Haydon Bridge High School has recently taken delivery of the first zero carbon modular school building in the UK which was manufactured by North of England based EnviroHomes Limited. Haydon Bridge High School was awarded £1 million to create a new building that would minimise the school’s overall carbon footprint. The building is comprised of a 65 square metre classroom area, plus a 90 square metre science lab. The classroom area also includes a chicken coup and incubator to help the students learn directly about the rearing and care of animals.

The result is a landmark building which not only showcases renewable energy but provides a state-of-the-art environment in which students can learn about it. Just outside there is an area with polytunnels, a greenhouse and raised beds where students can grow their own produce.

It’s zero carbon, highly sustainable and finished to a very high specification. The attention to detail is fabulous throughout and the fact that it was manufactured off-site meant the school didn’t have months of disruptive construction going on during term time. Jill Collinson is the Capital Projects Officer at Northumberland County Council, responsible for Carbon Management Procurement, stated “We definitely see this method of construction as the way forward for school buildings in the future.”

Simon Astill, Managing Director of EnviroHomes explains, “Right from the start the Haydon Bridge brief called for a zero carbon building. Our ‘fabric first’ approach means starting with the choice of insulation materials to be used. Then we selected the most efficient heating, lighting and control systems to suit the needs of the building, the students and staff who would be using it. Finally we added renewable technologies to the building, which in this case was solar thermal & PV and a wind turbine. In fact the addition of these gives the building an A+ energy rating which shows the building to be carbon negative, that’s to say the building will generate more power than it uses.”

This is a purpose built, permanent building with full planning permission. The other key point to make is that our efficient modular construction method provides a high quality zero carbon building, manufactured, installed and finished in 21 weeks. From the moment the manufactured sections arrived on-site, there was a fully watertight building within 10 hours.

Robert Doran, Principal Building Control Surveyor for Allerdale Borough Council commented, “My role was to check the building for compliance with building regulations which involved regular inspections for quality control and consistency. Because this method of manufacturing is done inside a controlled factory unit, consistency is much easier to achieve. In addition there’s no degradation of materials due to bad weather. All in all this is a very efficient construction method which has resulted in a high quality building that’s fully compliant with all building regulations.