The Story

The project is seeking to develop a low carbon energy system for a new build housing scheme that utilises shared ambient borehole clusters and dwelling level ground source heat pumps. This will be supported by solar (thermal & PV) generation to reduce dependency on imported grid-based energy, reduce carbon emissions and manage energy costs. The project aims to develop the energy plant in an external energy module to enable off-site assembly, increase the scope for standardisation and reduce the footprint of the energy plant within the building for wider applications.

Challenges & Risks

eQuality Homes has secured an option for the land and planning consent for 22 new build units (subject to s106) and is currently working through the emerging requirements relating to nutrient neutrality which has recently impacted the project.

Lessons Learned

We’re still learning lessons and adapting the concept and the design as the scheme develops, but flexibility and adaptability to deal with changing circumstances and requirements remain key.

Key Figures

- **Project size:** Heat pumps 4 – 7 kW /property
- **Tech type:** Solar PV: 4 – 7 kWp /property
- **RCEF grant**
  - Stage 1: £24,750
  - Stage 2: £99,750

Key Facts

- **Ambient loop**
- **Heat pumps**
- **Solar PV**
- **Solar thermal**

Further Notes

- **LEP area:** North West Hub
- **Link for further info:** [www.equalityhomes.co.uk](http://www.equalityhomes.co.uk)