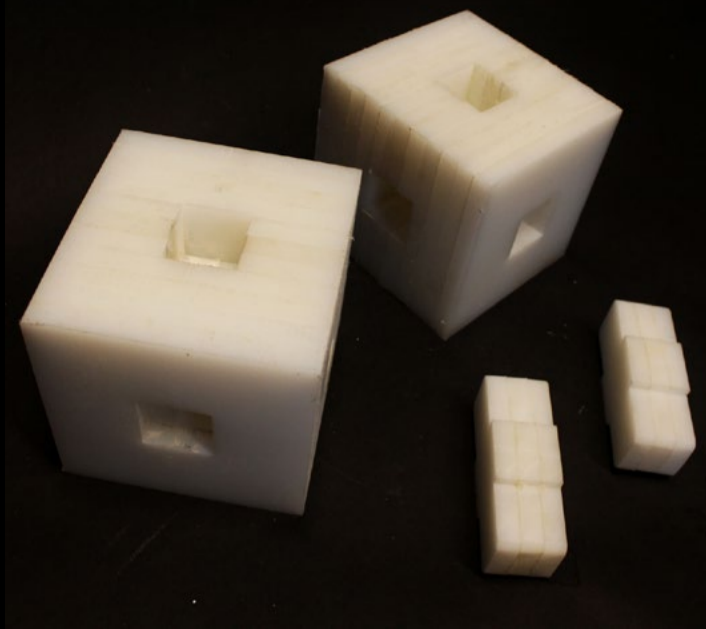


# Unito

Carbon-negative furniture system



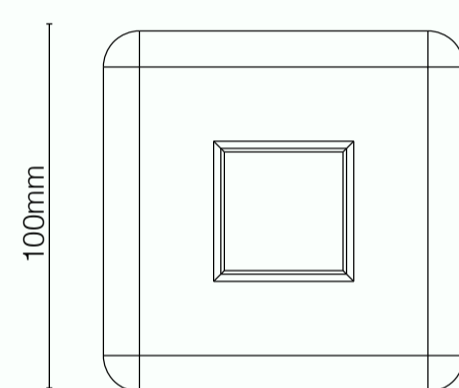
1kg bio-HDPE mass units

## Carbon-negative bioplastics in product design

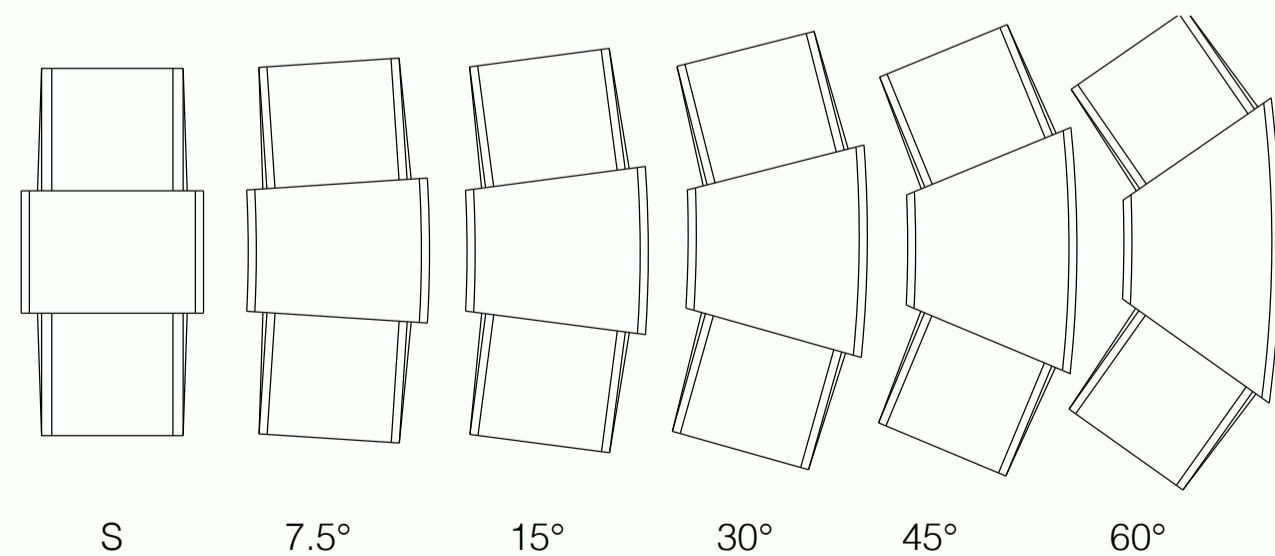
Bio-derived plastics can have a negative carbon footprint if they are produced using renewable energy and sufficient efficiencies. These materials act to sequester and store CO<sub>2</sub>. Utilizing these materials in products means that products can act as a negative emissions source, helping to combat climate change.



## Unito system architecture



**1KG CO<sub>2</sub> Bio-PE Storage Cell**  
 30% carbon in material (BCC 95%)  
 70% sequestered during production  
 100 year lifespan



**Family of connectors**  
 Enables modular formgiving and reconfigurability

Unito is a speculative design concept that explores what a product might look like if it were optimized to store carbon. It proposes a modular system architecture based on carbon-negative bioplastic storage units. Each unit stores 1kg of organic carbon. These units, combined with a family of connectors, can be used to generate an infinite number of functional and sculptural objects, which can be reconfigured and adapted to future needs.



42.kilo lounge chair prototype and bio-HDPE material

## Carbon-negative furniture designs

