IHP Design Review Report
Parc Eirin, Tonyrefail
DCFW Ref: IHP C
Meeting of 8th June 2018
Declarations of Interest

Panel members, observers and other relevant parties are required to declare in advance any interests they may have in relation to the Design Review Agenda items. Any such declarations are recorded here and in DCFW’s central records.

Mark Hallett is a Design Review Panel Member and has worked with David Ward on other projects in the past. Steve Smith is a Design Review Panel Member but also works for Swansea Council who regularly bring their own schemes to design review. He has also worked on other projects with Pobl Group and previously worked at RCT Council. The panel Chair was advised that Gayna Jones, Chair of the Design Commission for Wales, chairs the IHP Group and has recently been invited to join the board of Directors of Tirion. Gayna was not present in the meeting. All present at the review were content to proceed following the declarations.

The Proposals

Parc Eirin will represent the first large scale Energy Positive housing development in the UK, the project will aggregate and share energy to benefit consumers and the electricity network. The scheme will provide a minimum of 50% affordable housing using an innovative finance strategy.

Parc Eirin was originally designed as a traditional housing scheme with an emphasis on affordable housing. The scheme will be further developed into an Energy Positive development where the energy demands of the homes on an annual cycle are met through renewable energy, storage and intelligent control of appliances and electric vehicle charging. The homes will feature innovative building integrated technologies that generate, store and release both heat and electricity plus, in part, modular housing techniques. All of the above will be achieved within the constraints of the existing design and planning permission with a look and feel that is familiar to consumers.

Main Points

This report is not a record of the full discussion that took place during the review, rather a summary of the key points that have been identified that would help to improve the project and any concerns regarding the funding of the project.

Urgent Design Concerns

- A dated masterplan and reserved matters have already been granted planning permission. This presents a conflict between the standard volume housebuilding approach which has permission and the contemporary methods of construction and exemplar placemaking which are now desired.
- The approved scheme does not represent good design practice in terms of location, layout and unit design, but the energy system proposed is innovative and it would be good to test this at scale.

**Placemaking**

*Design for community*

Although the scheme already has planning permission, any opportunities for improving the sense of place and community should be taken at this stage. Opportunities might include:
- Inclusion of a community shop
- Integration of play areas
- Provision and improvement of joined up active travel routes
- Increasing connectivity with surrounding communities and facilities
- Provision of purposeful open space which encourages social interaction
- Increasing visibility, integration and positive impact of open spaces and community facilities, including allotments
- Taking advantage of existing site features and expressing these
- Moving away from mono-culture housing on isolated sites

**Informative site and context analysis**

It should be demonstrated that good analysis of the site and context has informed the design process. DCFW’s guide for Welsh Government, Site and Context Analysis: Capturing the Value of Site, can be found here: https://gov.wales/topics/planning/policy/guidanceandleaflets/site-and-context-analysis-guide/?lang=en

**Landscape design and management**

The system for management of the shared landscape should be considered at the design stage. There may be opportunities to bring the community together to manage parts of the landscape.

**Architectural language**

It would be more efficient and cost-effective to remove the ‘traditional pastiche’ features of the housing and simplify the design.

Ideally, and for future projects, the architectural language would result from a process which optimises site layout, orientation, passive design and is derived from the contemporary construction methods and integrated energy systems used.

**Integration of innovation**

Innovation approach: The most innovative aspect of the project is the testing of the proposed integrated energy package on a scheme with a large volume of units. It will be good to use this project to test and gather data to reduce risk on future projects and improve performance of the system. Such systems could be beneficial in minimising energy bills for those most at risk of fuel poverty in the south Wales valleys.

Whilst the masterplan and housing design are dated and flawed, this project could be a useful step to finding a viable and different pathway to delivering volume housebuilding
with an innovative and integrated energy system. Future projects would benefit from a first principles, passive environmental design approach in addition to the technical package.

The financial model for delivery of the energy system is interesting and innovative. Discussions with ‘green’ mortgage providers is encouraged.

Modular construction which integrates with the technology system is also innovative but, perhaps, secondary to the delivery of the system at scale.

Using modular construction to deliver housing which ‘looks and feels’ like standard volume housebuilders’ traditional pastiche does not represent forward thinking. It would be more positive to embrace the contemporary approach to construction in the architectural language.

**Next Steps**
- Revisit the approved scheme and maximise opportunities for design improvements, good placemaking and building a sense of community; making sure decisions are based on good analysis of the site and context.
- Integrate the Control Solar Energy Processors with the public realm/garden design.
- Ensure site response and placemaking strategies are clearly presented alongside the technology/energy strategy.

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**A Welsh language copy of this report is available upon request.**

**Attendees**

Agent/Client/Developer: David Ward, Tirion Homes  
                        Rhys Parry & Mark Trounce, Pobl Group

Energy Consultant: James Williams, Sero Homes

Local Planning Authority:
Design Review Panel:
Chair
Panel
Simon Richards  
Ed Green  
Wendy Maden  
Mark Hallett  
Angela Williams  
Amanda Spence