



Active
Building
Centre

ABC Case Study: Innovative Housing Programme (IHP)



Innovative Housing Programme (IHP)

Location: various throughout Wales

Client: Welsh Government

Principal supplier: Tyrrells Systems

Background

IHP (Innovative Housing Programme), operated by the Welsh Government, provided funding for developers to trial innovative housing schemes. Working with Swansea University Research Programme (ABC RP), ABC provided £850k of project investment funding delivered over two phases involving 350 various types of homes. A sample of the Registered Social Landlords and Housing Association we are working with are Caerphilly County Borough Council, Coastal Housing Group Ltd, Flintshire County Council, Isle of Anglesey County Council and Monmouthshire Housing Association.

The evaluation of monitoring data gathered will be conducted on behalf of the Welsh Government by ABC Research Programme using anonymised data. This will be analysed and stored on ABC's database to inform R&D packages.



Project information

IHP has been operated by the Welsh Government for several years and provides funding for developers to trial innovative housing schemes. Only open to registered social landlords (RSLs), the programme aims to:

- increase the supply of affordable housing in Wales.
- support the seven goals enshrined in the Well-being of Future Generations (Wales) Act 2015 (WFGA).
- address cost and value in new homes, and develop housing that meets current and future housing needs.
- support innovators through the use of alternative approaches and demonstrate the benefits of such approaches to encourage uptake.
- harness opportunities to deliver jobs, skills training, and develop local industry.
- publicly disseminate key findings and maximise learning

ABC activity

- £850K whole of project investment funding from ABC over two phases.
- Provision of home-monitoring equipment to 350 homes.
- Working with Tyrell Systems Ltd (TSL) to provide a monitoring solution for three types of domestic systems incorporating renewable technologies, PV, Battery Storage, ASHP, GSHP, MVHR.
- Supporting TSL, Active Building Centre Research Programme and RSL representatives and their installation contractors.
- Delivery and installation documentation.
- Two-year remote data monitoring and warranty provision.

Benefits

This project will help build the evidence base for deploying innovative and energy efficient solutions in residential homes. It will also inform future IHP schemes and wider policy development. It has highlighted the inconsistencies in the development of buildings by social landlords and council across Wales. It emphasises the need for one common methodology and standard to be applied consistently across all developments.

Participation in year one of the IHP had shifted attitudes towards innovative approaches to construction among both developers and construction partners. They were proud of the products they had delivered and felt the standards achieved through the IHP had set the bar higher for future schemes. Moreover, IHP funding gave developers confidence and financial 'safety nets' to adopt more innovative approaches than they otherwise would have.

Apprenticeships and partnerships with local colleges provided specialist labour for some schemes and also supported local employment aims.



Lessons learned

- Unconventional forms of development may face additional challenges in the planning process or represent uncharted territory and there may be learning to do on the part of local planning authorities to prepare for such applications. Developers can help with this through early dialogue with planners and planning committee members, providing detailed information about their preferred construction approach and the advantages it offers.
- Early dialogue between developers and local authority planning teams can help to resolve tensions between the importance of high quality placemaking versus the operational objective, held by many social housing providers, to maximise the number of units provided at a time of housing shortage.
- Supplier engagement upfront is important and helps to mitigate risks and delays.
- Many developers concluded that they should have spent more time scoping local supply chains at the outset of the project, before they imported materials or deferred to their architects to identify suppliers on their behalves.
- A clear building performance and monitoring strategy should be identified and agreed from the start.
- There are a lot of options in the market to provide monitoring solutions. However, it is still challenging to find off-the-shelf solutions that require little bespoke interventions and that are affordable. ABC is working closely with the supply chain to drive this agenda forward.
- High and unpredictable build costs may act as a disincentive to developers delivering innovative schemes at scale in the short term, although it was accepted that build costs are likely to come down as innovative approaches are mainstreamed and processes become refined.

For more information on IHP, see the research published by the Welsh Government on its early lessons.



For further information on the work of ABC, download the **ABC Blueprint - Our approach to net zero**

