Glossary

Circular economy

A circular economy is restorative and regenerative by design and aims to keep products, components, and materials at their highest utility and value at all times. (Ellen MacArthur Foundation, 2015) This is in contrast to the linear economy that begins with the extraction of resources from the environment to their use and eventual deposit into a landfill.
(Felix Heisel, Circular Construction Lab 2021)

Construction and demolition debris

Also known as CDD, this is material that is generated during renovation, construction, deconstruction, or demolition of buildings and infrastructure; it is considered non-water soluble and non-hazardous and may have the potential to be reused or recycled.
(Palo Alto municipal code)

Deconstruction

The careful and systematic dismantling of a part or a whole building structure in order to maximize the recovery of valuable material. It is an environmentally friendly alternative to demolition, which produces large amounts of pollution and waste that ends up in landfills.
(Jennifer Minner, Just Places Lab 2021)

Embodied carbon

All CO2 emissions generated during the production and handling of a building's materials throughout its life: product and construction stage (raw material, manufacturing, transport, construction, and installation), use stage (repair, replacement, refurbishment), and end-of-life stage (deconstruction/demolition, transport, waste processing). If these materials end in landfill or incineration, the embodied carbon is lost. Operational carbon refers to all CO2 emissions related to the operation of a building during its use stage (heating, cooling, electricity, etc.). While operational carbon emissions are emitted over time, the majority of embodied carbon emissions happen before the first day of a building's use.
(Felix Heisel, Circular Construction Lab 2021)

Recycle

An umbrella term for processes that convert waste into usable products, materials, or substances with the goal of reintroduction to the marketplace. In contrast to reuse, recycling processes generally change the physiognomy (and may also change the composition) of the resource. Recycling processes divert material from the landfill or incinerator.
(Felix Heisel, Circular Construction Lab 2021)

Reuse

A process that further utilizes a component, products, or material in its original composition and shape.
(Felix Heisel, Circular Construction Lab 2021)

Salvage

A systematic and careful intervention to extract valuable building materials, components, and products before demolition. The salvaged materials usually retain their original form with light reprocessing before being reinstalled into a building.
(Jennifer Minner, Just Places Lab 2021)