



Welsh Zero Carbon HWB HWB Carbon Sero Cymru

Launch 24th April 2024

Lansiad 24^{fed} Ebrill 2024

Chair/Cadeirydd – Elfed Roberts (Pobl)



Lansiad HWB Launch

- Welcome
- Safety
- Background
- Agenda

- Croeso
- Diogelwch
- Cefndir
- Agenda



Background 1

- The Welsh Zero Carbon HWB will become a resource of decarbonisation best practice for social landlords in Wales who build new homes and retrofit existing homes
- To meet WDQR 2021 and WHQS 2023
- To go beyond this to meet Zero Carbon targets
- Learn from each other's projects
- Provide training and other resources
- Bring the Community together



Cefndir 1

- Bydd HWB Carbon Sero Cymru yn adnodd **Arfer Gorau** datgarboneiddo i landlordiaid cymdeithasol yng Ngymru sy'n adiladu tai newydd ac ol ffitio tai presennol.
- Cyrraedd **Gofynion Ansawdd Datblygu 2021** (tai newydd) a **Safonau Answadd Tai 2023** (tai presennol)
- I mynd tu hwnt gyda'i targedau Carbon Sero
- Dysgu oddi wrth ein gilydd
- Darparu hyfforddiant ac adnoddau eraill
- Dod a'r Gymuned at ei gilydd



Background 2

- Proposal initiated by Clwyd Alyn HA
- Funded by Welsh Government
- Driven by Steering Group of 9:
 - Welsh Government, Clwyd Alyn, Pobl, Flintshire, Cardiff, CHC, DCfW, WLGA
- Appointment of a Delivery Partner
 - Energy Savings Trust, TrustMark, Good Homes Alliance, Sero



Cefndir 2

- Wedi'i gychwyn gan Cwmni Tai Clwyd Alyn
- Wedi ei ariannu gan Llywodraeth Cymru
- Yn cael ei yrru gan Grwp Llywio
Llywodraeth Cymru, Clwyd Alyn, Pobl, Sir Fflint,
Caerdydd, Cartrefi Cymunedol Cymru,
Comisiwn Dylunio Cymru,
Cymdiethas Llywodraeth Leol Cymru
- Apwyntiad Partner Cyflawni
Energy Savings Trust, TrustMark,
Good Homes Alliance, Sero



Agenda

10.30 Welcome
10.40 Julie James MS
10.50 Intro: Welsh ZC HWB
11.15 Case Studies
12.30 Lunch
13.30 Intro: Industry Advisory
Groups (IAGs)
14.10 Q&A
14.40 Refreshments
15.00 Breakout for IAGs
16.00 Feedback
16.30 Close

10.30 Croeso
10.40 Julie James AS
10.50 Intro: HWB SC Cymru
11.15 Astudiaethau Achos
12.30 Cinio
13.30 Intro: Grwpiau
Cynghori Diwydiant (GCD)
14.10 C&A
14.40 Lluniaeth
15.00 Torri Allan (GCD)
16.00 Adborth
16.30 Cau

Welsh Zero Carbon Hwb

- Progress to date

Julian Brooks,
Project Manager

24.4.2024





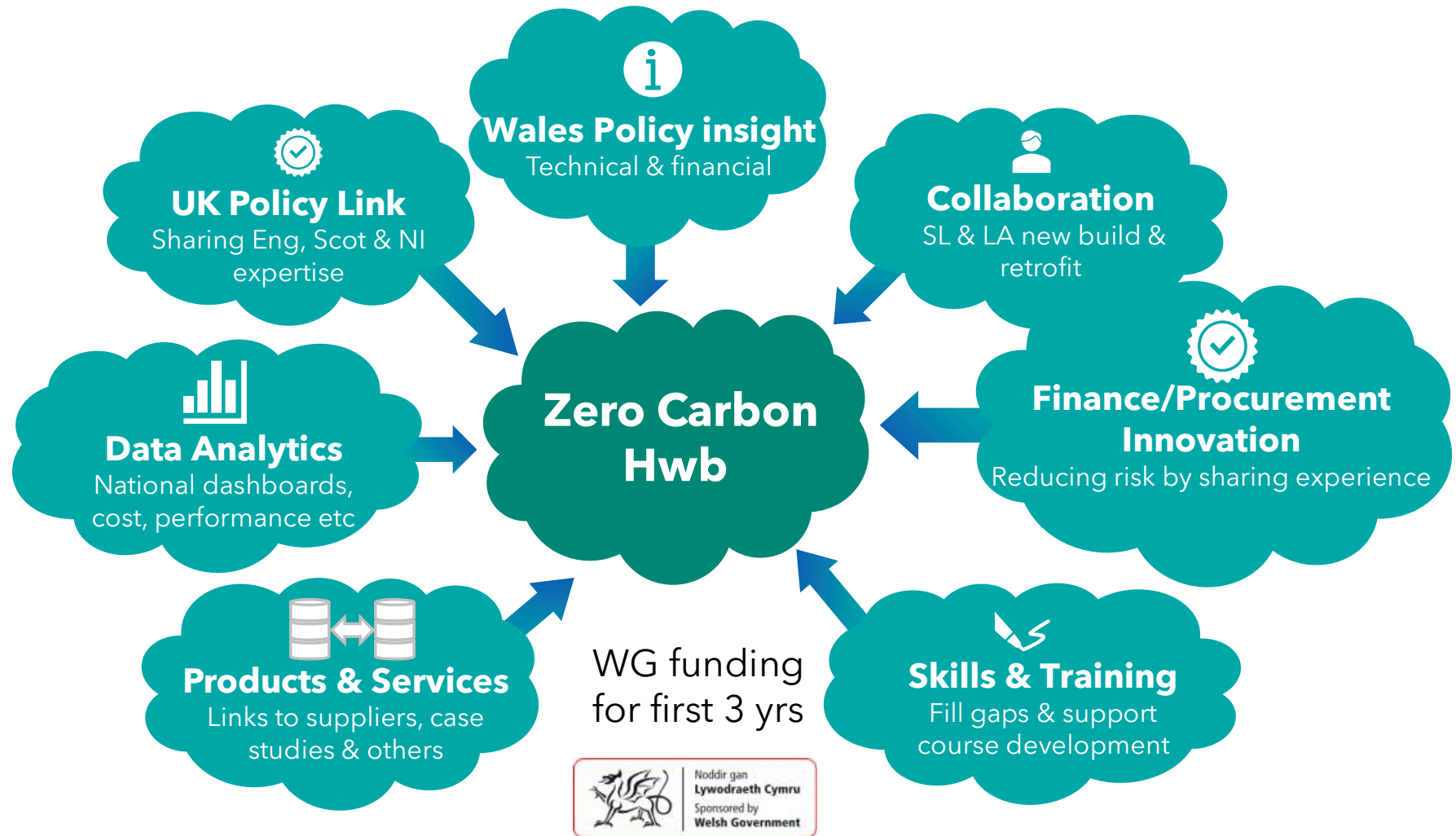
Project Background

- The Zero Carbon Hwb is a collaboration between Welsh Government, Local Authorities and Housing Associations to gather and share best practice on the decarbonisation of new and existing social housing in Wales.
- Led by a steering group, the Hwb will be a knowledge sharing online portal where publicly-funded organisations will be able to use the information as a catalyst for change.
- The aim of the Hwb is to become Wales's primary vehicle for driving forward the decarbonisation of new and existing homes in the medium term.
- The Hwb will identify knowledge gaps in the sector and provide up-to-date best practice, lessons learned and other industry reports.
- The Zero Carbon Hwb is a 3 year project (funded by WG) and we will work with the steering group, Welsh Gov and industry to source funding from year 4 onwards.

The Steering Group

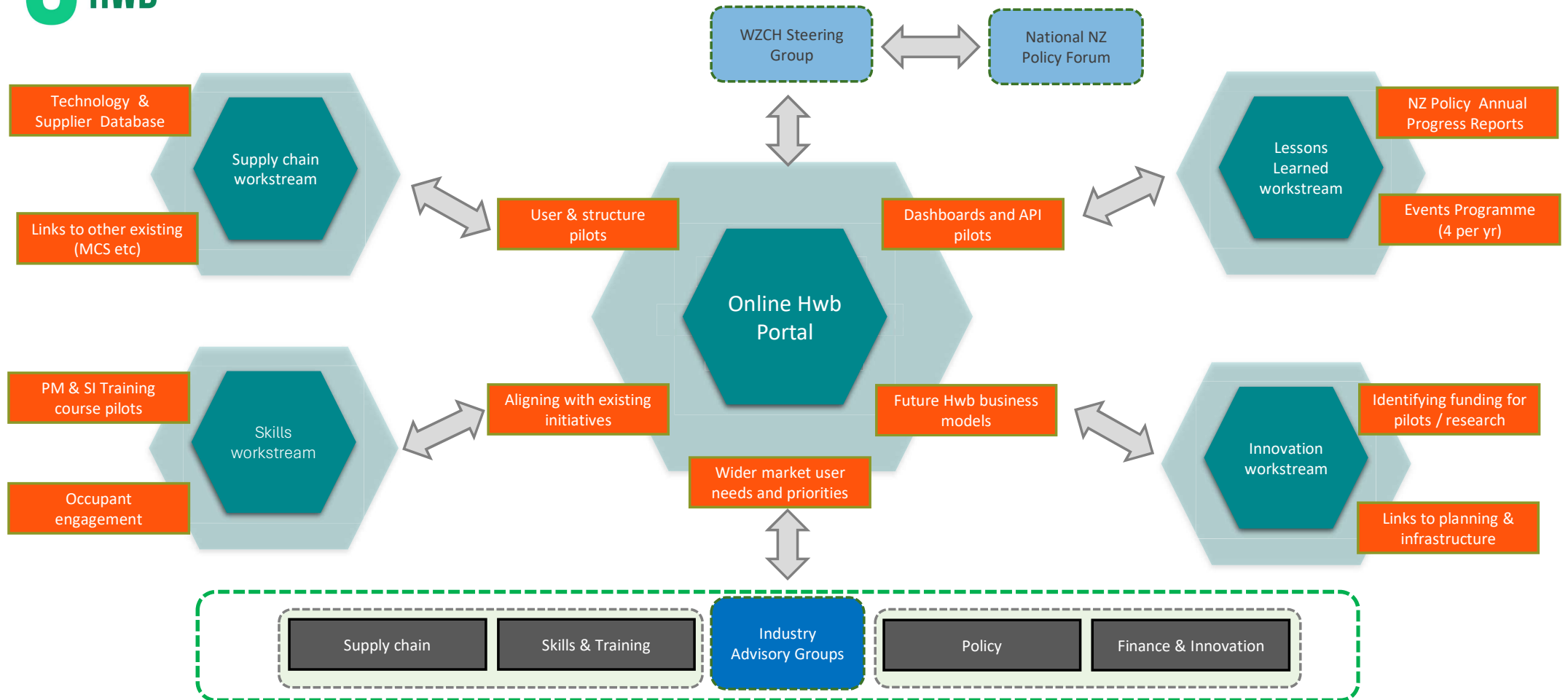
- The Hwb project will be led by a Steering Group that represents Central and Local Government, Local Authorities as well as Housing Associations in Wales. We will act as a consultant to the Hwb project, delivering the work packages initiated and set by the Steering Group.
- The SG members are drawn from Clwyd Alyn HA, Pobl HA, Welsh Gov, CHC Cymru, Welsh LGA, Carmarthenshire and Denbighshire Councils, Design Commission for Wales.

Our vision for the Hwb – accelerating net zero homes



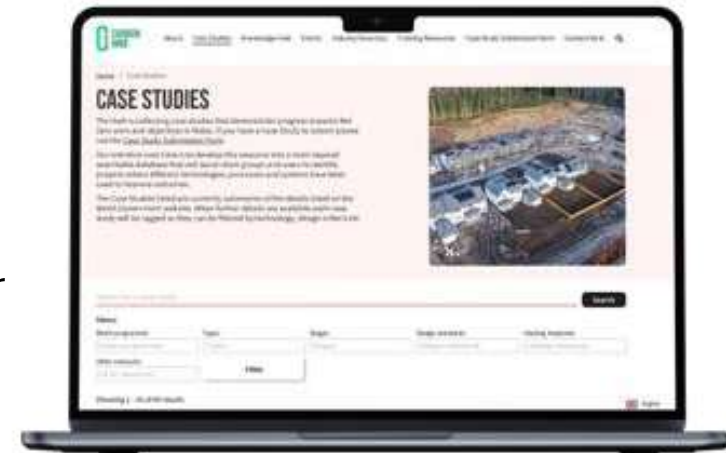


Our working model for looks like this.....



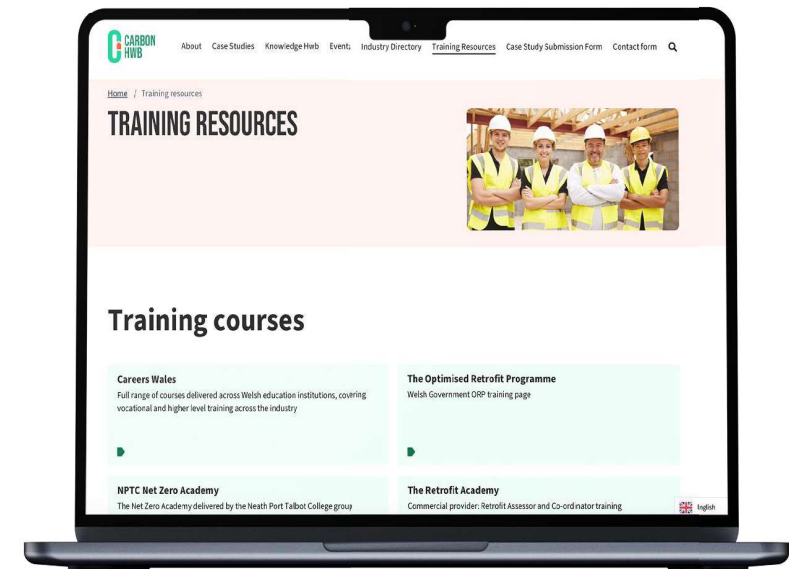
Progress to Date

- Design and implement a website with ongoing additions. ✓
- Host a series of workshops/consultations to understand the needs of Housing Associations and Local Authorities - **ongoing**
- The creation of Industry Advisory Groups ✓
- Work with core collaborators and external data providers to map IPR and GDPR issues - **ongoing**
- Host a series of learning events across Wales – 4 per year starting Q1/2 2024 ✓
- Provide a non biased database of technologies and systems ✓
- Provide Case Studies of Welsh Gov funded IHP/ORP projects - **awaiting detailed info**
- Create E-Forums for Social Landlords ✓



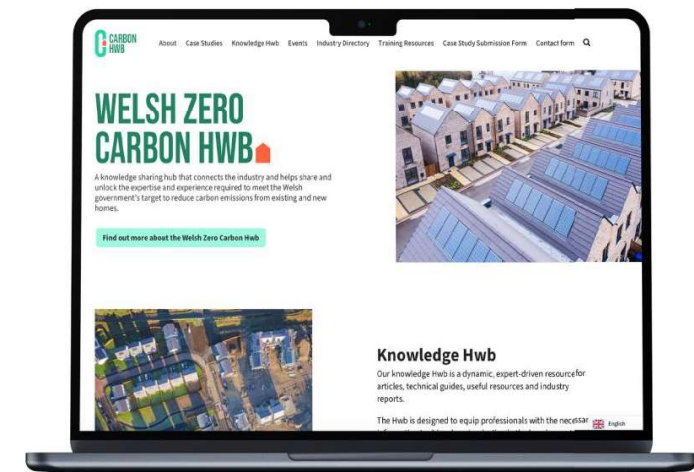
Progress to Date

- Identify strategic skills and training priorities for delivering Net Zero Carbon including the design of a QA for NZ training programme for HA Site Inspectors and Project Managers – **Course now in development.**
- Develop and promote a national Net Zero Carbon policy group with twice yearly online meetings – **In development**
- Provide online guidance to regional funding and innovative finance opportunities – **In development**
- Identifying future drivers for new Net Zero Housing financial offerings.
- Exploring AI advanced search function using curated reports.
- Release annual Net Zero Hwb reports (M12, M24, M36).



Longer Term Aims

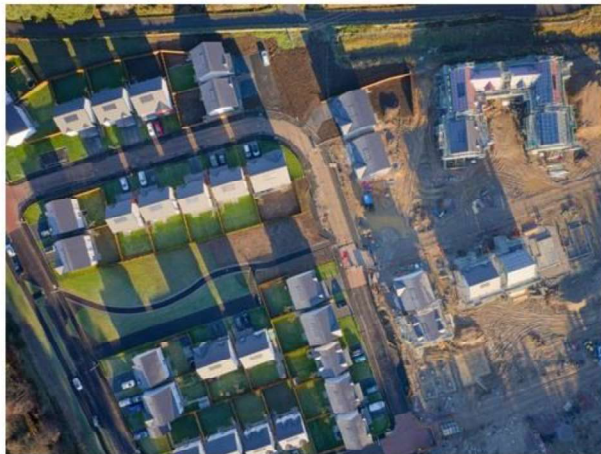
- Collate initial data from industry to refine database structure and content presentation - **ongoing**
- Hwb portal/Website development - **ongoing**
- 24 month collaboration plan to prioritise areas of highest risk / industry need.
- Focus groups to scope 'sector specific' key metrics dashboards .
- Explore future business plan for Hwb continuance beyond funding period.
- Pilot skills and training matrix with links to providers and further guidance .
- Launch HA & PM course templates / guidance for wider usage – July 24.
- Hwb portal features lessons learned examples of innovative procurement including a focus on SMEs and attracting new entrants to the retrofit sector.



WELSH ZERO CARBON HWB

A knowledge sharing hub that connects the industry and helps share and unlock the expertise and experience required to meet the Welsh government's target to reduce carbon emissions from existing and new homes.

[Find out more about the Welsh Zero Carbon Hwb](#)



Knowledge Hwb

Our knowledge Hwb is a dynamic, expert-driven resource for articles, technical guides, useful resources and industry reports.

The Hwb is designed to equip professionals with the necessary information to drive decarbonisation in the housing sector effectively.

[Visit the Knowledge Hwb](#)

[Home](#) / [Case Studies](#)

CASE STUDIES

Our intention over time is to develop this resource into a multi-layered searchable database that will assist client groups and users to identify projects where different technologies, processes and systems have been used to improve outcomes.

The Case Studies listed are currently summaries of the details listed on the Welsh Government website.

If you are responsible for any of the case studies listed here and would like to add more relevant information, please get in touch with us using our [case study submission form](#).



Filters

Welsh programme

Types

Stages

Design standards

Heating measures

Other measures

Showing 1 - 16 of 86 results

Cardiff Community Housing Association ORP 2.2

29 homes delivered under ORP 2.2 by the Cardiff Community Housing Association, installing external wall insulation, triple glazed windows, new external doors, new roofs, PV and battery storage (including

Bro Myrddin Housing Association ORP 2.2 by Carmarthenshire County Council

33 properties delivered under ORP 2.2, with a mixture of houses and bungalows predominantly heated by electricity

Aelwyd Housing Association ORP 2.2

23 homes delivered under ORP 2.2.

 English



[Home](#) / [Knowledge Hwb](#)

KNOWLEDGE HWB

A collection of useful resources from organisations working towards net zero housing.



UK Newbuild & Retrofit Hubs

UK National Retrofit Hub

The National Retrofit Hub is a non-profit organisation that brings together those involved in the retrofit sector to share their expertise and work together to enable a National Retrofit Strategy to be delivered. Retrofitting homes is vital for the UK to achieve its energy, fuel poverty and climate change goals.



BE-ST - The Scottish Built Environment Hub

An international centre of excellence supported by Scottish Government, Scottish Funding Council and Scotland's Enterprise Agencies, bringing together key stakeholder groups; industry, academia, government & public sector, and Scotland's citizens to accelerate the transition to zero carbon.



The Future Homes Hub

The Future Homes Hub has been established to facilitate the collaboration needed within and beyond the new homes sector to help meet the climate and environmental challenges ahead. It is an independent organisation

[Home](#) / [Events](#)

EVENTS



Showing 1 - 3 of 3 results

[View past events](#)

24th April 2024 at 10:00 am

Zero Carbon Hwb Launch

An opportunity for Welsh local authorities, social landlords and the supply chain to meet, and learn about the Welsh Net Zero Carbon Hwb and it's planned activities over the next 3 years.

There will be presentations from various organisations including Welsh Government representatives, with break out rooms for workshops.

2nd July 2024 at 8:00 am

Wood Build 2024

WoodBUILD 2024 will engage Timber and Construction Industry stakeholders in a collaborative effort to build new, multi-disciplinary business opportunities and regenerative solutions.

11th July 2024 at 8:00 am

Welsh Housing Industry leaders

The day is packed full of main stage presentations and panel discussions, getting to the heart of current priorities, including:

TRAINING AND SKILLS

Training and Skills IAG

Secretariat by the Welsh Zero Carbon Hub

Menna Lewis – Welsh Zero Carbon Hub

Ben Whittle – Welsh Zero Carbon Hub

Julian Brooks – Welsh Zero Carbon Hub

Malcolm Davies – Welsh Government

Catherine Bullough – House Building Federation

Rhodri Williams – House Building Federation

Oonagh Gavin – Neath Port Talbot Borough Council

Lisa Thomas – Coelgau Cymru

Tracey Jones – Welsh Government Skills Team

Gareth Williams – Construction Industry Training Board

Bethan Proctor – CHC Cymru

Matthew Dicks – CIH Cymru

[Home](#) / [Forum](#)

FORUM

Welcome to the WZCH forums. Please be courteous and sensitive when expressing your thoughts and opinions. WZCH accepts no liability for the content in forum posts, and will remove any sensitive or potentially damaging content when it is flagged.

The WZCH will act as moderator on the forums but other than signposting to knowledge and case studies we will not be providing technical advice.

Username *

Email *





Organisation *






0 / 30

Password *

Confirm Password *

FORUMS

General Forum		Last post
 General discussion General discussion 1 Topic · 2 Posts	 Hello and Welcome.... 2 weeks ago · Julian Brooks	
 Policy and Regulation To discuss Welsh policy, housing standards and building regulations 0 Topics · 0 Posts		No topics yet!
 Innovation, Technology and Renewables To discuss any innovation in the building construction and services 0 Topics · 0 Posts		No topics yet!

Learning Forum		Last post
 Sustainability Ecology, Water management, Embodied Carbon and other foundation topics 0 Topics · 0 Posts		No topics yet!
 Building Physics and rdSAP HVAC, Moisture, Air tightness, U-Values and the "performance gap" 0 Topics · 0 Posts		No topics yet!
 PAS 2030 and PAS 2035 Anything related to the PAS standards 0 Topics · 0 Posts		No topics yet!
 Building Performance Evaluation and Monitoring Topics related to all aspects of building performance 0 Topics · 0 Posts		No topics yet!
 Heating and Renewables Relating to heat and energy generation 0 Topics · 0 Posts		No topics yet!

● New posts
● Nothing new
✓ Mark All Read
🔍 Show Unread Topics



[Home](#) / [Newsletter sign up](#)

NEWSLETTER SIGN UP



First Name *

Last Name *

Email Address *

Nature of enquiry...

☐ I consent to receive emails from the Zero Carbon Hwb

For further information about how we use your data please see the privacy policy available at [zerocarbonhwb.cymru/privacy-policy](#)

I'm interested in the following:

- ☐ News about the Hwb and other retrofit and newbuild activity in Wales
- ☐ Policy and Regulation
- ☐ Events and Training
- ☐ Technology and Innovation

Submit



Diolch/Thank you

www.zerocarbonhwb.cymru

info@zerocarbonhwb.cymru



Zero Carbon Hwb

Case studies



penderi.

blaen-y-maes | portmead | penplas | cadle

Andy Sutton, Sero

24.04.24



penderi.

blaen-y-maes | portmead | penplas | cadle



sero



Problem Statement

*How do we help regenerate this community,
and put it on a pathway to net
zero,
in a way that we can afford to roll
out at scale,
is fair to the residents, and works
with the grid?*



Penderi in Numbers



518 homes

Homes

In the project, with opportunity to grow to the 644 homes planned initially.

£3.5m

Grant Funding

Provided by the Welsh European Funding Office & Welsh Government Optimised Retrofit Programme

£5m

Project Cost

Total amount spent on the project

1.5MW

Battery Storage

Every home has a battery installed

1.3MW

Solar Generation

Across approximately 85% of homes in the community

362t/CO₂^{eq}/yr

Tonnes Carbon Saved Annually

Across the community

Problems to Tackle – “we can afford to roll out”



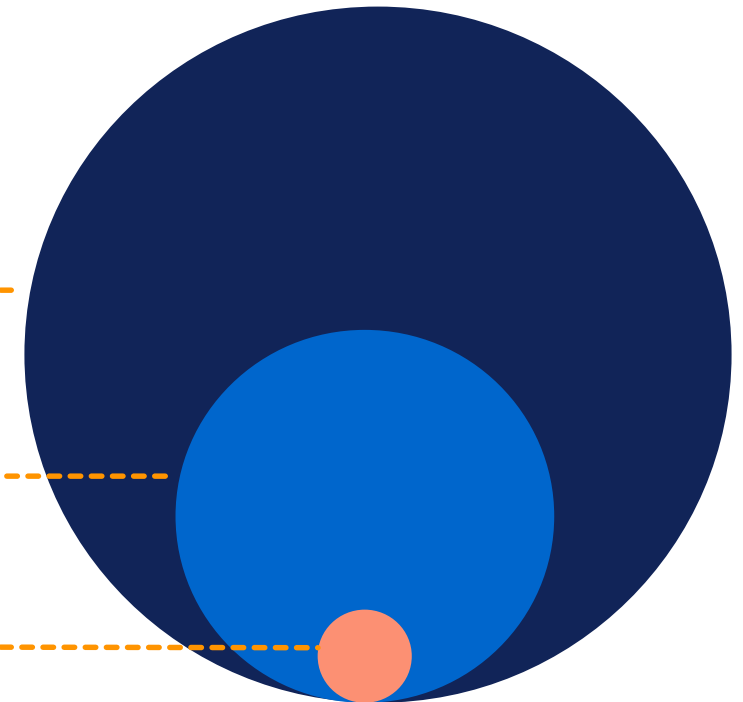
The greatest barrier to Net Zero in social housing is the availability of funding.

In the meantime, tenants pay.

In 20 years, tenants will spend ~£9.4Bn

Cost of achieving Net Zero in Wales ~£5Bn

Government funding may make up c.10%



Problems to Tackle – “*fair to the residents*”



The solution should be able to be equitable across a community (or portfolio) as they all move towards Net Zero



Problems to Tackle – “works with the Grid”



The solution should avoid Grid upgrade costs but work to support a renewable network



Project Phases



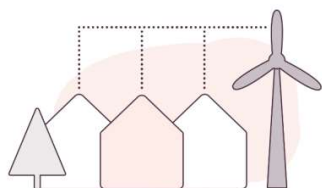
1



Planning & Funding

Complete
2018 – '20

2



Grid Infrastructure

Complete
2020 – '22

3



Retrofit Installation

Complete
April '22 – June '23

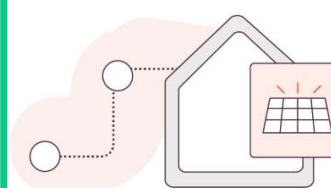
4



Billing Roll Out

In Progress
September '23 - today

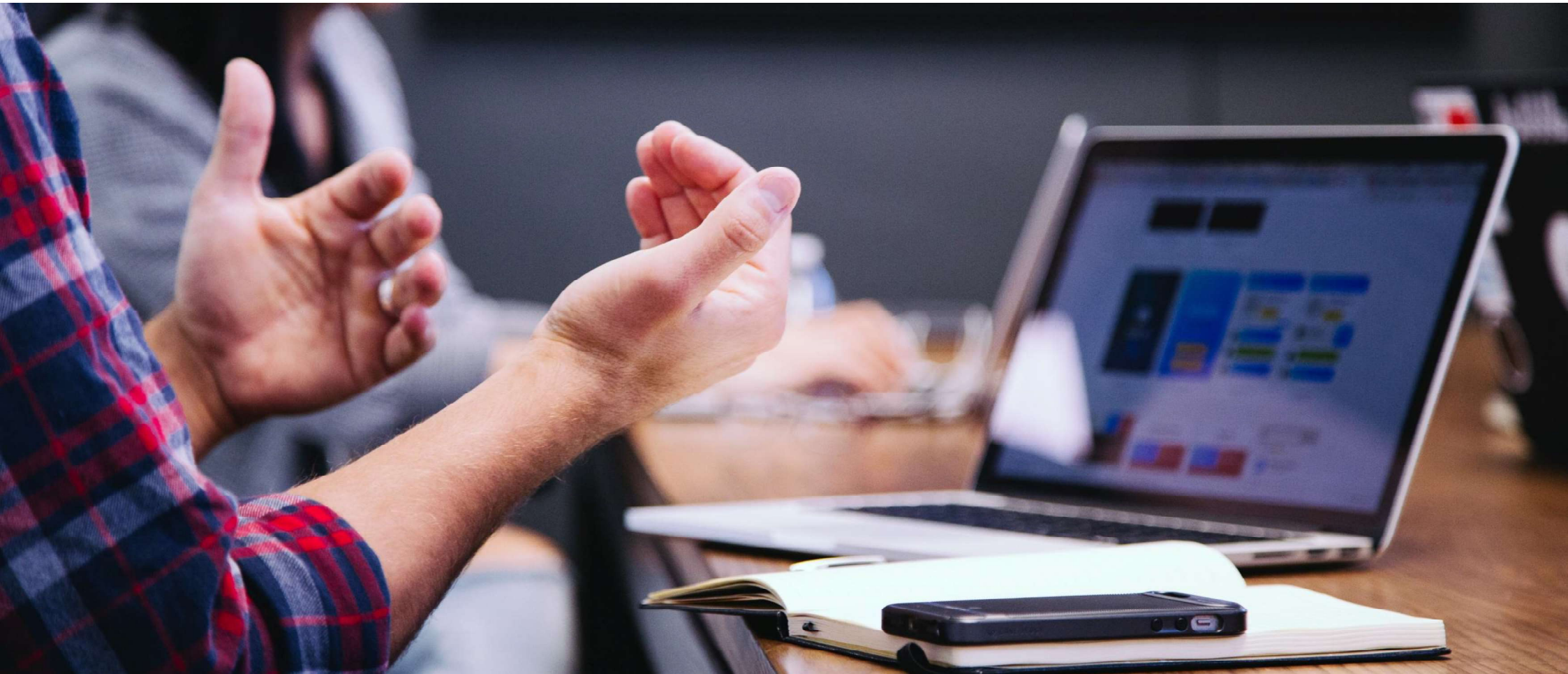
5



Fully Operational

Q4 2024 onwards
Community credit
applied
VPP incomes

Step 1 – Planning & Funding



Step 2 – Infrastructure Upgrades



1. Scheme developed in close cooperation with Western Power (now National Grid)
2. Each home set to be below threshold that triggered costs for Grid reinforcement
3. Plan to prove that managed homes often do not require material Grid upgrades, and help evidence this
4. National Grid invested c £1.5m to upgrade, including 4 new LV substations, whilst aiming to prove there was no need!

(substation shown isn't a Penderi one, sorry!)



Step 3 – Retrofit Installation



Step 3 – Retrofit Installation



1. New Technology training
2. Apprenticeships
3. Business Breakfast
4. Local businesses
5. Community involvement
6. Industry knowledge sharing



Step 3 – Retrofit Installation

5kW battery



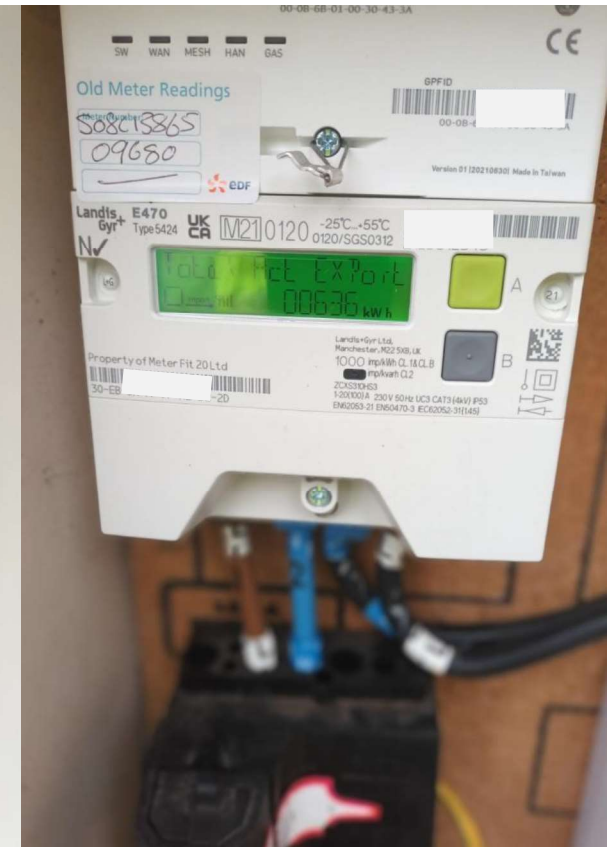
Solar PV



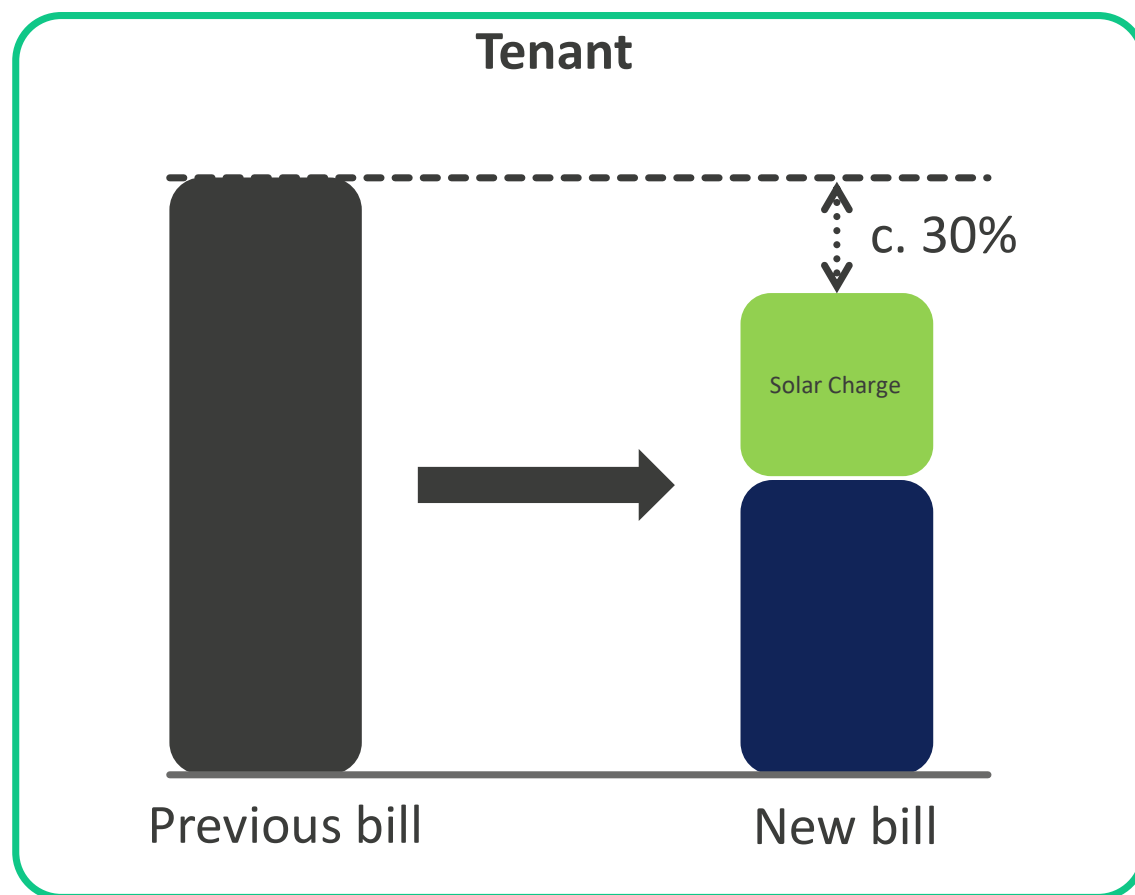
Sero BEE



Smart Meters



Step 4 - The Billing explained



sero

Name Surname
22 Ridgeway, Cardiff CF10 5AW

Sero ID: SL000000
Statement Number: SL000000-4

Date: 1st July 2023

Your New Comfort Statement Is Here
Energy used from 1st June to 30th June 2023

Emergency Number
Power Cut
Call 105 (24hs)
Smell Gas
Call 0800 111 999 (24hs)
Problems with your heating?
Call 029 2000 2882

Please Pay
£23.76 by 15th
July thank you

Ref: SL000000
Sero Life Limited
Sort Code: 16-58-10
Account Number: 21331111

As part of the services we provide you,
we source your electricity from Octopus Energy.

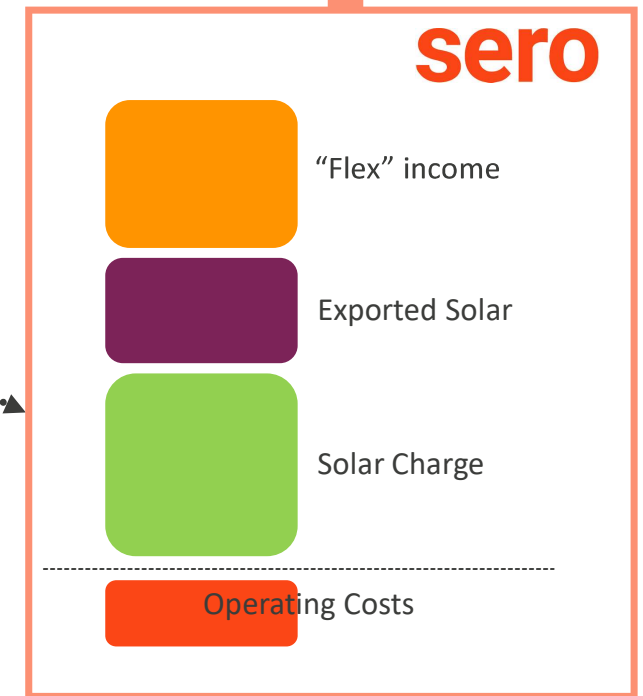
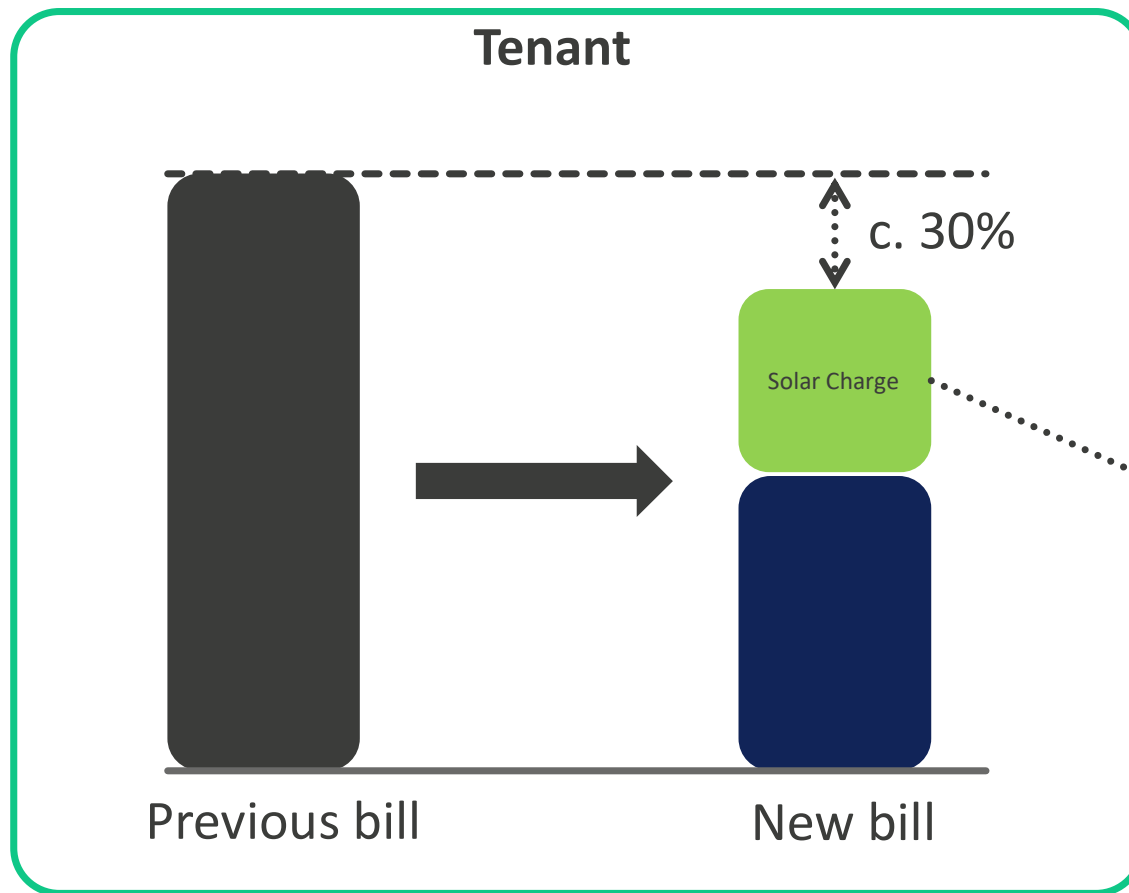
Powered by **octopus energy**

Your Opening Account Balance	£0.00
Payments (made by you, thank you)	£20.00
Adjustments (Breakdown on page 2)	£10.00
Your Energy Charges	
Electricity Used (brought from Octopus Energy)	£17.01
Gas	£17.01
Solar	£26.25
Community	£6.51
Your New Account Balance	£23.76 In Debit

Step 4 - The Billing explained



sero



Step 5 - The Billing from Pobl's project view



Export Sold	£15,017
Solar Charge	£161,704
“Flex” Revenue	£62,520
Credit (Community)	(£54,169)
Operating Costs	(£43,344)
Net Income	£141,729

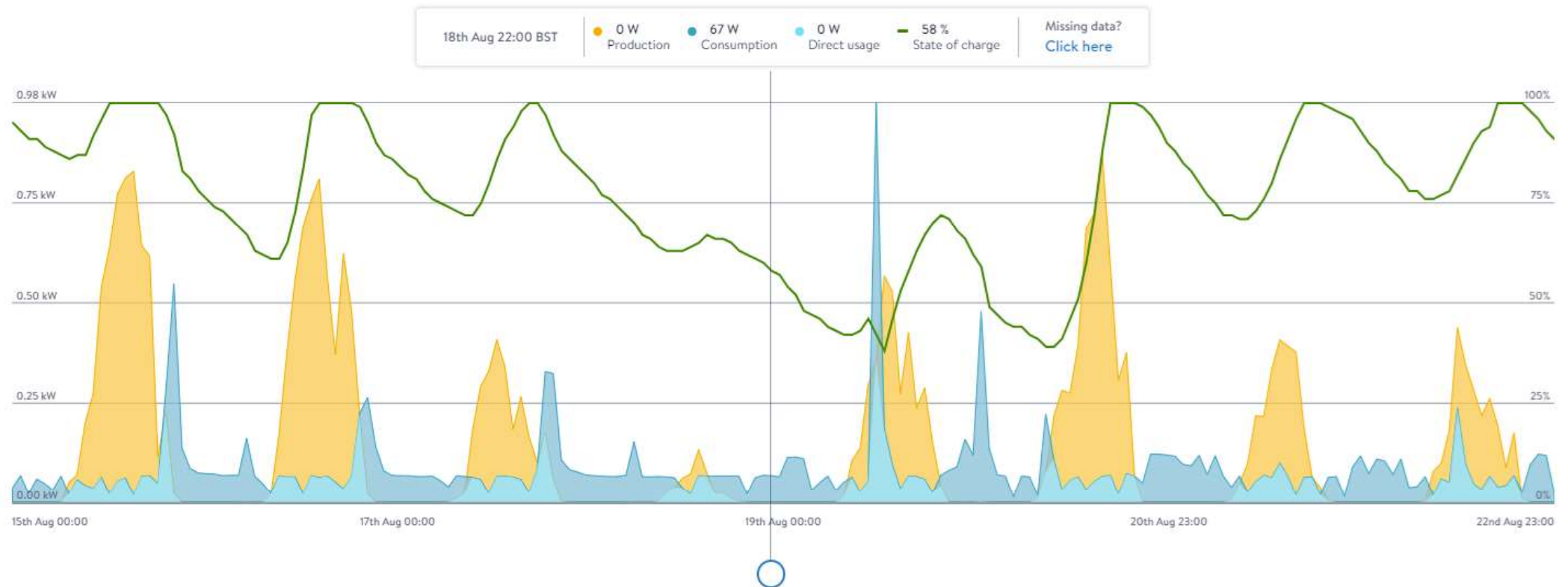
Tariff = 22p/kWh
Assumed self consumption % = 72%

Battery only credits = £180 per annum

Target saving = 20% (before TOU tariffs)

* Assumes all homes signed up and doesn't include bad debt

Step 5 – Operational Model



Learning by working with Residents



1. Piloting new technology
2. Mistrust of Institutions
3. Project Comms v's community networks
4. Knowledge of the energy market and bills
5. Responsiveness and honest reflection
6. Partnership approach



What else have we learnt?



1. Electrical re-wiring
2. Grid reinforcement programme
3. Importance of communication from the beginning, early resident buy in
4. Metering complexity – prevents full benefits
5. Installation & billing – a single step
6. We need to have both greater benefit and consequences
7. Technical challenges due to resident behaviour

Penderi in Numbers



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IHP Lessons Learnt Case Study

Maes Famau, Llanbedr DC,
Denbighshire

ClwydAlyn Housing

Tom Boome

24.04.24



Project Overview

- 38 homes (4 detached bungalows, 34 semi-detached houses)
- Communal air source heat pumps (3No.) with underfloor heating
- Mechanical Ventilation Heat Recovery system
- Air permeability - $3.29\text{m}^3/(\text{m}^2.\text{h})$
- Building fabric
 - Walls – $0.17\text{W}/\text{m}^2\text{k}$
 - Roof – $0.11\text{W}/\text{m}^2\text{k}$
 - Floor – $0.13\text{W}/\text{m}^2\text{k}$





Carbon Impact

- Working with WoodKnowledge Wales, using RIBA and RICS measurement methodology.
- 253kgCO₂/m² embodied carbon
- 16% improvement on RIBA 2030 target
- Produces 0.3 tonnes of CO₂ per yr (average house produces 6 tonnes of CO₂ per yr)



Lessons Learnt – Technology

- 3No. ASHPs and associated plant large enough for 90-100 homes.
- Oversized plant = inefficiencies.
- Commissioned optimisation studies to explore best possible settings and possible changes to technology installed.
- New technology installed brings challenges in servicing and maintenance.
- Wider staff training required – not just development or energy team, must include maintenance, housing, contact centre, etc

Lessons Learnt – Residents

- Handover to residents happened in May 2020, during Covid lockdowns.
- Lack of opportunity to provide full explanations/ demonstrations.
- Residents adapting to new ways of heating their homes.
- Some are confident in the use of the technology, whilst others continue to struggle to grasp the changes to what they have always known.
- “Everyone has a plan until a resident moves in.”

Comparison



Comparison



No.14



15,020kWh annual consumption

No.30



2,373kWh annual consumption

Maes Farnau, Llanbedr DC

Lessons Learnt

The End



ClwydAlyn

Flintshire County Council

Mostyn ORP2

Steve Fanning

24.4.2024



External Refurb Works with Integrated Energy Efficiency / Decarb measures to 205 Council Homes

Mostyn area of Flintshire in proximity to the River Dee estuary, works carried out to 121 Houses & 84 Bungalows



Project Background

- The project was jointly funded by Welsh Gov under the Optimised Retrofit Programme 2.2 (ORP2) pilot funding. Flintshire utilised business as usual budget (BAU) that had been planned for external enveloping refurbishments and integrated PAS 2035 Retrofit coordination and Pas 2030 energy efficiency measures (EEM's) in the project particulars and specifications.
- Properties were monitored before and after works to measure and evaluate how effective the works were. Key metrics are:
 - Energy usage
 - Average ambient temperatures
 - Average ambient moisture levels
 - CO2 emissions

Design & Approach

- Initially net zero carbon retrofit was considered, however during the design stage there was a worldwide fuel cost crisis which fundamentally changed the primary aims of the project. Under the overarching WG instruction to do no harm in respect of fuel poverty, and with the data available from modelling the Retrofit Assessments. It became evident that a greater return on investment could be achieved by investing in a comprehensive insulation programme supplemented by renewable energy, low cost measures like low energy lighting and a passive ventilation strategy.



Outcomes

- Average EPC prior to works was D & C
- Average EPC post works is B and A
- Average Energy usage – reduced - the properties which have had the retrofit measures only fluctuates relative to heating season which indicates a stable environment and a general reduction in energy use.
- Average Ambient internal temperatures fluctuates only .5 degrees during the heating season and is well within safe parameters
- Average Ambient moisture - properties which have had retrofit measures only fluctuate by 3% humidity which indicates a stable environment and well within the healthy boundary limits.



All works carried out under PAS 2030 guidelines and validated in full compliance with PAS 2035 all property accreditations and performance certificates will be lodged via Trustmark



Lunch



Introduction to Industry Advisory Groups (IAG)



Finance Innovation

Industry Advisory Group

Graham Sumsion

24.04.24



Purpose

To guide, inform and prioritise activities relating to finance and procurement elements of the wider Welsh Zero Carbon Hwb work plan

Activities

- Inform the group of relevant activity within the industry
- Be at the forefront of stimulating innovation within the finance sector
- Collaborate with other Hubs to maximise opportunities & dissemination
- Identify and promote net zero Carbon new build & retrofit funding opportunities for LAs & HAs
- Build upon existing pilots with mortgage providers & institutional investors to link the Carbon performance of homes to new products & valuation protocols
- Explore the potential for how energy efficiency and Carbon reduction could be reflected in the finance industry's mortgage affordability calculations

Members

Chair	Graham Sumsion, Monmouth BS
Sero Lead	Cerys Williams, Sero
WZCH Lead	Julian Brooks
Members	Steve Cranston, Welsh Gov Sarah Cole, Welsh Gov Gavin Dick, National Residential Landlord Association Sam Rees, Royal Institution of Chartered Surveyors Rachael Hunnisett, Green Finance Institute Cenydd Rowlands, Dev. Bank Wales Simon Matthey, Principality Building Society David Ward, Tirion Homes Tom Boome, ClwydAlyn

Key areas of exploration

1. Wider availability and preferential fees for green mortgages with clear and robust criteria for eligibility
2. Recognition of the true value of eco housing development and recognition of lower running costs
3. EPC reform to focus on in-use performance and allow disclosure of accurate running costs to prospective buyers and renters
4. Stamp Duty Land Tax reform
5. Obligation for local authorities and other public sector landowners to use asset disposals to promote land value capture for net zero development

Key areas of exploration

6. Higher Carbon offset pricing by local planning authorities and better use of offset funds to promote net zero development
7. Increased government funding for community led housing and social housing built to higher standards
8. Preferential interest rates from government backed loans such as the Public Works Loan Board (PWLB) for net zero development
9. Reduced planning application fees for net zero housing development
10. More incentives from financiers for developers to build to higher standards

Training And Skills

Industry Advisory Group

Menna Lewis

24.04.24



The Training and Skills IAG has a wealth of knowledge and expertise.



- Menna Lewis – Welsh Zero Carbon Hwb
- Ben Whittle – Welsh Zero Carbon Hwb
- Julian Brooks – Welsh Zero Carbon Hwb
- Malcolm Davies – Welsh Government
- Catherine Bullough – House Building Federation
- Rhodri Williams – House Building Federation
- Oonagh Gavin – Neath Port Talbot Borough Council
- Lisa Thomas – Coelgau Cymru
- Tracey Jones – Welsh Government Skills Team
- Gareth Williams – Construction Industry Training Board
- Sophie Douglas – Universities Wales Association for HE in Wales
- Bethan Proctor – CHC Cymru
- Matthew Dicks – CIH Cymru
- Stuart Rattray – Building Engineering Services Association
- Wyn Pritchard- Leading Consultant in Net Zero Skills
- Alex Eslor – Qualification Wales
- Sian Lloyd Roberts – Regional Skills Partnership Manager, North Region
- David Price – Regional Skills Partnership, Mid Wales
- Jane Lewis – Regional Skills Partnership, West region
- Richard Tobutt – Regional Skills Partnership Manager, Cardiff
- Andrew Eldred – Electrical Contractors Association

Group's Objective

- The objective of the Skills and Training Group is to assess, develop, and implement strategies and initiatives related to skills development and training in Wales within Repair Maintenance and Improvement (RMI) and Construction sectors.
- The group aim is to enhance the skills, knowledge, and competencies of businesses, employees/members, enabling them to meet current and future challenges towards Net Zero effectively.



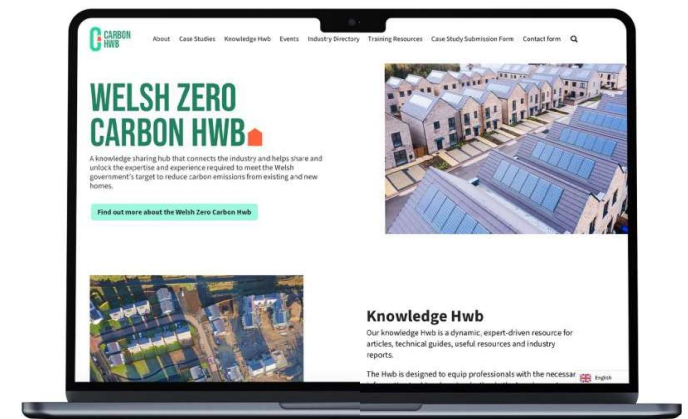
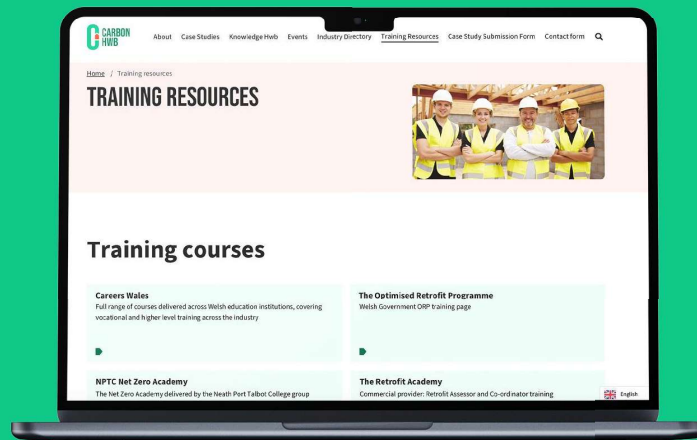
Progress to date



- First meeting held in November 2023.
- SharePoint site created to aid collaboration and communication.
- Chair to be agreed and appointed at next meeting.
- Terms of Reference and Scope agreed with IAG members.
- Working with Welsh Government Skills team conducting a mapping exercise of the skills and training available within Further Education. In an ideal world it would be great if this included Higher Education and private training providers but this is proving to be a challenge.
- Discussions of the challenges we face in Wales with the supply chain and upskilling staff. It will be interesting to hear your views in the break out sessions later which will feed into our wider work.
- Awaiting results of the Net Zero Skills Consultation and mapping exercise before arranging next meeting.



Thank you/Diolch



Supply Chain

Industry Advisory Group

Cat Griffith-Williams

24.04.24



The Supply Chain IAG

Expertise drawn across the entire value supply chain



- Julian Brooks – Welsh Zero Carbon Hwb
- Malcolm Davies – Welsh Government
- David Lorey – Denbighshire Council
- Jay Morgan - Carmarthenshire Council
- David Jaques – Cardiff Council
- Naomii Thomas – Cardiff Council
- Liz Jones – Cardiff Council
- Catrin Sneade – Cardiff Council
- Darrin Davies - Valleys 2 Coast
- Richard Mann - United Welsh
- Helena Kirk - North Wales housing
- David Hayhoe/Jason Wroe - Cadwyn housing & Newydd
- David Lewis – Clwyd Alyn
- Jade Lewis – Welsh Government
- Llinos Williams – Head of Residential Decarbonisation Policy Team
- Nicole Pike – Residential Decarbonisation Officer
- Ryan Price – WHQS Relationship Manager
- Brian Gould – Senior Housing Standards Technical Officer
- Peter Williams - .Gov
- Ann Marie-Smale - Powell Dobson Architects
- Barrie Davies – Asbri Planning
- Matthew Williams – McCanns
- Kassie Williams – Robert Price
- Ben Copson – Sustainable Energy Association
- Alex Hughes – MCS Certified
- Phil Mason – Trust Mark
- Stuart Jones - Wates
- Dorian Payne - Castell Group
- Luke Joyner- Joyners
- Mike Mills – EOMLtd
- Penny Haywood - SEWSCAP
- Simon McWhirter - Down to Earth
- Vince Hanly - Home Grown Homes & Procurement specialist
- Peter Draper – Rounded Developments
- Robert Chapman – Independent Sustainability Consultant

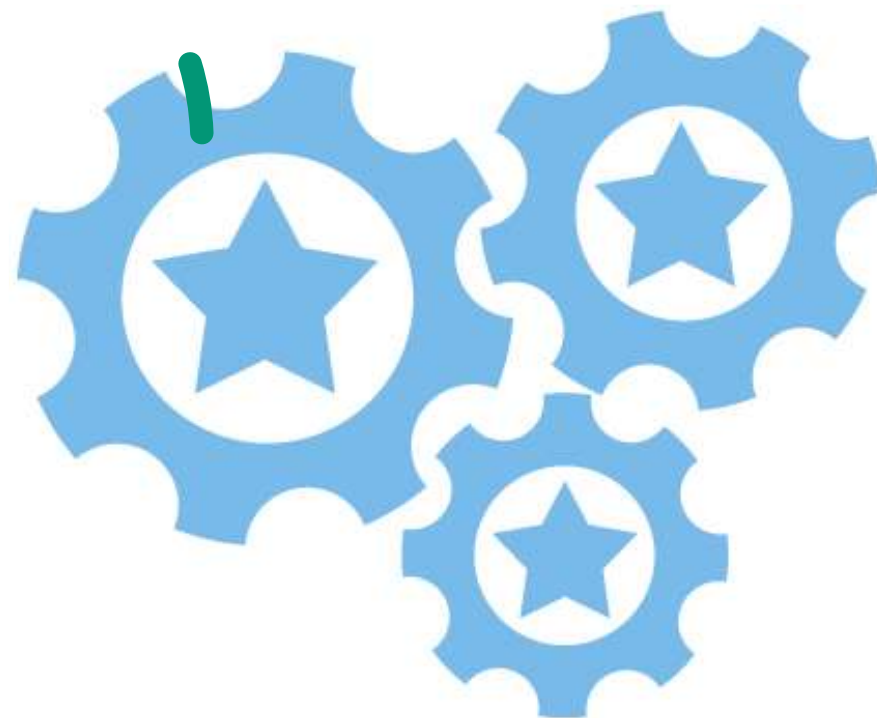
Group's Aim and Objective

- To ensure that the Hwb addresses the issues relating to Net Zero from a best practice perspective within the supply chain and that it provides the necessary information and knowledge in a clear and concise manner to the social housing sector
- To advise the Hwb and ensure its outputs and deliverables are directly relevant and helpful to the supply chain, Local Authorities and Housing Associations
- The group's aim is to inform the Hwb team enabling them to meet current and future challenges towards Net Zero effectively



Progress to date

- First meeting held on 11th April 2024
- Currently seeking expressions of interest for Chair, to be agreed and appointed at next meeting
- Terms of Reference agreed with IAG members
- Scoping exercise to look at priority areas and map any overlapping issues covered by the other IGA Groups to avoid duplication
- *Procurement & behaviours, Training & skills, best routes to achieve & comply with net zero, fabric first approach, availability of products & sourcing of material, retrofit to net zero, grid solutions, technology, renewable energy, land prices, carbon offsetting, additional benefits inc. biodiversity & health, circular economy, waste, MMC, offsite & prefabrication, user's journey, the need to look at the wider mechanisms to achieve net zero, like urban design, space planning, transportation and fleet*
- Encourage best practice case studies and ways to unearth lessons learnt



Thank you/Diolch



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Working with supply chains to drive sustainability

Effective supply chain engagement can really drive sustainability and innovation through project delivery. Ineffective engagement can lead to capacity issues and clients not getting the best solutions, but effective engagement can reap rewards.



Don't overlook smaller organisations

They can be more flexible, collaborative and willing to change and adapt to client needs. This means looking beyond traditional Tier 1s, consultants and advisors to seek out new ideas, innovation and really good practice.

Everyone needs to actively own project outcomes

There is often a discrepancy between what gets presented at bid stage and the reality of what is delivered. Effective contract management and managing tender commitments is essential to ensure good project outcomes.



Collaboration drives innovation

Working in a collaborative way e.g. through alliances can help drive new ideas. Finding innovative ways to engage the Tier 2, specialists and manufacturers can facilitate better solutions and outcomes.



Behaviours are key

Seek out supply chain partners that are adaptable and willing to work with you to deliver sustainable outcomes. This is not always clear at tender stage.



Enforcement

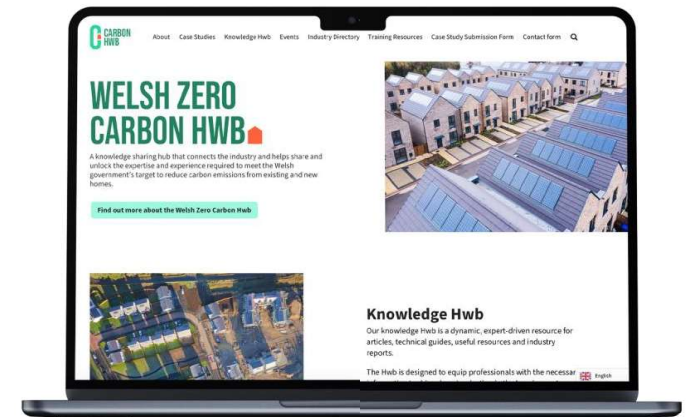
There are 'red card' systems for health and safety. Perhaps the same is needed for sustainability.

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Policy Forum

Julian Brooks

24.04.24



Group Details

- The objective of the Policy Forum is to collate the outcomes of the other IAGs within a policy context.
- Each IAG chair will have a seat on the Policy Forum
- Other members of the Forum have been selected and approved by the SG
- The Forum will meet twice a year and synthesise the work of the Hwb and the IAGs into an annual report for submission to the SG and our community of interest
- The Policy Forum will seek to inform WG and the Social Housing sector as to how Policy might develop and change to help achieve NZ outcomes at scale and at pace.



Q & A



Breakout for Industry Advisory Group Meetings



4 Breakout sessions chaired by:

1. **Finance Innovation** - Graham Sumsion and Cerys Williams
2. **Training and Skills** - Menna Lewis
3. **Supply Chain** - Cat Griffiths Williams and Ben Whittle
4. **Policy** - Julian Brooks

Question

“What are the issues and needs of your organisation on your journey to net zero”

- Spend 10 minutes on each of the following:
 - Positive and helpful issues e.g. increasing NZ skills development, clear policy drivers?
 - Negative and blocking issues, e.g. lack of suitably skilled workforce?
 - What are the needs of organisations e.g. easy access to a wide range of best practice case studies?
- Spend the last 15 minutes identifying how best can the Hwb help you to address the issues and needs to bring back to the main audience.

Feedback/ next steps





**Thank you for your time today,
we wish you a safe journey
home. Please stay in touch
with us by signing up via our
contact form**

**[www.zerocarbonhwb.cymru/
newsletter-sign-up](http://www.zerocarbonhwb.cymru/newsletter-sign-up)**

