

Summary – EU Commission Transition pathway for a resilient, greener and more digital construction ecosystem

Energy renovation

- energy efficiency of building
- support deployment of technologies like: solar panels, heat pumps, energy storage, and smart energy management systems
- **support local/ European manufacturing**
- fuel used in building (*consider this, cannot see a clear recommendation*)

Resource consumption, circularity and waste

- greater use of **secondary materials**
- where possible reducing use of materials that will be difficult to recycle in future (e.g. due to presence of certain hazards)
- support refurbishment, repurposing and deconstruction
- waste from deconstruction to be treated in an environmentally sound way
- **more standardised building design may increase the reuse potential of components**, for example, via prefabricated building elements
- **tracking data on materials used through the design and construction process** (e.g. via Digital Building Logbooks) for future recycling decisions

Greenhouse gas emissions

- The manufacturing and construction process is responsible for embodied greenhouse gas emissions before buildings are occupied, and when they reach the end of their service life.
- Potential for buildings to act as a temporary carbon sink - for example with green infrastructure and the use of organic building materials that can store carbon
- Action that increases the service life of built assets, such as **regular monitoring, maintenance and repairs** to infrastructure
- **Design for future adaptation of uses**, deconstruction and reuse, can avoid premature demolition and landfill

Building materials

- **Support for Nature-based solutions** (i.e. Solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Note. This is NOT the same as “natural or organic”)

Enhancing climate resilience and adaptation to climate change

Promotes spatial planning

References:

- <https://ec.europa.eu/docsroom/documents/47996>
- https://ec.europa.eu/info/research-and-innovation/research-area/environment/nature-based-solutions_en