

The building sector contributes over 40% of worldwide carbon emissions, with the furniture industry emitting over 900 tonnes of carbon per year in the UK alone. Therefore our ambitions for supporting a circular economy in our sector are big and heartfelt. It is difficult to compare both interior materials and furniture for carbon footprint and other measures of sustainability, therefore we have strived to reuse as much as possible, and where new is necessary - do our best analysis and support UK made products or innovative products which we wish to explore and showcase. Our choices of materials and products can always be challenged – and we hope that the finished Entopia building serves as a case study for what is possible and a lab for innovative materials. We hope the exciting mix will invite people in to see, touch and try for themselves.



### **Hemp boards: Cecence**

A very sustainable product as hemp grows very fast, can grow almost anywhere and is biodegradable and renewable. It is a plant that can take care of itself as it requires little or no chemicals to grow. Hemp board benefits farmers by allowing the agricultural industry to become the new source of forest products. Areas of the world which lack forests could be able to create their own timber products. Hemp chipboard and hemp faced plywood are being explored.



### **Strawboard: Stramit**

The Stramit strawboard technology was invented in Sweden in the 1930s. It was brought to the UK in 1945 by the Mosesson family, who established a factory and research centre in Suffolk. 100% recyclable and biodegradable, with an excellent CO2 footprint. The manufacturing process uses one tenth of the energy needed to manufacture standard drywall. We are exploring it's use in furniture.



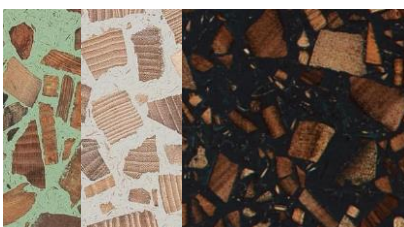
### **Recycled CDs: Revive RE-CD**

RE-CD is a solution to the global issue of recycling CDs, DVDs, games and software discs. It is a unique, sustainable composite material consisting of 100% waste discs and is 100% recyclable. CDs could spend over a million years degrading in landfills, or create unhealthy emissions being incinerated.



### **Textile board: PLANQ, Planqtextile**

Studies show that up to 47% of all fibre entering the fashion value chain becomes waste throughout the different stages of production, before it even reaches the consumer. PLANQ's sustainable veneer is made of recycled textiles such as army jackets, coffee bags, blue denim and discontinued stewardess uniforms.



### **Worktops: Foresso**

The UK consumes about 10 million cubic metres of timber a year. However, around 65% of wood that is taken to be recycled will not be reused, but chipped and burnt in power stations. Using offcut British timber and wood waste in a bio-resin binder, these sheets are handmade to counteract the side-effects of this industry.



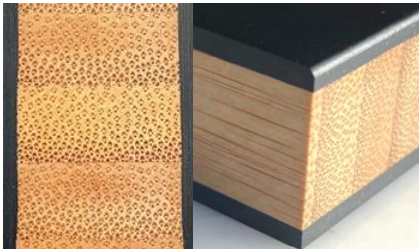
### **Hemp Fabric: Camira**

60% Pure New Wool and 40% Hemp with nonmetallic dyestuffs. It is estimated that industrial hemp absorbs between 8 and 15 tonnes of CO<sub>2</sub> per hectare of cultivation. Hemp is versatile, renowned for its uses as a medicine, fuel, fabric and garments.



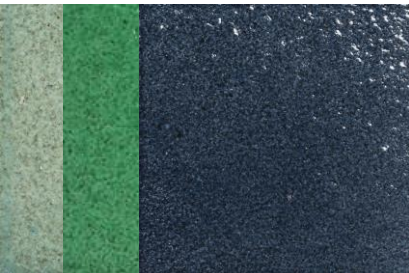
### **Bamboo Furniture Panels: Moso Bamboo**

A fast-growing grass, it requires no fertiliser and self-regenerates from its own roots; it doesn't need to be replanted. Bamboo panels used for the kitchen cabinets are made from the giant bamboo species known for its CO<sub>2</sub> absorbing and O<sub>2</sub> producing capacity. Bamboo is also durable and hard, therefore lasting well.



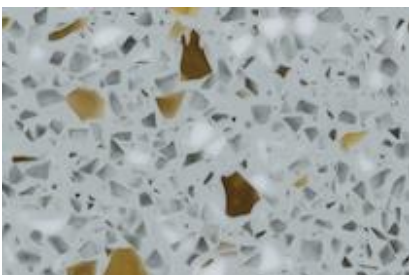
### **Stratum Bamboo: Richlite**

It is estimated that by 2020, paper mills will be producing 500,000,000 tons of paper and paperboard each year! We obviously need this product and a reduction of use is not in the horizon. Pulp and paper is the 3rd largest industrial polluter of air, water and soil.



### **Recycled Tiles: Alusid**

Made from no less than 98% recycled materials - approximately 60% of those materials are currently ending up in landfill.



### **Recycled Plastic Worktops: Durat**

Post-industrial plastic waste is collected from companies in Sweden and Finland to create tough and durable products, containing 28% recycled plastic. Durat use a circular method, by collecting used products, refurbishing and reselling - preventing them ending up in landfills.



### **Linoleum Flooring: Forbo Marmoleum**

Used throughout the reception, tea points and WCs. Marmoleum is CO<sub>2</sub> neutral. 97 % of linoleum is composed of natural raw materials. The basis is linseed oil, extracted from the seeds of the flax plant. The linseed oil is mixed and heated-up with tree rosin to produce linoleum cement, which is in turn mixed with wood flour and finely ground limestone and then mounted on to a jute mesh. It captures more climate-harming CO<sub>2</sub> than it releases. It is hardwearing and waterproof.