



Government challenges.
Ideas from business.
Innovative solutions.



Gwasanaeth Ynni
Energy Service

Cefnogi ymdrech Cymru i greu economi sero net llwyddiannus
Supporting Wales' drive to a successful net zero economy



Llywodraeth Cymru
Welsh Government

Briffio Cystadleuaeth Her Rhaglen WSRID 1.0 Byw'n Glyfar Llywodraeth Cymru

Welsh Government Smart Living WSRID 1.0 Programme Challenge Competition Briefing

10.00 – 12.00 13/9/24

Cyflwyno rhaglen ariannu WSRID Llywodraeth Cymru
Introducing the Welsh Government WSRID Funding Programme

Today's agenda

- | | | |
|----|---|-------------------|
| 1. | Welcome and onboarding | 10:00am – 10:05am |
| 2. | Introduction to WG Smart Living Scheme | 10:05am – 10:15am |
| 3. | WSRID 1.0 Challenge – Call for innovative proposals | 10:15am – 10:30am |
| 4. | WSRID Phases and timelines | 10:30am – 10:50am |
| 5. | Questions and comfort break | 10:50am – 11:00am |
| 6. | Challenge case studies | 11:00am – 11:30am |
| 7. | Questions and meeting closure | 11:30am – 12:00am |

WG Smart Living Scheme

The Welsh Government's decarbonisation innovation initiative, established 2015.

Core aim to catalyse and support diverse pre-market innovative decarbonisation projects, focusing on place-based and needs-led solutions that require trialling in the real world before they can be adopted and rolled out at scale.

Also to accelerate the development of innovative activities by providing a continuous pathway from concept to pilot for innovation in decarbonisation, removing barriers.

Scheme mission reviewed and refreshed through research and recommendations developed by DG:Cities and tested by key WG internal policy sponsors in June 2024.

Mission:

- Catalyse decarbonisation innovation solutions to place-based and needs-led issues.
- Develop concepts and designs for building net zero carbon decarbonisation pathways using whole system designs across multiple sectors and vectors.
- Bridge known market failures affecting the ability of business innovation to flourish and provide solutions by connecting businesses with public bodies and academia.
- Engender broader functional interactions between actors, buildings, networks, natural and engineered infrastructure to enable sufficient scope for systems analysis providing robust solutions for place-based issues on a modular basis.

Rationale, Themes & Policy Fit

The WSRID programme is informed by and continues to be framed by a set of key strategies, policies and programmes:

- **The goals outlined in the Welsh Government Innovation Strategy and Delivery Plan, including the Environment and Nature goals.**
- **The Welsh Government's Economic Mission: priorities for a stronger economy.**
- **Stronger, fairer greener Wales: net zero skills 2023.**
- **The Climate Action Wales: Public engagement strategy 2023 to 2026.**
- **The Wellbeing for Future Generations (Wales) Act 2015**
- **The Just Transition Framework**
- **The New Warm Homes Programme: policy statement**
- **The Net Zero Wales Carbon Budget 2 and the associated Welsh Government Net Zero strategic plan**

WSRID complements Ynni Cymru's objectives to expand locally-owned renewable energy used and generated in Wales and to accelerate the transition to and deployment of Smart Local Energy Systems (SLES).

WSRID promotes a Whole Systems Approach

- Fosters networks of innovation to support public sector bodies and partner organisations to deliver projects within local contexts.
- Connects system actors to encourage knowledge exchange and capacity building.
- Provides a platform for collaboration amongst stakeholders, including between Welsh Government and industry.
- More effectively identifies system-wide funding and/or resource gaps to reduce the risk of duplicated efforts.
- Gives greater clarity on Welsh Government's priorities, which in turn increases the confidence across industry.
- Increases the productivity and reduces the negative environmental impacts of an engineered system.

WSRID complements LAEPs & REPs

The 6 important energy system themes of the **Local Area Energy Planning** and **Regional Energy Planning** reports are essential for WSRID:

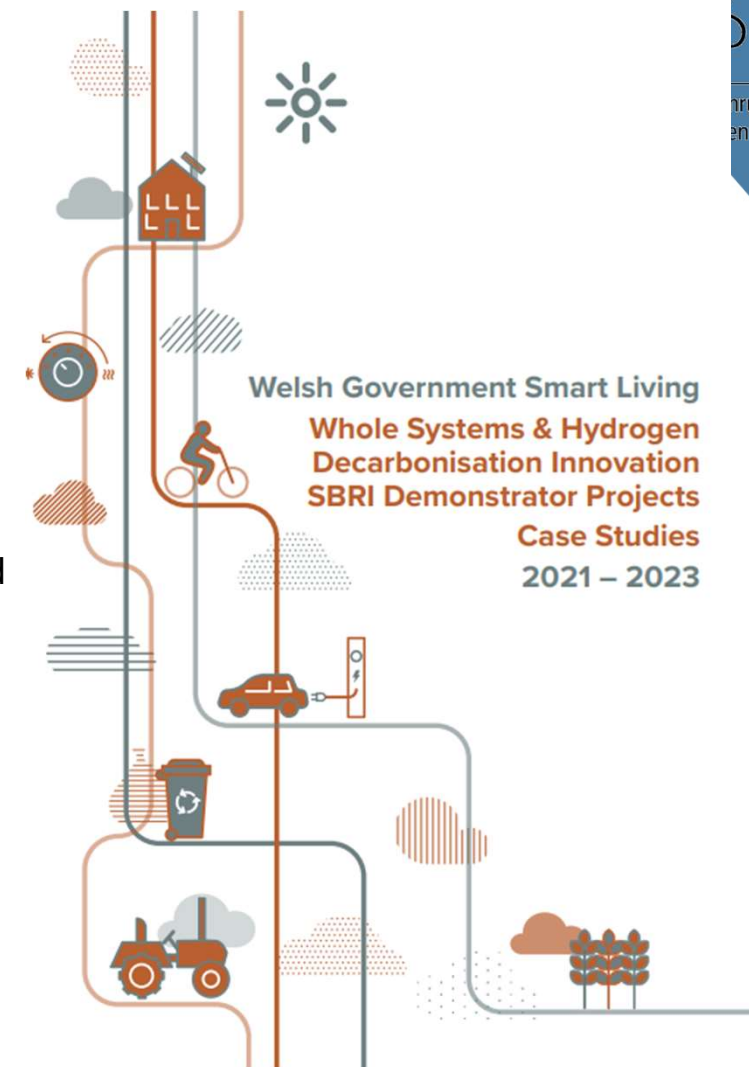
1. Decarbonising heating in homes, prioritising those households that are experiencing or at risk of fuel poverty.
2. Electrifying passenger transport infrastructure and services.
3. Making active travel and public transport the mode of choice through developing smart, integrated transport networks.
4. Maximising Wales' potential for onshore renewable generation whilst retaining local ownership and benefits.
5. Decarbonising key industrial clusters across Wales.
6. Invest in additional capacity on the electricity network where it is needed most.

WSRID - Challenge Led Innovation

- Delivered using the SBRI Contracts for Innovation Challenge Owner model.
- UK's pre-commercial procurement framework that offers organisations and businesses a unique opportunity to work directly with the public sector to develop new solutions for public sector challenges and/or needs.
- Enables the public sector to engage with innovative suppliers, co-create and test solutions in real-world situations.

See case studies:

<https://www.gov.wales/sites/default/files/inline-documents/2024-08/smart-living-case-studies-small-business-research-initiative-sbri-demonstrators.pdf>



WSRID – Phases

WSRID 1.0 follows SBRI model for delivery in two phases, with a preliminary application process to identify distinct innovation challenges, and suitable public sector organisations to act as “Challenge Owners”.

- **Challenge identification by Public Sector organisations** (this application).

A fund of £500,000 for up to five Challenges.

- **Competition Phase One (3 months).**

The appointed Challenge Owners will then run a competition to identify innovative projects to address their chosen challenge, to run for 3 months and to procure suppliers.



WSRID – Phases

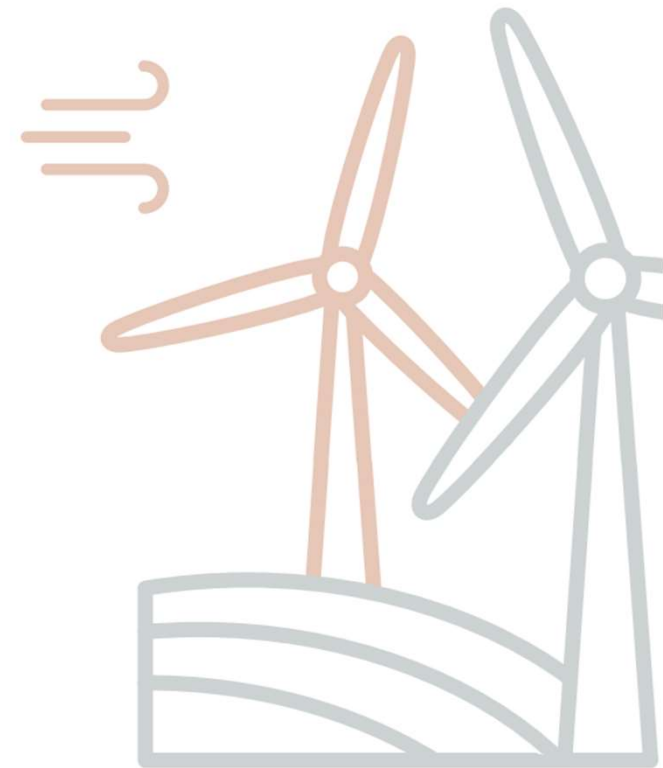
- **Competition Phase Two (12 months)**

The main research and development effort takes place in Phase Two in FY 2025-2026, which aims to produce a well-defined prototype or demonstrator for each selected innovation.

At the end of Phase Two it is intended that what has been developed will be manufactured and marketed as a way of fulfilling requirements. Projects which successfully complete Phase Two should have a pathway to commercialisation.

Contract award: A total of £1.5 – 2 million is anticipated to be available across the demonstrator projects in Phase 2.

Intervention rate: 50-100%



WSRID – Phase 1 timeline

The following table summarises key dates* for the WSRID 1.0 Programme up to Phase 1 completion:

Open date	Monday 2 September 2024
Online Briefing event	13 September 2024
Close date	30 September 2024
Interviews with Challenge Owner applicants	Week beginning 7 October
Decision Release	14 October 2024
Funding awarded to Challenge Owners	17 October 2024
Feedback provided	17 October 2024
Phase One Commences – Project Supplier Procurement	18 October 2024
Phase One Projects Delivered	Monday 31 March 2025

The competition for Phase 2 projects will run in the financial year 2025-2026.

*All dates may be subject to change

Challenge case studies – Bridgend

Low carbon energy consultant, Challoch Energy, in collaboration with Bridgend County Borough Council (BCBC), created a concept for a totally self-contained energy network in a small village, where homes can be powered by renewables, with surplus energy 'traded' within the village.

The project was supported by Welsh Government Smart Living's Whole Systems Innovation Research for Decarbonisation (WBRID) SBRI programme, as a local authority-funded demonstration project to set up a local energy market (LEM), trading in locally produced and consumed renewable energy for the benefits of residents.

Bridgend Village Creates Local Energy Network To Power Net Zero Homes



Challoch Energy and NuVision Energy team with local councillor and resident of South Cornelly during home installation of solar panels.

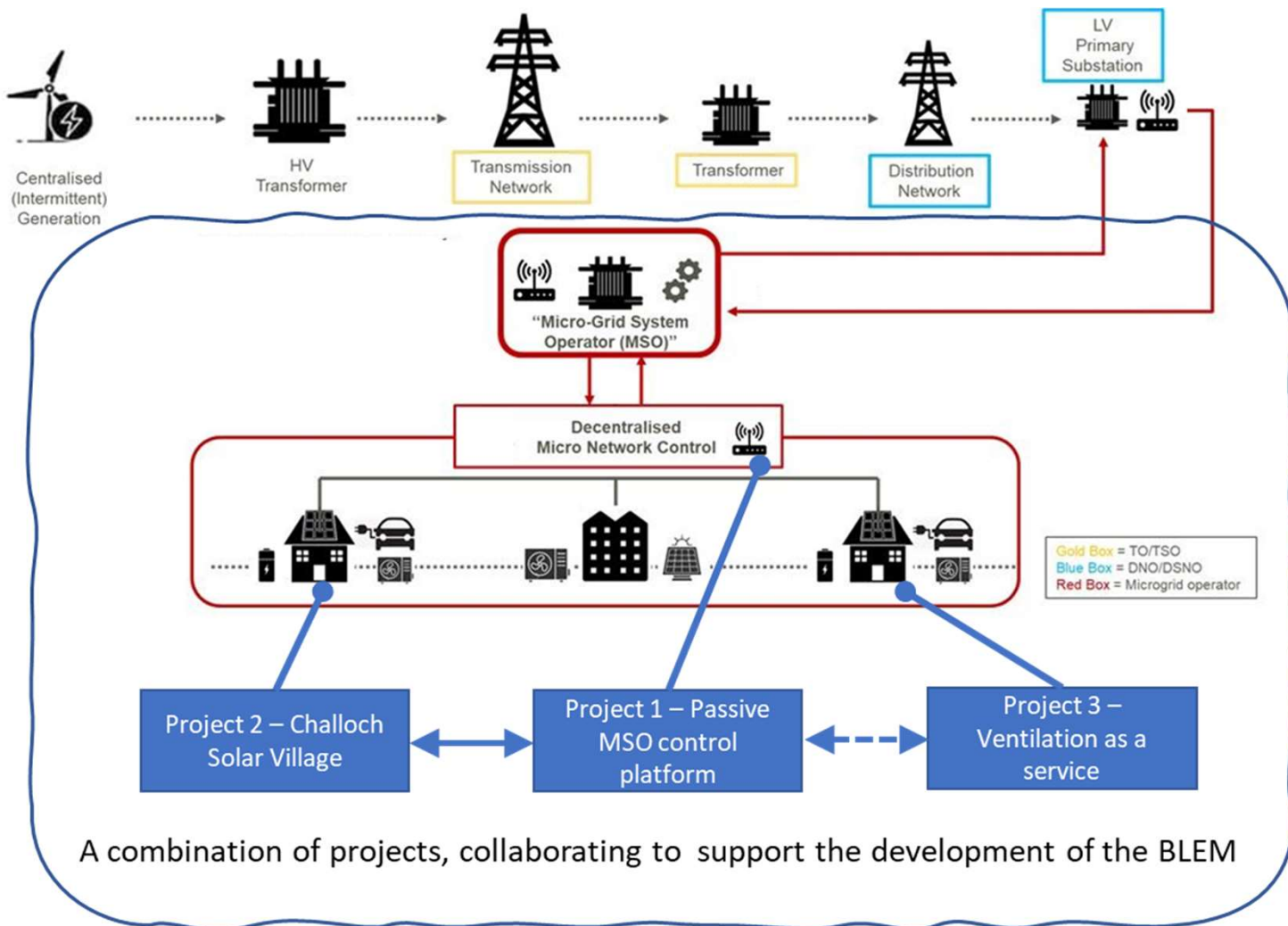
Bridgend Council SBRI Demonstrator Experience

Bridgend County Borough Council
Cyngor Bwrdeistref Sirol Pen-y-bont ar Ogwr

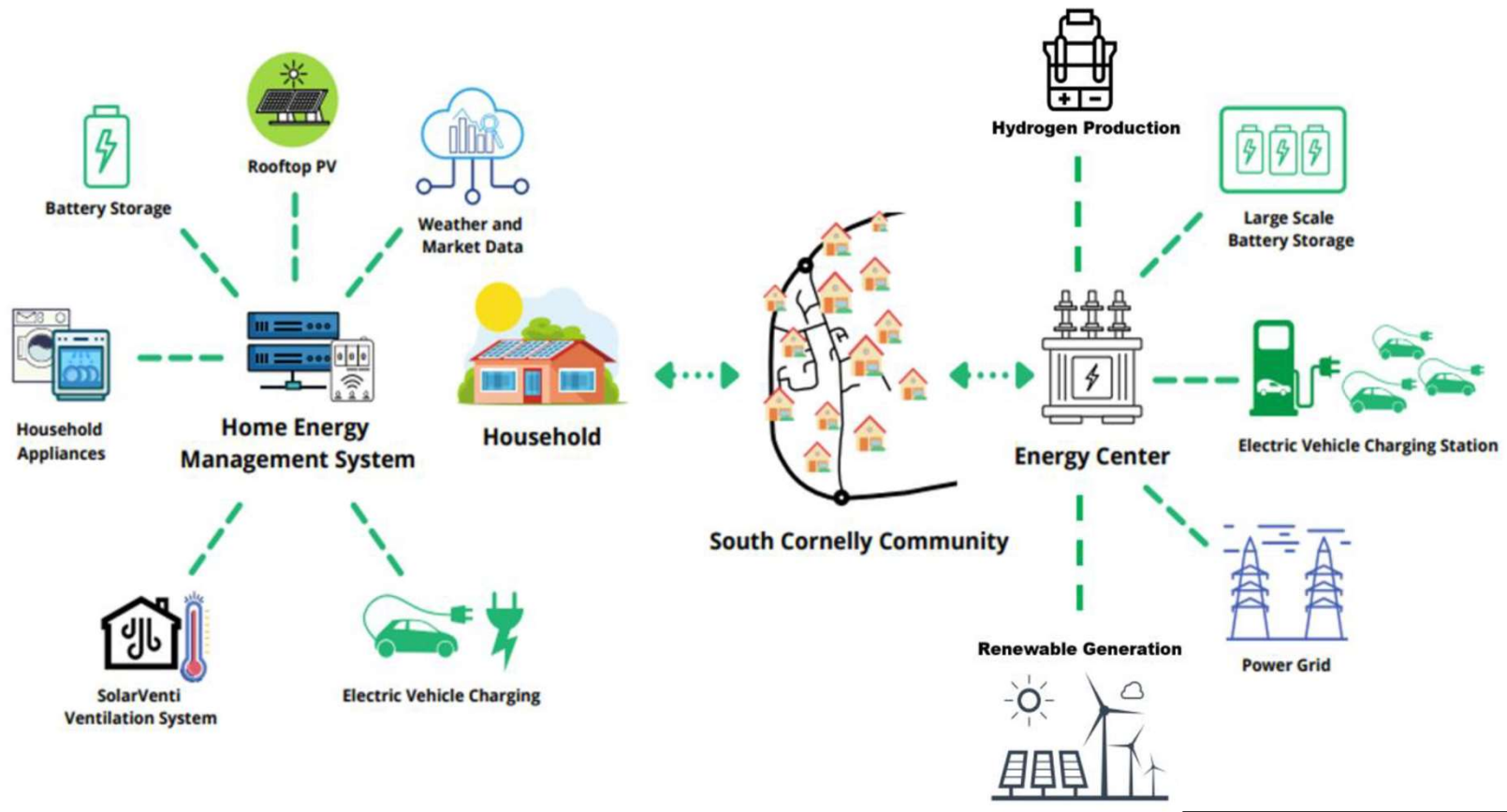
The Challenge

- Demonstrate innovative propositions creating a suitable testbed for a Local Energy Market
- Develop and prove a mechanism to determine its viability
- Enabling and accelerating the journey towards creating an integrated, local trading platform
- Play a part of an energy revolution pathway to Net Zero.





South Cornelly Net Zero Village



Challenge case studies – Blaenau Gwent

Blaenau Gwent County Borough Council (BGCBC) embarked on an ambitious project funded under the Welsh Government's Smart Living Whole System Business Research Innovation for Decarbonisation (WBRID) SBRI Challenge.

This initiative, aimed at developing a Smart Industrial and Commercial Energy Platform Model, highlighted the critical role of collaboration between local government, innovative suppliers, such as StorTera and BankEnergi and sustainable businesses embedded in the community in driving net zero energy solutions within business parks.

Powering Progress: Blaenau Gwent's Bold Leap Towards Net-Zero With Innovative Energy Solutions



Roseheyworth Business Park, Abertillery.



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SBRI Government challenges.
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Questions and meeting closure



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SBRI

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**Diolch am gymryd rhan
Thank you for participating**

**Rhaglen Byw'n Glyfar Llywodraeth Cymru
Welsh Government Smart Living Scheme**