**Decarbonising Heating VIP: A trip to the Bishop’s Palace in Wells.**

As temperatures plumet, and the cost-of-living crisis continues, many people’s thoughts have turned to how to afford their heating. This is something our VIP students have been looking at over the past few semesters, from exploring student housing to working out how low carbon grants can be most effectively used for decarbonisation and heat poverty.

This semester, however, has been slightly different. We have been looking at how to decarbonise the Bishops Palace in Wells. Why are we interested in this? Well, although heating any building in the circumstances we currently find ourselves in is costly, under more normal circumstances heating historic buildings is particularly hard. And yet we have lots of them and if we are to decarbonise, we need to get better at it.

Every historic building is unique, but there are commonalities such as leaky single glazing, difficulty in changing how the building looks (hard for solar panels, for example), and extra permissions needed for any changes made. Bath is full of historic buildings, making it harder than many cities to decarbonise.

So it was with great interest that we spoke with Bishop Michael Beasley and Jan Wallwork Clarke, the CEO of the Palace Trust at the beginning of semester, listening to their plans for decarbonisation and thinking about how we at the University might help. The Palace in Wells has some very interesting opportunities as it is situated, as the name implies, on some wells. The water flows from springs in the grounds and is used around the moat and flows, eventually, into a river nearby.

We were very lucky to be invited to have a tour of the site on Saturday the 10th December. We explored this to think about how we might reduce demand and produce low carbon energy. We discussed solar and how the Church of England has changed its policy to try to show off solar on its buildings to be a role model; but that there were potentially still issues with this building as it is so highly protected – so we looked for hidden space in the parapets. We explored the wells and springs and an old water wheel – considering how we could use water both for electricity and for heat pumps. We had a good look round also to see how we could reduce energy consumption – as the energy we don’t need to use is the best of all! There is lots to do and think about. The students on the VIP are from various backgrounds and disciplines and the ideas are coming in thick and fast; from mechanisms to produce power and heat, to educational ideas for behaviour change. Such is the benefit of getting a wide range of people together to help solve difficult challenges.

Because our visit was so close to Christmas some of us who brought our families were able to watch “A Christmas Carol” and all were able to marvel in the Christmas decorations. Our hosts were extremely kind and provided a lovely warming lunch and answered all our questions. One tourist appeared to join part of our tour as we were going around.. and I think was somewhat surprised to find themselves in the boiler room!

We are at the start of our journey on this project, but it is fun and relevant. And as ever, it is great to be part of a VIP project where we know the work will help to make real change. What we learn will not just help those at the Palace, but will quicken the pace of change for decarbonisation – something we all know is important.











