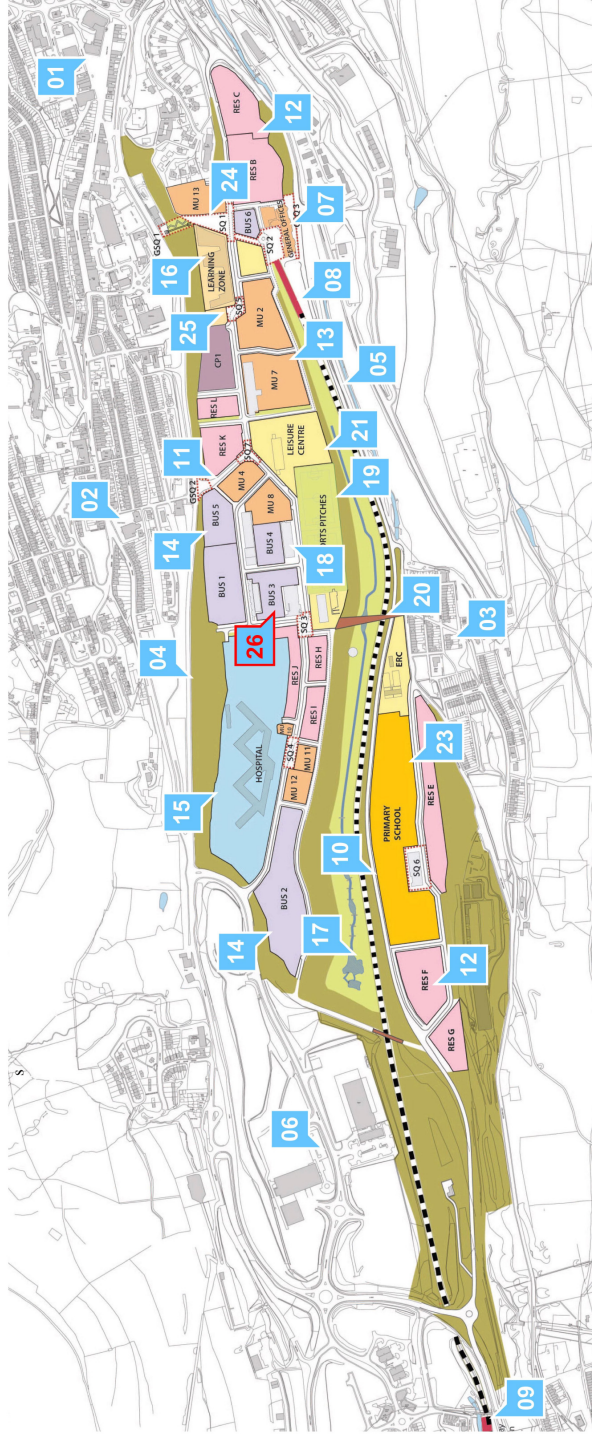


Past & Present Projects: Prosiectau Gorffennol & Presennol:

01. SETIC, Energy Technology Centre, East Kilbride, Scotland
02. SIZIAF, Parc des Industries Artois Flandres, Douvrin
03. BEP, Parc Crealys, Namur (Lead Partner)
04. Blaenau Gwent County Borough Council, The Works, Ebbw Vale
05. PALME Organisation, Paris (Technical consultants)
06. Envipark, Turin (Technical Consultants)

the masterplan y prif gynllun

01	Town Centre	01	Canol y Dref
02	Christ Church	02	Eglwys y Drindod
03	Ty Liwyn	03	Ty Liwyn
04	A4046	04	A4046
05	Steelworks Road	05	Flordd y Gwaith Dur
06	Victoria Business Park	06	Parc Busnes Fictoria
07	General Offices and Visitor Centre	07	Swyddfeydd Cyffredinol Chanolfan Ymwelwyr
08	Terminus Station	08	Gorsaf Derfynfa
09	Parkway Station	09	Gorsaf Parkway
10	Peripheral Distributor Road	10	Flordd Dosbarthu Ymylol
11	Christ Church Link & Square	11	Cyswilt Eglwys y Drindod a'r Sgwâr
12	Residential Development	12	Datblygiad Preswyl
13	Mixed Use – Residential with Local Amenities	13	Defnydd Cymysg – Preswyl gyda Chyfleusterau Lleol
14	Business Hub	14	Canolbwynt Busnes
15	Community Hospital	15	Ysbyty Cymunedol
16	Learning Zone & Link to Town Centre – Funicular and Stairway	16	Hafan Dysgu a Chysylltiad i Ganol y Dref – Ffwnicwlar a Grisiau
17	Central Valley Wetland Park	17	Parc Gwlypdir y Dyffryn Canolog
18	Basement Park	18	Adeliadau Islawr
19	Sport Pitches	19	Meysydd Chwaraeon
20	Green Bridge	20	Pont Werdd
21	Leisure Centre	21	Canolfan Hamdden
22	Theatre	22	Theatr
23	Primary School	23	Ysgol Gynradd
24	Main Square	24	Prif Sgwâr
25	Market Square	25	Sgwâr y Farchnad
26	REGAIN	26	REGAIN



the location
y Jleliad



The building is located between two of the basements of the old Corus Steelworks.

Access to the building is via the east / west hospital service road off the main north-south site road.

Mae'r adeilad wedi'i leoli rhwng dau o isloriau hen waith dur Corus.

Mae mynediad i'r adeilad drwy ffordd gwasanaeth dwyrain/gorllewin yr ystybyddi ar brif ffordd gogledd-de y safle.



Plan Cynllun

The building has a simple layout designed to allow the layout to be easily expanded or modified.

Mae gan yr adeilad gynllun syml er mwyn ei gwneud yn rhwydd i'w ehangu neu ei addasu.

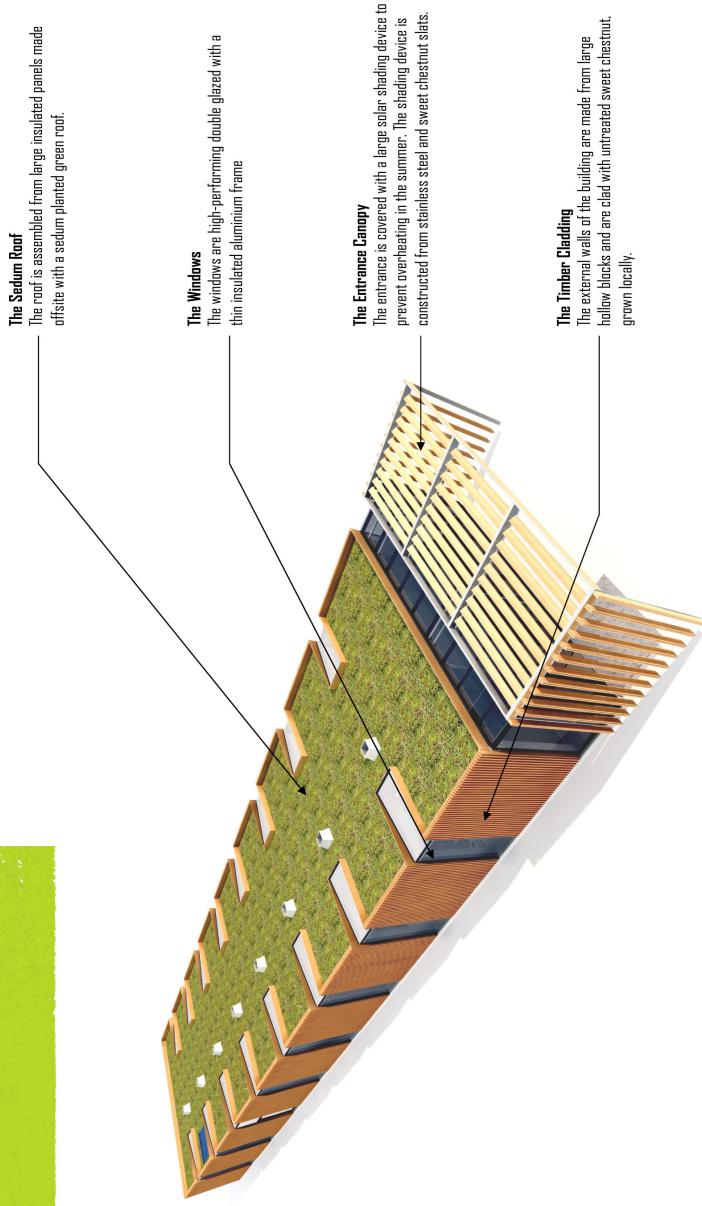
the building & material yr adeilad a deunydd

The **RESEAIN** building is jointly funded by the Welsh Government and the European Union. It is intended to demonstrate the highest levels of environmentally friendly design.

The building takes the form of a simple tube with a series of vertical glazed slots cut out along its length. This provides high levels of natural daylight, but prevents overheating.

Caiff adeilad **RESEAIN** ei ariannu ar y cyd gan Lywodraeth Cymru a'r Undeb Ewropeaidd. Bwrwedd iddo ddangos y lefelau uchaf o gynllun cyfeillgar i'r amgylchedd.

Mae'r adeilad an ffurf twb syml gyda chyfres o slotiau gwyrdd fertigol ar ei hyd. Mae hyn yn rhoi lefelau uchel o ddau dydd naturiol ond yn atal gordwymo.



The Sedum Roof

The roof is assembled from large insulated panels made offsite with a sedum planted green roof.

The Windows

The windows are high-performing double glazed with a thin insulated aluminium frame

The Entrance Canopy

The entrance is covered with a large solar shading device to prevent overheating in the summer. The shading device is constructed from stainless steel and sweet chestnut slats.

The Timber Cladding

The external walls of the building are made from large hollow blocks and are clad with untreated sweet chestnut, grown locally.

Y To Sedwm

Gwnead y to o baneli mawr wedi'u hinswleiddio a wneir oddi ar y safle gyda tho gwyrdd sedwm wedi'i blannu

Y Ffenestri

Mae gan y ffenestri wydr dwbl perfformiad uchel gyda ffram aluminwm wedi'i inswleiddio.

Canopi Mynedfa

Borchuddir y fynedfa gyda dyfais gysgod solar mawr i atal gordwymo yn yr haf. Adeiladwyd y dyfais gysgod o ddur glow a slitiau castanwydden felys.

Cladlin Pren

Gwneir waliau allanol yr adeilad o blociau gwag mawr gyda cladlin o gastanwydden felys leol.

sustainability
cynaliadwyedd

HEATING:
Air Source Heat Pump (ASHP)

Refrigerant circulates heat from the outdoor coil to the indoor coil, releasing heat into the building.

Outdoor coil extracts heat from the air.

Compressor circulates the refrigerant and maintains the pressure of the refrigerant.

Indoor coil releases heat into the building.

Expansion valve maintains the pressure of the refrigerant.



WALLS:
Durisol Blocks

A photograph of two interlocking concrete blocks, known as Durisol blocks, which are used for constructing walls. The blocks are light-colored with a textured surface and have a U-shaped profile for interlocking.



ELECTRICITY:
Photovoltaic Panels (PV)



HOT WATER:



ROOF:
Insulated Roof Cassettes & Sedum
Green Roof



The building uses three types of renewable energy, photovoltaic and solar panels to produce electricity and hot water, and an air source heat pump which extracts heat from the air which provides warm water to the under-floor heating system.

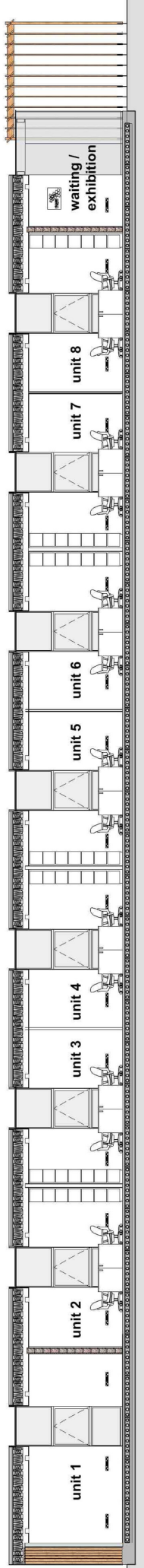
Most of the hot water (all during the summer) is provided by the solar thermal panels on the roof.

The building incorporates a series of sustainable, innovative products such as insulated roof panels with a green sedum roof, and large hollow blocks consisting of 80% waste wood chips, insulation and concrete. These products help improve the energy performance of the building and reduce carbon emissions.

Mae'r adeilad yn defnyddio tri math o ynni adnewyddadwy, paneli ffotofoltaig a solar, i gynhyrchu trydan a dŵr poeth, a phwmp gwres o'r aer sy'n allbynnu gwres o'r aer sy'n rhoi dŵr twym ar gyfer y system wresod dan y llawr.

Caiff y rhan fwyaf o'r dŵr twym (y cyfan yn ystod yr haf) ei ddarparu gan y paneli thermal solar ar y to.

Mae'r adeilad yn cynnwys cyfres o gynnyrch blaengr. cynaliadwy megis paneli to wedi'u hinswleiddio gyda tho sedwm gwyddu, a blociau gweigion mawr yn cynnwys 80% sgolïo pren gwastraf, hinswleiddio a choncret. Mae'r cynnyrch yma'n helpu i wella perfformiad ymyr yw adeilad a gostwng allyriadu carbon.



the location

Road

The Works is located off the A4046 on Steelworks Road, which connects to the A467 leading down to J28 of the M4. Both London and the Midlands are around 2.5hrs away.

Rail

With the development of the new train station on The Works, Cardiff will be a short train ride away. From here London and the Midlands can be reached within 2.5hrs. Regular services to other major destinations are also available through the Ebbw Vale – Cardiff rail link.

Contact The Works Ebbw Vale team to get more information about what we plan to achieve.

Project Office:

Steelworks Road
Ebbw Vale
Blaenau Gwent
NP23 6YL

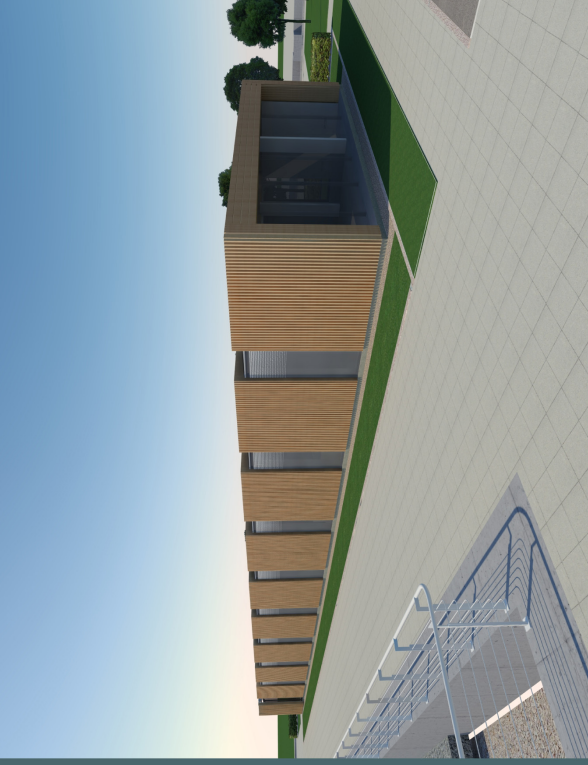
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Any areas, measurements or distances are approximate. The text, photographs and plans are for guidance only and are not necessarily comprehensive.



Mae unrhyw ardaloddd, mesuradau neu bellteroedd yn fras Mae'r gairiad, ffotograffau a chynlluniau ar gyfer arweiniad yn unig ac nid ydynt o reidrwycd yn gynhwyslawr.

y lleoliad

Ffordd

Mae'r Gweithfeydd ar yr A4046 ar Ffordd Gweithfeydd Dur sy'n arwain at yr A467 ac i lawr at gyffordd 28 ar y M4. Mae Llundain a Chanolbarth Lloegr ryw 2.5 awr o daith i ffwrdd.

Rheilffordd

Mae gorsaf newydd yn cael ei hadeiladu a bydd Caerdydd o fewn tair ter ar y tren. Oddi yno, dim ond tair o 2.5 awr fydd rhyngoch chi a Llundain a Chanolbarth Lloegr. Bydd gennych gysylltiadau felly â gwasanaethau rheolaidd a holl brif drefi'r wlad trwy ddolen Glyn Ebwy Caerdydd.

Cysylltwch a thim Y Gweithfeydd Glynbeuwy i gael mwy o wybodaeth ar hyn yr anelwn ei gwflawni.

Swyddfa'r Proiect:

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Y GWELTHFYDD
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