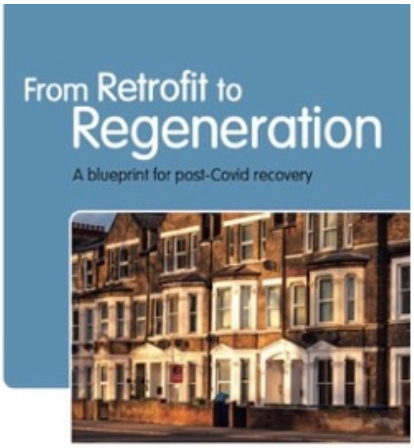
# SPAB / STBA Annual Conference 2021 (summary)

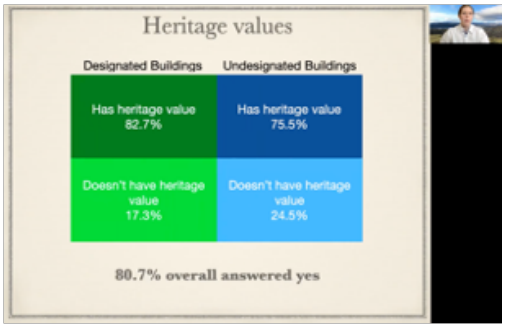
## Day 1: Retrofit Tools and Solutions (Chaired by STBA Director Peter Draper)

Keynote Speaker, **Lynne Sullivan OBE** gave a balanced overview of **UK's Retrofit Policy** took in the Climate Change Committee's 2021 Progress Report and, the need to "accelerate transition". She stressed the financial incentives required and this came too from a less common source in the former Governor of the Bank of England, Mark Carney, suggesting, how we can "create an ecosystem in which society's values broaden the market's conceptions of value".


**Nigel Griffiths** unveiled the latest STBA paper: '**From Retrofit to Regeneration'.** As author, Nigel enthused on localism, community spirit, and contingencies in meeting the targets set by decision-makers for the retrofitting and regeneration of our homes. Outlining the merits of focused and considerate strategies he emphasised how this paper could enable works to traditional homes with skilled personnel and, with significant input from people who live in them.

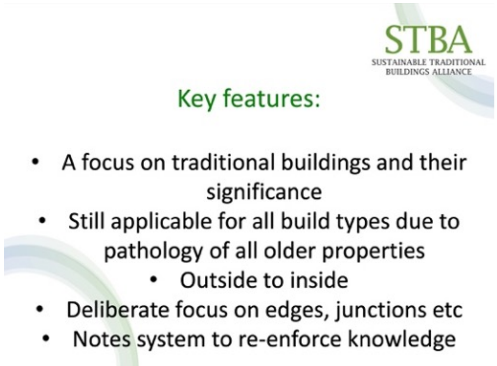


**Freya Wise** from the **Open University** presented us with '**Retrofitting residential heritage buildings: remember the people'** which pinpointed the importance of community engagement with retrofitting heritage buildings. This work was undertaken in Cumbria and reported on "the views, values and behaviours of residents of older buildings". Amongst her findings was the number of homes which were not designated 'heritage' buildings but were felt to be historically significant by their owners. This suggests a broadening of the definition 'heritage' and the types of retrofit that are treated as 'protected' needs to be considered.

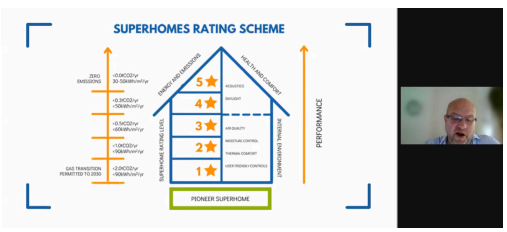



**Professor Will Swan** presented the '**Salford Energy House**' – a purpose built house/laboratory, with multiple retrofit test scenarios including **BEIS Demonstration of Energy Efficiency Potential (DEEP).** The studying of an occupied home would be difficult to carry out, given the numerous intrusions on the inhabitants to facilitate sufficient data and warrant testing at scale. Professor Swan and his team have put in place a suite of monitoring sites which would replicate a full retrofit, u-value and Smart Energy systems.


**Peter Draper** presented on the '**STBA Whole House Tool Development'**. STBA's tools are free to access and use and its Responsible Retrofit Guidance Wheel is already the go-to resource for the heritage sector. This presentation focused on a survey tool that would work with the forthcoming British standard - BS4104 (assessing buildings for retrofit) and a carbon calculator 'options appraisal' tool that should be ideal for the home owners large estate owners alike. The tools are being developed as part of a wider project and a partnership with HES and Green Building Encyclopedia

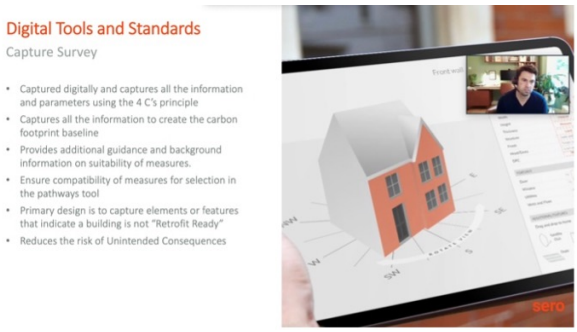


**Claire Westron & Paul Ciniglio** presented the conference with an overview of the **SuperHomes Rating Scheme**. Based on PAS2035 this scheme is focused on RSLs and owners who wish to highlight the credentials of their retrofit and also prove its effectiveness through Post Occupancy Evaluation. Based on wider metrics than just carbon savings this provides a new 5 star rating system that is based on reality rather than predictions.





**Andy Sutton** from Sero Homes focused on their work with the Optimised Retrofit Programme in Wales. The team at Sero are developing a **Pathways to Zero suite of digital tools** which will help take homes to Net Zero in a risk assessed manner. Based on PAS2035 principles and lead by a knowledgeable team in retrofit these tools are aimed at larger RSLs.



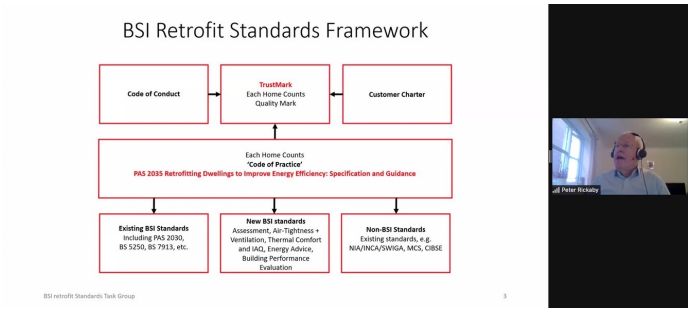

**Day 2: <u>Significance, Policy & Research</u>**
**<u>(Chaired by SPAB Technical & Research co-Chair Sally Stradling)</u>**

Keynote speaker **Sally Stradling** reflected on Day 1 and introduced the audience to a day of significance, policy and research.

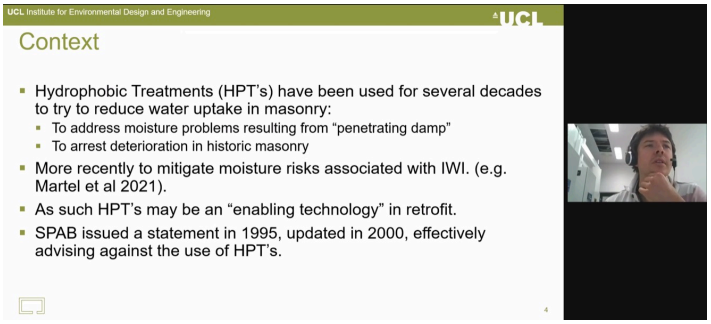
**Dr Moses Jenkins'** from HES presentation '**From Research to Mainstream**' began Day 2 and debated that in spite of a strong knowledge and research base, the way forward is not always clear. The poignant question was: What do we need to do next?

**Morwenna Slade** from HE gave an **Overview of Historic England's Research.** Evidence based case studies and practical 'real-life' advice were shone in this presentation as she highlighted, issues with EPCs, 'flooding', and 'heat pumps'.

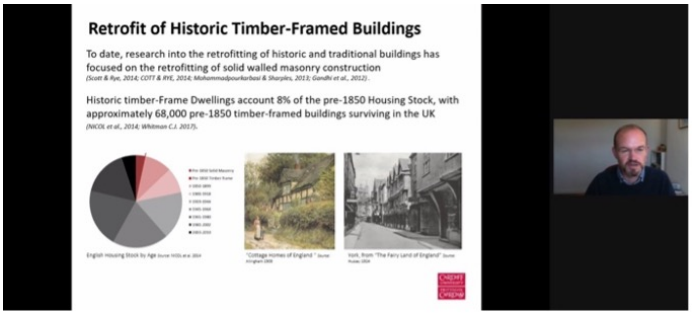

**Dr Peter Rickaby** presented on the newly released **PAS 2038: the new UK standard for non-domestic retrofit** from the BSI Retrofit Standards Task Group (noting that she steering group for the authorship this document included members of STBA, HE, HES, Cadw, UKCMB.) With over two million non-domestic buildings in the UK (ranging from corner shops to The Shard) he illustrated how the complexities of the market had affected the standard and gave some direction as to how the standard would be used and applied.




**Toby Cambray** from UCL delivered his latest findings from his SPAB sponsored research project: **Water Repellent Treatments and Historic Masonry** and in particular the work around 'Hydrophobic treatments' and its "enabling technology" in retrofit.

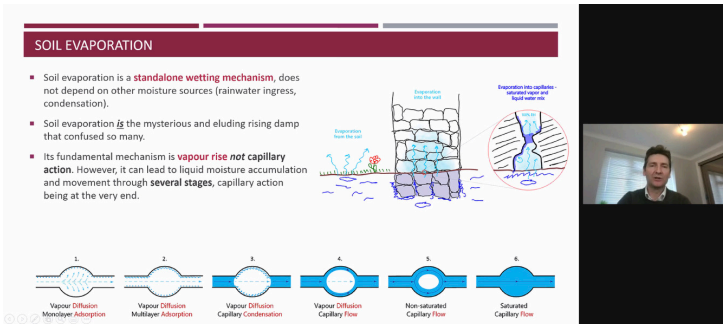


**Dr Chris Whitman** from Cardiff School of Architecture presented **Retrofit of Historic Timber Framed Buildings in the UK: monitoring replacement infill panels** by looking at potential risks with retrofitting examining materials such as hemp, cork, woodfibre and wattle and daub. The talk focused on hydrothermal characteristics of the different materials and how they performed relative to each other, and this gave some fascinating insights into detailing as well as material performance.




**Gareth Fleming & Corey Lane** of Eaton Estate provided us with a case study entitled: **A House by a River.** This focused on the findings of a 19th Century, Grade II listed building repaired after a flood. The use of key materials had a profound impact on the success of the project and the timelapses in the journey of the building from flood to dry were full of impact.

**Val Juhasz** presented the initial finding for SPAB with **Moisture Movement in Porous Masonry: New Findings.** Val showed us documentation of rising damp which appeared as early as 1844. He showed conference his preliminary laboratory experiments for monitoring the migration of moisture and breathability in solid bricks.




Delegates regarded the two day conference a marked success, as pointed out by their reviews:

***Day 1 was fantastic, really informative presentations and a good range of subject matter. I particularly enjoyed hearing about the Superhomes and Sero Homes initiatives and the support being made available to homeowners and housing associations/LAs.***

***Carry on as you are. It is always good to hear updates (e.g. Moses Jenkins) as well as new speakers.***

***Generally, all very good. Like the 2 half days format. Zoom was ok and understand why that is an appropriate way to meet at present.***