

The circular economy

Top left: Deconstruction skills.

Bottom left: Kenoteq, unfired brick which has 90% recycled content.

Top right: IndiNature, a natural fibre insulation, locally grown.

Bottom right: Resource rows, Lendager Group.



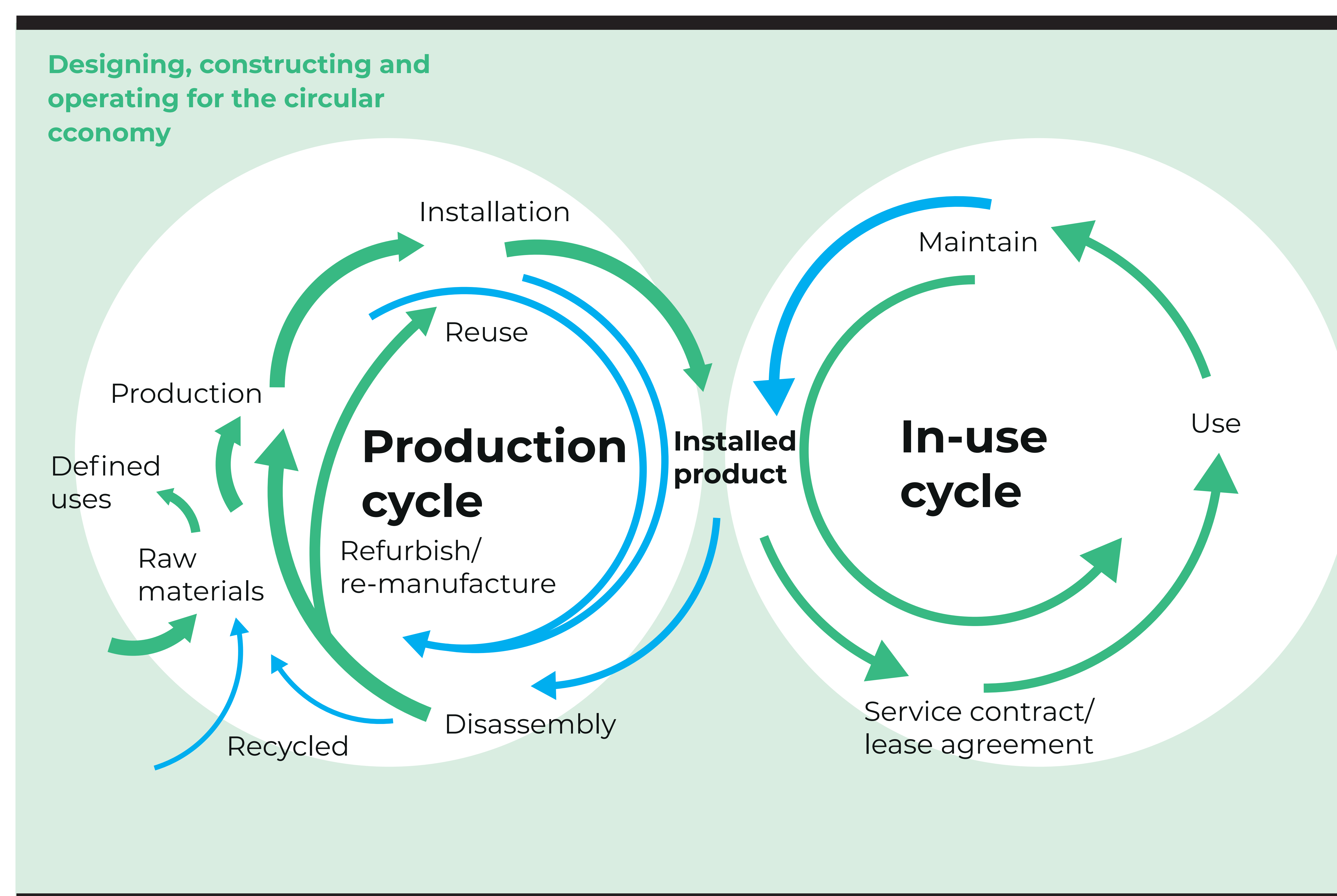
We are ‘the throw-away society’. So much of our lives has become disposable, from plastic bottles to smart-phones and washing machines, and this applies to our buildings, too.

We need to change our behaviour so that we reduce waste and make materials, products, homes and workplaces last much longer. The circular economy describes a future where we retain, reuse, refurbish and recycle, avoiding as much carbon emission as possible from new production.

71% of pre-1919 dwellings in Scotland have disrepair to critical elements – a big change in attitudes is needed. Our first step is to retain as many buildings as possible through planned maintenance and repair, avoiding the need for new construction.

5 things we can change

- 01** Ensure buildings are at the end of their useful life before demolition or deconstruction is considered.
- 02** Re-use elements during alterations, such as reallocating doors, windows, flooring and fittings within the same building. A ‘lego kit’ of parts can be created for future projects with excess, functioning parts.
- 03** Verify carbon emissions for all new materials and recycle as much as possible.
- 04** Make a life-cycle analysis of everything used during design and construction.
- 05** Recycle waste material if demolition is unavoidable, including masonry crushed to aggregate, timber chopped for woodchip and metal to salvage.



Designing out waste from the start of the project.

Designing for resource efficiency by considering where you can reduce material use.

Designing for deconstruction and disassembly.

Ensuring responsible sourcing of materials.

Utilising delivery and return logistics options with material suppliers.

Using ‘product as service’ systems rather than outright purchase.

Using suppliers’ incentivised return options.