

Sense of the past with a commitment to the future

Jon James is an experienced Architect and certified Passivhaus Designer. With 20 years' experience in the industry, he leads his own practice, Jon James Studio Architecture, based in the Vale of Glamorgan with a focus on sustainable buildings. He is also a Board member of the Design Commission for Wales.

We demolish about 50,000 buildings in the UK each year. There's a huge carbon impact in terms of embodied carbon (that's the carbon emitted in creating building materials, assembling and transporting them) plus we lose our heritage so our sense of past and culture is eroded.

We can't ignore what is happening around us. While important buildings in Wales are protected by Cadw, we've got to create a more sustainable future by re-using existing buildings rather than demolishing them. This means recognising the value in more recent history by refurbishing buildings, even modern buildings, because they are part of our history. Re-using them and re-purposing them also requires less new materials than building new and creates less waste in terms of demolition.

Buildings represent our timeline of history and how we've developed over the years. They give us a sense of the past. Take the Pierhead Building in Cardiff Bay as an example. Incorporating a French-Gothic Renaissance theme, it is one of Cardiff's most familiar landmarks. The Grade I listed building was built in 1897 as a replacement for the headquarters of the Bute Dock Company which burnt down in 1892. A coat of arms on the building's façade bears the company's motto "Wrth ddŵr a thân" ("by water and fire"), encapsulating the elements creating the steam power which transformed Wales. It is now a museum.

Aberystwyth's Old College also has a new life with a revamp of the Grade I listed university building creating new science exhibitions with interactive displays. It is hoped the project will attract 190,000 tourists to the town and create 50 new jobs.

Building new is a relatively new trend because, for many centuries, our predecessors have reused building structures to suit a new way of living. There is a lot of embodied carbon in a building structure, especially in the concrete and steel but many building materials can be reused, recycled

and recovered. What's more, with today's technologies and digitalised processes, renovating has become a lot easier and sustainable.

That's why it is so pleasing to see a shift in attitude with developers recognising that long-term value and legacy lies in the refurbishment of buildings and regeneration of communities rather than demolishing to build new. The cost argument is gradually diminishing.

As towns and cities make way for new developments, the Royal Institute of British Architects (RIBA) is absolutely right to be saying that demolitions should be stopped to help lower carbon emissions. Of course, not all structures are suitable for refurbishment but we should be recovering and repurposing all that we can. It's about upcycling on a grand scale.

New structures made of concrete and steel increase CO₂, with construction responsible for 10% of UK emissions and almost two-thirds of all UK waste. This has got to change which is why we must recognise that conservation of buildings is now a climate issue. Demolishing existing buildings and rebuilding from scratch instead of renovating them should be strongly discouraged – in fact, I would suggest that reforms need to be introduced to ensure that the demolition of buildings is an absolute last resort.

As we begin the recovery from Covid-19, now is the time to protect our heritage and reduce emissions by reusing and repurposing because that's the right thing to do. That requires a long-term view and a commitment by all to preserve our past and protect our future.