# ENERGY HOUSE LABS





## ENERGY HOUSE LABS NEWSLETTER

**ISSUE 5 DECEMBER 2021** 

#### / WHO WE ARE

The University of Salford's Energy House Laboratories helps businesses understand how effective their products and services are in lowering consumers' carbon footprint and reducing energy bills. Our research facilities include:

- Salford Energy House
- Energy House 2.0
- Smart Meters>Smart Homes Laboratory
- Thermal Measurement Laboratory

#### / CONTACT US

If you have any questions email **us** at energyhouse2@salford.ac.uk or call 0161 295 0073

- @ehl\_salford
- @energy\_house2
  energyhouse2.com

The Energy House 2.0 project is part-funded by the European Regional Development Fund



### / Research Partnerships in Energy House 2.0

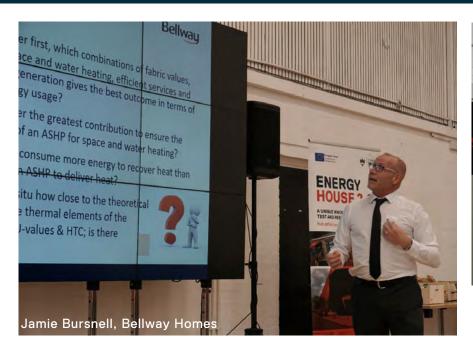
With the Energy House 2.0 on course for completion in March 2022, over the past few months we have been in discussion with a number of organisations about potential research projects within this unique facility.

Under the ERDF funding we are able to offer access to Energy House 2.0, at no cost, for collaborative research and the intention is to build four houses within the two environmental chambers. These houses will form the basis for in-depth research projects around low carbon homes that will run throughout 2022.

To date, we have secured commitments to build properties in the Energy House 2.0 chambers from Bellway Homes, a partnership led by the English Cities Fund (ECF), and a joint venture between construction materials manufacturer Saint-Gobain and Barratt Developments.

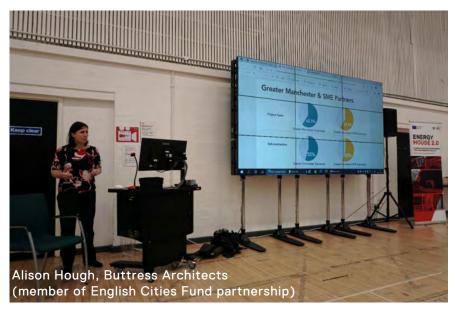
On the back of these commitments a Research Partnership event was held on 12 November 2021, where Greater Manchester companies were given the opportunity to pitch their technologies and ideas with a view to them being incorporated into the future research and testing programmes in Energy House 2.0.

In total, 22 companies presented their ideas which were very wide-ranging covering technologies such as, control systems, low carbon heating solutions, heat recovery, LED lighting, EV charging and low carbon concrete. Over the next few weeks we will be working hard to incorporate as many of these ideas as possible into the future research in the Energy House 2.0.











## **MEDIA UPDATE**

You may have seen Dr Richard Fitton from Energy House Labs on the following shows recently to discuss all things energy efficient:

- The One Show
- BBC Breakfast
- This Morning
- BBC North West

We've also been talking about low carbon heat pumps and how to be net zero in the home on BBC Radio.

You can see Richard discussing energy efficiency on The One Show <u>here</u>.

If you would like one of the Energy House Labs team to speak at your event, please contact <a href="mailto:energyhouse2@salford.ac.uk">energyhouse2@salford.ac.uk</a>











#### / Barratt Z House

The Z House is a great example of how Energy House Labs can work with industry to research the latest innovations in energy efficient housing. Built on the University of Salford's Peel Park campus, it is the first home in the country to be built by a major housebuilder that goes substantially beyond the Future Homes Standard.

Energy House Labs will test and monitor sustainable housing technology such as an air source heat pump, infrared panels, heated skirting boards, air-powered showers, electric vehicle charging points, PV solar panels and battery storage. Importantly, a University student will live in the house to give a true representation of an occupied dwelling. The Z House, built using modern methods of construction, is part-funded by government and has been developed in partnership with over 40 leading organisations from across the housebuilding, sustainability and technology sectors, helping to broaden knowledge with lessons learnt shared across the industry.



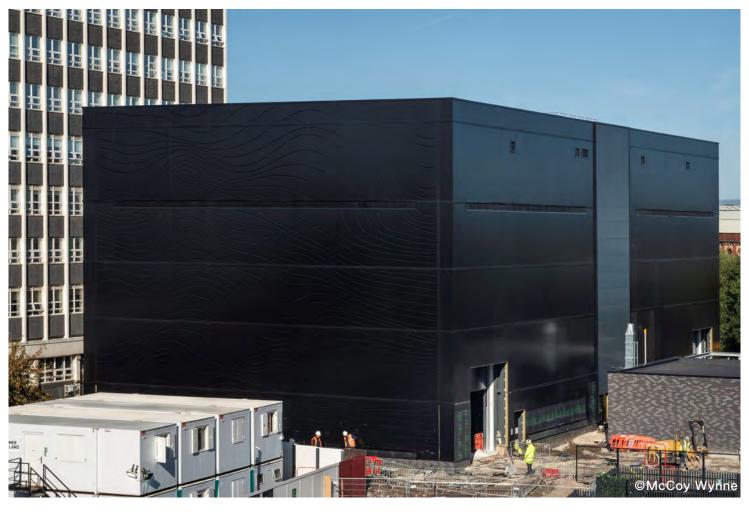


Further details can be be found here.









## / Energy House 2.0 Construction Update

With the main building works almost complete, bar decoration and some minor wiring works, the complicated and challenging tasks of commissioning the HVAC began at the end of November. This will see the chamber and HVAC tested to its absolute limits with temperatures ranging from -20 $^{\circ}$ C to +40 $^{\circ}$ C. We will examine accuracy repeatability and pace of change.

Following this, the fun will really begin when we start to commission the wind, rain, solar, and snow systems in the new year. Once these have been installed, we shall be joined by our housebuilder partners, who are due to start construction in early spring 2022.















#### / Friends of Energy House 2.0

We are excited to announce the launch of a brand-new impact-driven community: Friends of Energy House 2.0. We are inviting organisations and individuals dedicated to tackling the climate emergency to join together in collective action and support our new Energy House 2.0 Impact Fund.

Friends of Energy House 2.0 is all community impact, and how much more we can achieve through working together. This brand-new programme is founded upon philanthropy. We are asking contributing members to donate at a level of £5,000 or £10,000 to a newly founded Impact Fund. This Fund will be focused on 3 key areas:

- 1. Diversifying the energy efficiency workforce through supporting Women in STEM PhD studentships
- Powering educational outreach programmes within local Schools around the topic of climate change to enhance curriculum content, support teacher training and inspire the next generation
- 3. Accelerating local community initiatives on our doorsteps helping in the drive to net zero.

Through becoming a Friend, you will be a part of an innovative new community, accessing a great network and opportunities linked to Energy House 2.0 as it opens its doors in early 2022.

We already have a number of organisations signed up, committed to supporting our city region's path to net zero by 2038. If you are interested in learning how you can get involved, have a look <a href="https://example.com/here">here</a> or contact Sophie Ball on s.l.ball1@salford.ac.uk.

