## **Circular Economy**





Enabling a circular economy between the two parts of the Science Park, by storing recovered material for local reuse and upcycling, manufacturing building elements on site, designing for disassembly and reuse, tracking material on digital data banks and pioneering innovative bioengineered products.

**Business as usual:** Conventional construction processes are highly energy intensive in their production of new materials, transportation to site and onsite assembly. In addition, very little or no thought is given to the recovery of material or elements of the building during maintenance cycles and at the end of the building's lifecycle. Recently more consideration has been given to reducing carbon emissions from construction, and to modular design; but not to the repair, recovery, reuse, upcycling and disassembly of parts.

**Cambridge Science Park North (CSPN):** CSPN is proposing to change the conventional construction cycle. The phasing of CSPN will provide a facility for storing, upcycling and manufacturing material, enabling a circular economy between the existing and proposed sites that would typically not be possible. The proposed land use provides the required civils infrastructure to facilitate this process in the long term. New buildings will apply circular economy best practice principles, including material efficiency, designing out waste, designing for disassembly and recovery, low carbon, and material tagging and data tracking.



Onsite manufacture and upcycling

Transportation carbon saved