

Welcome

With Summer solstice and the sun starting to shine, we want to further brighten up your day by sharing lots of great news about the positive progress we have been making delivering the Optimised Retrofit project.

Optimised Retrofit project partners continue to hit major milestones as;

- IES's are continuing to be installed
- We have over 100 Welsh businesses and tradespeople signed up to find out how to get involved in delivering the project
- Our first case study featuring residents and team members has been filmed with RSL partner ClwydAlyn
- The Climate Assembly has launched their report with an appearance on ITV's Sharp End

It's been a busy month so read on to find out more ...



Also in this Issue

- We have been featured in some exciting news articles
- CE Wales hosts an event introducing Optimised Retrofit to over 70 Welsh businesses and tradespeople
- BetaTalk episode 2 and 3 released of our sponsored podcast
- RSAW announces its final CPD event

Foundational Economy

Blaenau Gwent Climate Assembly report and recommendations published

A group of Optimised Retrofit project partners have now published their report featuring recommendations from the recent Blaenau Gwent Climate Assembly – the first of its kind to be held in Wales.

The Assembly was held virtually over two weekends in March and brought together over 40 randomly selected and demographically representative people living in the county borough to deliberate the very important question: “What should we do in Blaenau Gwent to tackle the climate crisis in a way that is fair and improves living standards for everyone?”

The Climate Assembly adopted five recommendations relating to transport, housing and green space, which achieved over 80% support.

These recommendations were written by the Assembly members themselves and informed by presentations from climate change experts.



You can view the recommendations and the report in full [here](#).

This report was drafted by Cynnal Cymru and the Electoral Reform Society Cymru, two of the organising partners behind the Blaenau Gwent Climate Assembly.

In September last year the Council officially declared a Climate Emergency in Blaenau Gwent.

Next week, all borough councillors will have the opportunity to hear from Blaenau Gwent Climate Assembly members about their recommendations and consider how they can take this agenda forward.

The Blaenau Gwent Public Services Board, which brings together organisations including the council, health, housing, police and the

voluntary sector, have committed to giving a written response to these recommendations at their next meeting in July.

This reflects the Public Services Board partners’ long-term commitment to Blaenau Gwent, promising to play its full part in taking action to achieve Wales’s target for Net Zero emissions by 2050.

Net Zero Opportunities

Refurbishment of Welsh homes is not just an ambitious Welsh Government plan to give people energy efficient homes and move towards net zero, it is a chance for the construction industry to recruit, train and get involved with a radical policy.

On Tuesday 8th June, Constructing Excellence in Wales (CEWales) hosted the second event of their programme Construction Opportunity Knocks; Optimised Retrofit - recruit, train and equip Welsh construction.

The event explained why decarbonising Welsh homes is so important and how this

first step in the journey might affect transforming another 1.4m homes in Wales to Net Zero.

It's the start of what will be a huge and vital undertaking and it will be led by the beating heart of Welsh construction: small builders, plumbers, electricians, builders' merchants and their suppliers.

The event was attended by more than 80 people and the speakers inspired plenty of questions and discussion, most notably, Paul Gibson, Director of Gibson STS Ltd, who gave an introduction on what being part of Optimised Retrofit means for an SME.

In it, Paul reassured SME's and tradespeople, saying 'To all the small businesses or one-man bands, it is important to note you upskill and retrain at your own pace when you can afford it, but we must all start diversifying our businesses, and this is where you can start. Energy efficiency is not the future, it is happening now.'

This is the perfect chance to get involved, register now!"

So, if you are an SME or tradesperson keen to get involved you can register your interest [here](#) or follow us on [Facebook](#) for project updates and further information.

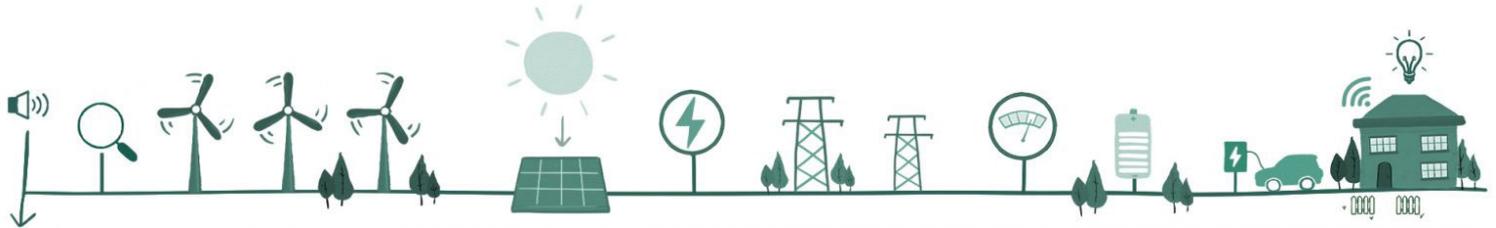


BetaTalk Podcast

We are now three episodes into Season 4 of the excellent [BetaTalk podcast](#), hosted by industry influencer Nathan Gambling.

As part of our mission to get the word out about Optimised Retrofit (particularly amongst future suppliers and tradespeople) – we are sponsoring Season 4 the podcast, which explores on-the-ground issues around technology, skills and training, with engineers across the country.

So, grab yourself a cuppa and give them a listen. Links below:



Episode 1



To Heat Pump
Hull & Back



Episode 2



Solar Thermal
Hybrid



Episode 3



Retrofit with PAS2035
and TrustMark

Events

RSAW Optimised Retrofit - Using the Pathway to Net Zero Tools Monday 5th July, 13:00 – 15:00



About this event

This session will cover:

- Start with a good survey
- Four Cs
- Whole Home Survey reminder
- Use the right principles
- What is Net Zero
- A marathon not a sprint
- Zero Carbon by...
- A planned maintenance approach
- Mapping a home's decarbonisation journey
- What is a Pathway to Zero?
- Building the Building Passport

Speakers

- **Colin King** Technical Lead - Retrofit & Construction, Sero
- **Alun Watkins** Project Manager, Sero
- **Andy Sutton** Co-Founder / Design + Innovation Director, Sero

Click [here](#) if you want to join us at the event!

We've Been in the News

We have had several in-depth industry media features lately, which highlight not only the importance of the Optimised Retrofit project but its potential impact.

Read Sero's Innovation and Design Director, Andy Sutton's, article for [LABM](#) in full below. We have also featured in [Construction Manager](#) and [Business News Wales](#).



Net zero housing

How do we do that? How do we make UK housing Net Zero?

Andy Sutton, Co Founder and Director of Design & Innovation at Sero, outlines the challenge facing politicians, councils, RSLs, policy makers and contractors and suppliers to retrofit our housing stock to deliver genuine decarbonisation.

Our homes need to change. The UK's homes and the activities within them generate about 40% of total national emissions.

What's more, the UK's Climate Change Act 2008 (extended in 2017) makes the requirement to decarbonise a legal obligation, as well as a moral and ethical imperative: "Net Zero" is the law.

New home construction rates rarely break 200,000 in any year, so decarbonising the existing 29m homes in the UK is the priority – and it is a retrofit problem.

But there are other issues – poor tools and understanding, few financial drivers, poor competency and quality plus the challenge of decarbonising the embodied carbon in the materials and retrofit process.

In the next few articles we'll unpick these, but we'll start with the tools assessing what Net Zero actually is.



No Legal Definition

Despite legislation, the UK does not have a statutory definition of Net Zero.

No precise legal definition means no proper understanding and no agreed tools or method for measuring what's net zero carbon – it unfortunately also means free reign for many claims of “green” and “zero carbon”.

The prevailing definition is by the UK Green

Building Council (UKGBC), which recognises that all carbon emissions from energy usage and occupancy of a home should be considered as part that home's carbon footprint.

This is not in line with existing UK regulatory tools and certification schemes. The most important of these is the Building Regulation's 'Standard Assessment Procedure' (SAP), and

for retrofit the little sibling RdSAP (reduced data...).

These are the statutory mechanism used to confirm the energy performance of buildings are above a notional minimum level.

Every home in the UK must have a SAP score and consequential Energy Performance Certificate (EPC) – but it's the wrong tool for assessing Net Zero.

SAP uses an energy metric to assess space heating demands and hot water needs, converting to carbon only as a yearly output based on an historic average annual carbon factor.

But it is blind to the ongoing decarbonising of the national energy grid and ignores the differences in the carbon emitted depending on when electricity is used.

SAP's normalisations of climate and occupancy, which are right for assessing legislative compliance with a minimum performance level, are for the same reason wrong for forecasting any individual cases.

This is why the advice on the back of EPCs is so famously bad – it's the retrofit equivalent of averaging complex dietary and nutritional advice down to “an

apple a day keeps the doctor away”.

SAP ignores the unregulated energy use that's plugged in by the occupants, which is around a third of the energy used in a modern home.

UKGBC's definition of Net Zero, and our planet's atmosphere, doesn't exclude the impact of unregulated energy.

Carbon Savings

Using the wrong tool for the job leads to poor outcomes.

It means that photovoltaics dumping generation on the grid when it doesn't need it will score you SAP points, but batteries that help to balance the grid gets you nothing.

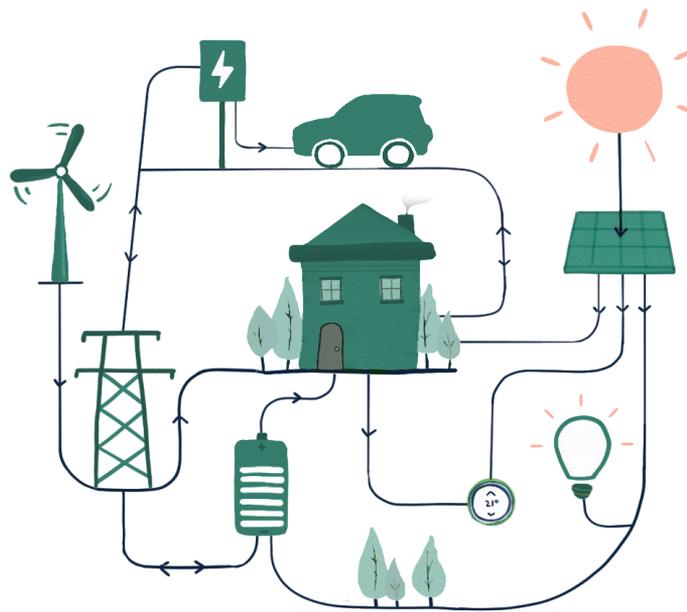
It means that athletic, jumper-wearing couples are told to spend thousands on insulation

that will actually save them grammes of carbon (and pennies), not on a large hot water tank heating overnight that could save them kilogrammes (and pounds).

It means that manufacturers chase points not carbon — products claim to 'achieve 2 SAP points' but rarely do these deliver genuine carbon savings.

This isn't to say SAP and rdSAP are bad tools, they are in fact very good ones for what they were designed to do.

But you don't put a screw in with hammer: SAP might nail minimum energy compliance, but we're all screwed if we use it to try and deliver Net Zero.



We Want to Hear From You!

If you have any questions or want to find out more about the Optimised Retrofit project, then please get in touch:

Visit: [Optimised Retrofit – Sero Group](#)

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