

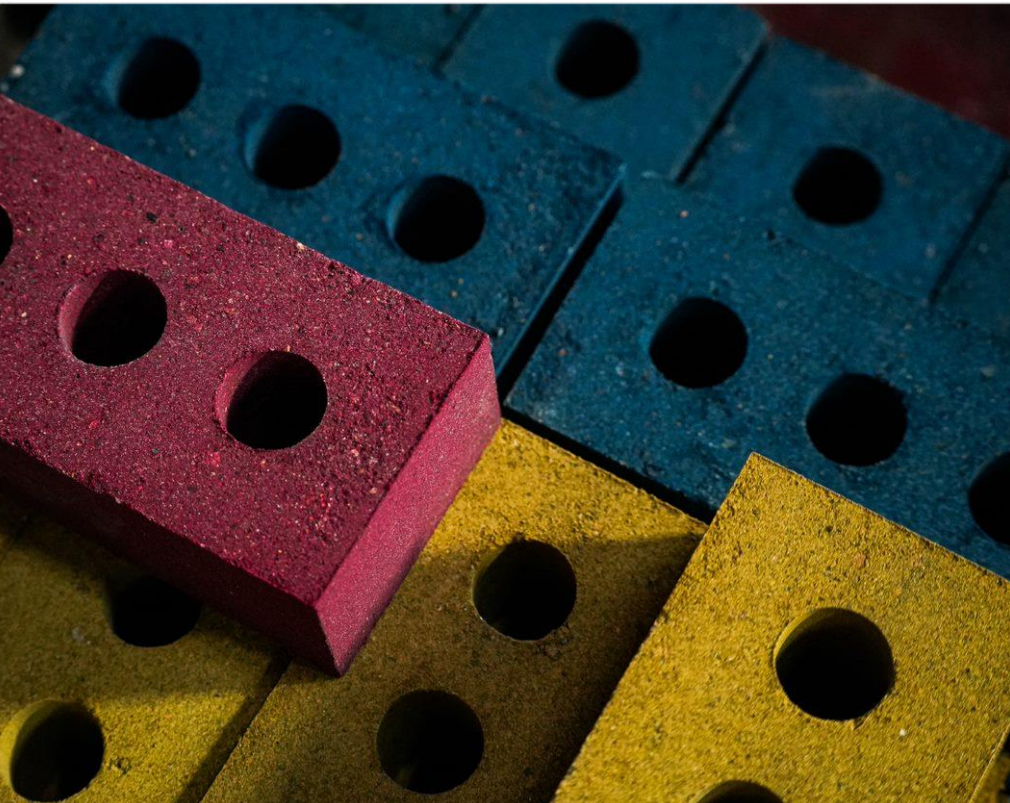
Highlights

Capable of delivering 3 million low carbon certified bricks per year to the Scottish and UK markets.

Has recycled 700 tonnes of construction waste in the development of prototype bricks for testing and trials.

A tonne of traditional clay bricks embodies 228,000 kg of carbon, a tonne of K-briqs only embodies 7,621 kg of carbon.

The site, where production is based, is serviced by a wind turbine for power and space heating is provided through a biomass plant.



Kenoteq

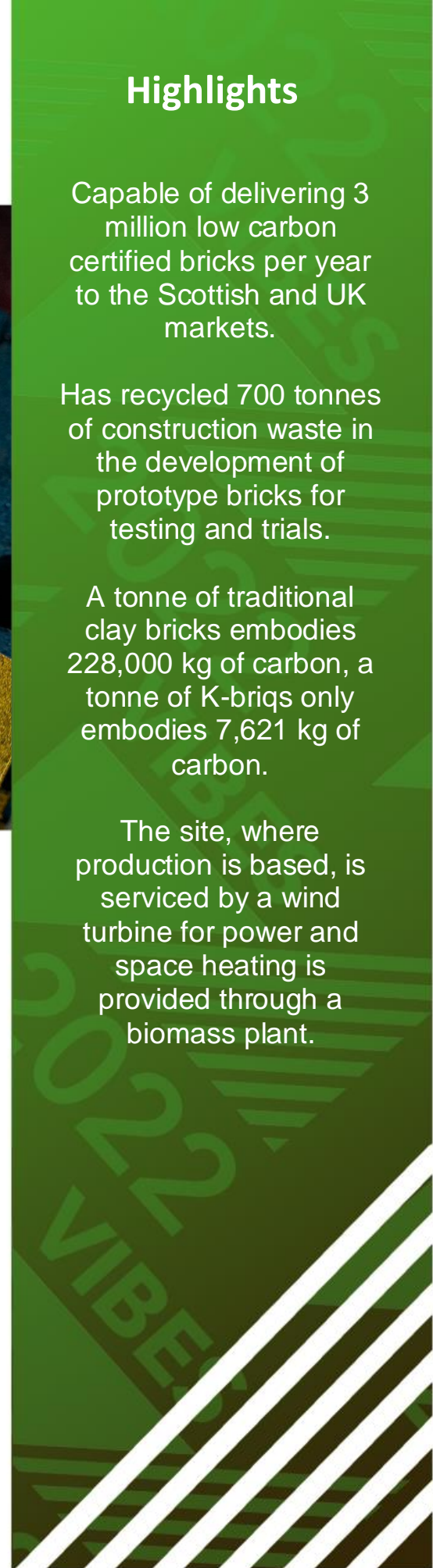
Kenoteq, based in Edinburgh, are a supplier of low carbon closed loop circular building materials. They have created the K-briq® which contains over 90% recycled construction and demolition waste, uses 1/10 of the energy in its production compared to a traditional brick and has a 90% lower carbon footprint, and are now targeting becoming a net carbon neutral business. K-briq® has initiated third party certification from BRE; An Environmental Product Declaration (EPD) quantifiably demonstrates the environmental impact of a product.

Kenoteq are the winners of the Circular Scotland Award for the Heriot Watt University spin out development of the K-briq®. Through recycling construction and demolition waste, Kenoteq is reducing the reliance on the energy intensive and environment scarring extraction of new aggregates, as well as reducing the need to use high carbon clay and cement-based bricks in construction, therefore diverting waste from landfill.

Category description: Circular Scotland

The Circular Scotland Award recognises businesses that can demonstrate their operations, products or services are aligned with the principles of the Circular Economy.

A Circular Economy approach ensures that materials are retained within productive use, in a high value state, for as long as possible. It is a move from the current 'take, make, dispose' model and focuses on reshaping business and economic systems so that waste is 'designed out' of how we live.



The concept is a closed loop project finding an outlet for demolition wastes, reducing everyone's costs. A symbiotic relationship has been developed with suppliers of the demolition raw material, and end user builders to reduce their Carbon footprint. Kenoteq are involved in a Knowledge Transfer Partnership project - co-funded by Innovate UK and the Scottish Funding council, which "aims to develop Scotland's circular economy approach further by undertaking significant research and development into creating new sustainable products from waste streams". K-briq® won best STEM 2022 research project, via extensive school engagement. Kenoteq monitor and provide the haulage carbon figures to customers, allowing building industry and architects contacts to track embodied carbon. They are marketing the product to social housing projects and housing associations.

50,000 K-briq® equates to a carbon saving of 30t, and over 100t of recycled waste material from construction and demolition. As Kenoteq enters full commercialisation and sales later in 2022, early 2023, the full economic benefit of the business will be realised with projections of £30 million per year anticipated by year 5. The use of K-briqs® as exterior facing bricks will reduce the energy requirement of homes. Initial and third-party tests are demonstrating that the K-briq® has double the thermal insulation qualities of traditional brick and block.

The judges were impressed by the brick's potential in the construction industry and felt this made them a worthy winner of the category.

Quote from the company:

"To be recognised by VIBES for winning the Circular Scotland Award is a great achievement which we are very proud of. We hope that by taking our place amongst many excellent companies working towards achieving Scotland's Net Zero ambition, we will inspire more organisations to make a difference."

Sam Chapman, Managing Director