

Research Project of the Year: STEM

| Institution name | Heriot-Watt University |
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| Submission title or project name | K-Briq: Building sustainability into construction – one brick at a time. |
| Nominee/key personnel | Dr Sam Chapman and Professor Gabriela Medero |
| URL | www.kenoteq.com |
| Submission | The UK's construction industry produces over 100 million waste tonnes annually, over a third of the UK's total. Seeking a solution, we poured a decade of research into creating the 'K-Briq'. The K-Briq is made from 90% construction and demolition waste. It produces a tenth of the CO2 emissions of a traditional fired brick and uses less than a tenth of the energy during manufacture. Tackling sustainability in this traditional sector faced multiple challenges, including testing. We've overcome all these issues to secure our first build, the globally renowned Serpentine Pavilion, and we're in discussion with many other diverse projects. K-Briq has driven 'sustainability in construction' into the media and public consciousness with features on BBC's The One Show, CNBC, Forbes and Dezeen. We've engaged hundreds of children, we're a SEPA circular economy case study and we're aiming to increase the recycled content to 100%. |