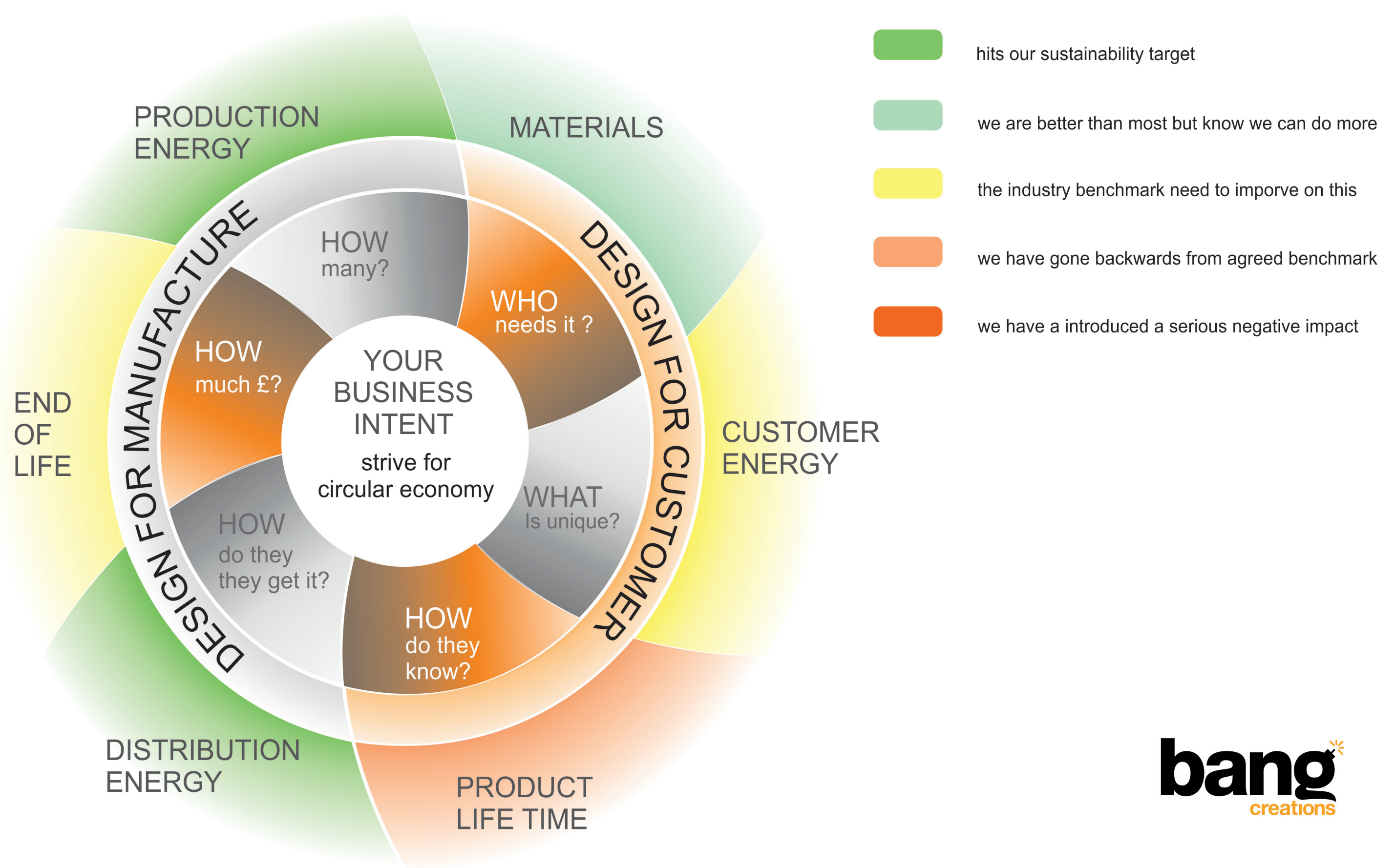


Working with Bang Creations



‘Our studio is committed to integrating sustainable design thinking. We use this model to assess whether a product should be developed and, if so, how it should be designed.’ Stefan Knox, Bang Creations, 2024

Bang Creations are a B-Corp certified consultancy who design products that are commercially viable, technically feasible, and socially and environmentally responsible. They have supported the students on this project through the delivery of dedicated workshops, and shared their own model for sustainable design thinking: the ‘Wheel of Sustainable Innovation’.

The wheel is divided into two halves. One half embraces user-centred design, emphasising questions directly addressing customer needs. The other half considers manufacturing, assembly, and distribution, impacting the user experience indirectly. The inner ring comprises six questions derived from the ‘4 Ps of marketing’: Product, Price, Promotion, and Place. The students used this to begin to understand the market and identify the problem their concept solves.

The students’ work mainly focuses on the outer ring. Splitting sustainable thinking into two aspects - those directly affecting customer experience and those shaping production methods - allows for a comprehensive evaluation compared to an existing product benchmark:

1. Materials: What raw materials are used, and how much material is required for the solution?
2. Customer Energy: Does the product necessitate customer energy consumption?
3. Product Lifetime: What’s the anticipated lifespan of the product for the customer?
4. Distribution Energy: How much energy is expended in delivering the product to the customer?
5. End of Life: What’s the disposal process for the product?
6. Production Energy: How much energy is utilized in manufacturing the product?