



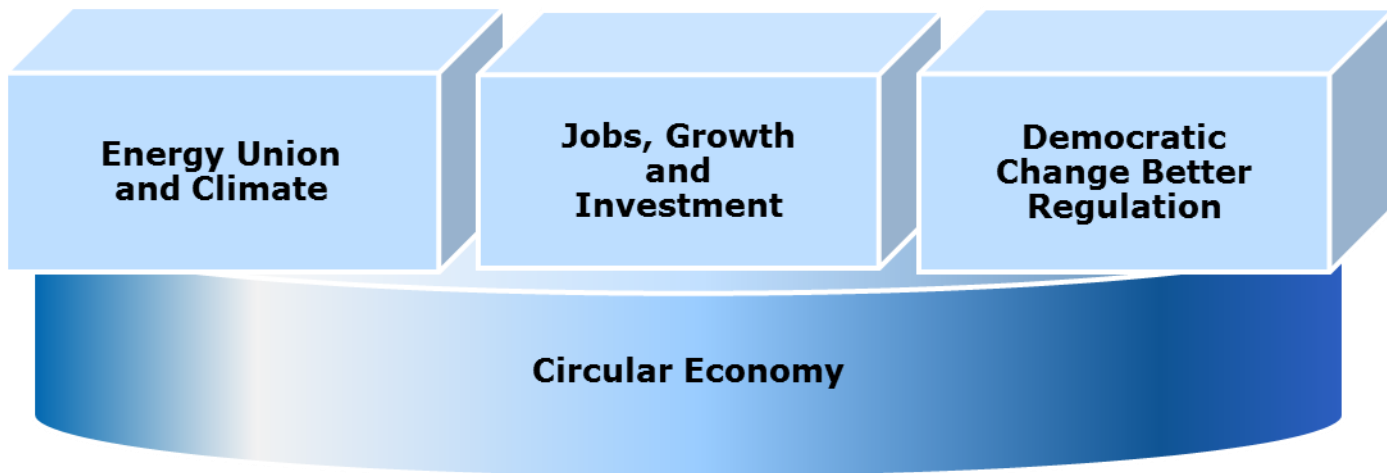
Building Materials - Progressing towards a more circular economy

CEPS, Circular Impacts Workshop,
Energy Climate House, Brussels, 7 December 2017

Vincent BASUYAU, Policy Officer Sustainable Construction
European Commission, DG GROW.C1.

Links with European Union's Priorities

Protecting the environment and maintaining our competitiveness have to go hand-in-hand: both are about a sustainable future



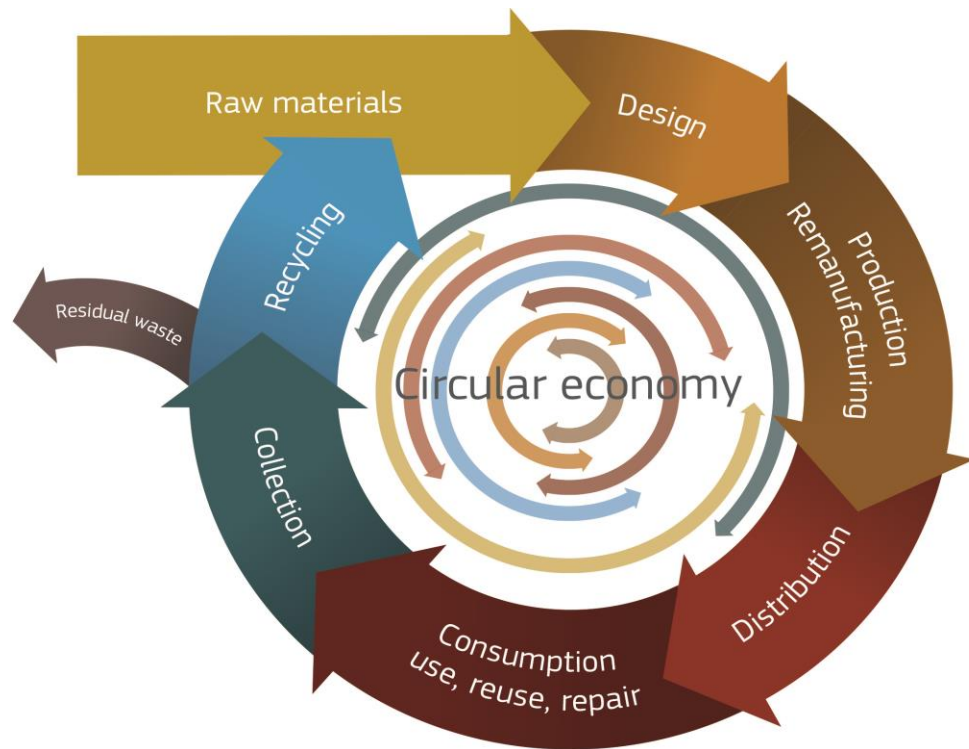
What is the Circular Economy?

- **Maintaining the value of products**, materials and resources in the economy for as long as possible while **minimising waste generation**.
- To **boost our economy** and competitiveness with new **business opportunities** and innovative products and services.
- For economic, social and environmental gains

From a Linear Economy...



... to a Circular Economy



Objectives of the CE Package on 2 December 2015

Synergies between **environment and business agendas**

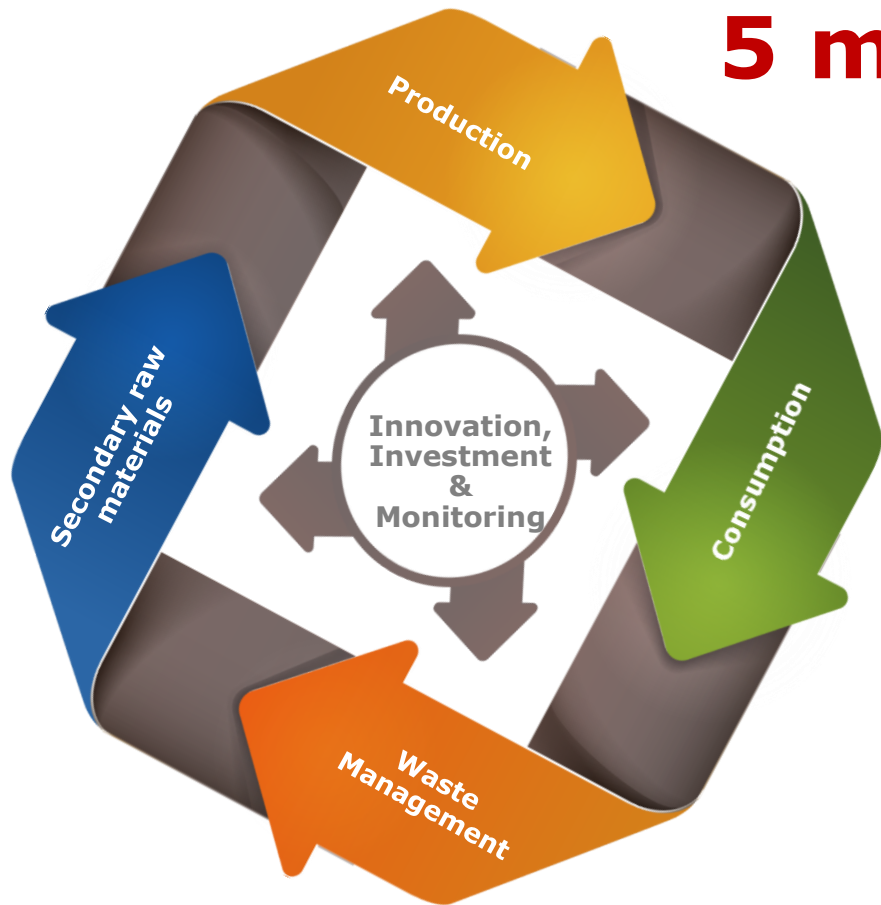
- Preserve resources while creating business opportunities
- Closer links to other **key EU priorities**:
 - climate and energy
 - jobs and growth, investment, innovation, social
 - industrial competitiveness



Propose concrete and ambitious action where **EU intervention has high added value**

- long-term vision and targets on waste management
- internal market rules for products
- environment and consumers protection
- regulatory obstacles or enforcement issues; innovation and investments

5 main areas of action



Production	Reparability, durability, and recyclability, resource efficiency, industrial symbiosis
Consumption	Reuse, availability of spare parts, Ecodesign, actions on false green claims, CE criteria in GPP., planned obsolescence assessment, EU Eco-label, Environmental Footprint
Waste management	Revised legislative package on waste, Cohesion Policy contributions guided by the EU waste hierarchy.
Secondary raw materials	Increase use of SRM, quality standards, interface chemicals, product, and waste legislation, knowledge of material stocks and flows.
Innovation, Investment, Monitoring	€650 million Horizon 2020 in the CE (2016-17), € 1 billion (2018-20), financing CE with EIB and national promotional banks. Monitoring framework to measure progress on reliable existing data.

Priority sectors



**Biomass &
Bio-based
Products**

Plastics

**Construction
&
Demolition**

**Food
Waste**

**Critical Raw
Materials**

Construction & demolition

Objective

- Identify and increase recovery of **valuable materials**

Key Actions:

- Ensure **recovery of valuable resources** and **adequate waste management** in the construction and demolition sector
- Develop **pre-demolition guidelines to boost high-value recycling** as well as voluntary **recycling protocols** aimed to improve quality of and **build confidence**.
- Facilitate **assessing the environmental performance** of buildings

EU Construction and Demolition Waste Management Protocol

- Increased demand for C&D recycled materials
- New business activities
- Increased cooperation along the value chain
- Progress towards meeting C&D waste targets
- Progress towards harmonised EU markets for C&D recycled materials
- Generation of reliable C&D waste statistics
- Reduced environmental impacts and contribution to resource efficiency

EU Construction & Demolition Waste Management Protocol

Based on volume, C&D waste is the most generated waste in a lifetime. It generates not only a large amount of waste, but also a large amount of CO₂ emissions. And if this waste is not recycled, it will end up in a landfill.

achieved by:

- Improved waste identification, source separation and collection;
- Improved waste logistics;
- Improved waste processing;



recycling companies;

- Public authorities at local, regional, national and EU levels;
- Quality certification bodies for buildings and infrastructure;
- Clients of C&D recycled materials.

The Protocol includes good practices from across the EU that can be sources of inspiration for both policy makers and practitioners. It also includes an overview of definitions and a checklist for practitioners.

This initiative has been launched by the European Commission.



Ref. Ares(2017)1500969 - 20/03/2017



EU Construction & Demolition Waste Management Protocol



Recycling and re-using of C&D waste is the answer. Proper management of C&D waste and recycled materials – including the correct handling of hazardous waste – can have major benefits in terms of sustainability and the quality of life. But it also can provide major benefits for the EU construction and recycling industry, as it boosts demand for C&D recycled materials.

The Waste Framework Directive establishes a target of 70% of C&D waste to be recycled by 2020. In a few Member States, only about 50% of C&D waste is being recycled. The good news is that some Member

States are already exceeding this target, in line with the tripartite principle of the Construction 2020 initiative.

http://ec.europa.eu/growth/toolsdatabases/newsroom/cf/itemdetail.cfm?item_id=8985

Protocol translations & Presentations

Roadshow in 6 capitals + events

- **Information:** meeting national stakeholders and authorities
- **Networking:** opportunities and enthusiasm for best practices
- **Reach:** Press coverage in trade and business media



Roadshow presentations:

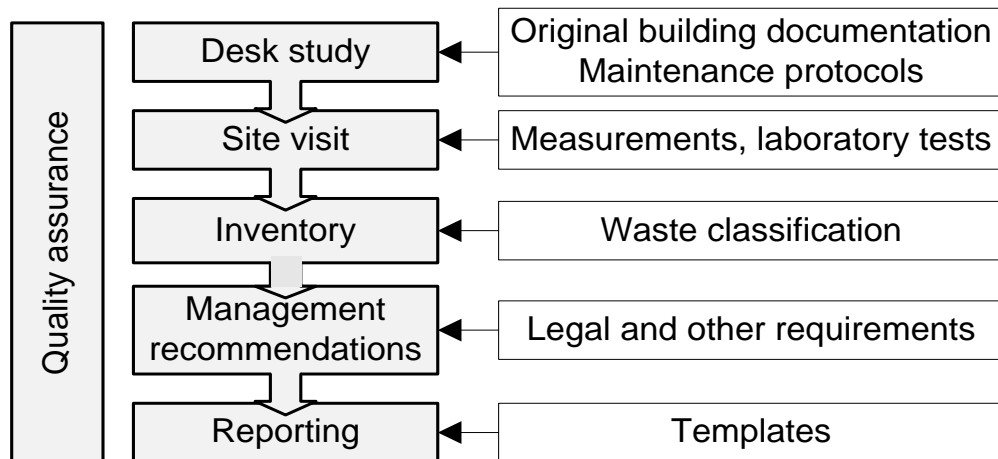
http://ec.europa.eu/growth/content/workshops-eu-construction-demolition-waste-management-protocol-6-eu-capitals_en

Protocol translations:

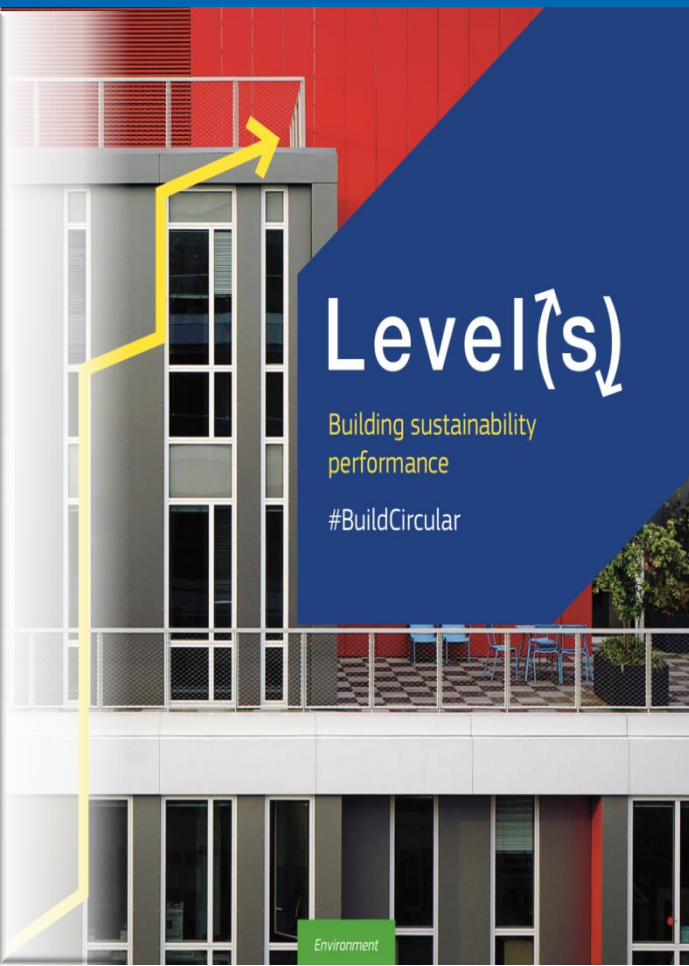
<http://ec.europa.eu/DocsRoom/documents/20509/attachments/1/translations/>

Guidelines for Pre-demolition & renovation waste audits

Development of Specific Tools and/or Guidelines for Assessment of Construction and Demolition Waste Streams prior to Demolition or Renovation of Buildings and Infrastructures



- a specific task within the project planning
- the first step towards recycling
- fair competition amongst contractors
- awareness and traceability processes.
- assurance that contaminants are safely removed
- better demolition waste management



Level(s)

EU approach to sustainable building performance reporting

- Tracking the levels of sustainability performance of buildings, taking into account the full life cycle.
- For different building professionals at different stages of a building project.
- Supports different levels of sustainability maturity, from beginners of assessment to LCA professionals.

<http://ec.europa.eu/environment/eussd/buildings.htm>

Test phase

Conference on 4 December 2017, Brussels

➡ In progress

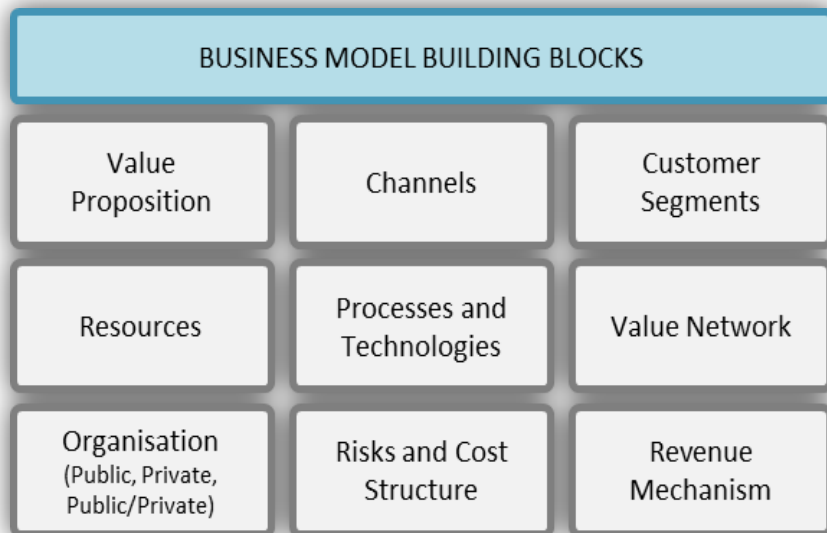
Finalisation of the project

➡ 2019

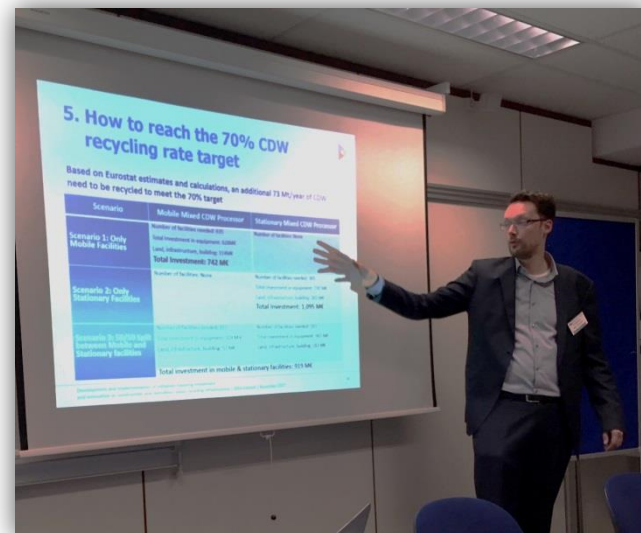
Looking forward

- Foster **investments in CDW recycling infrastructure** in MS/regions lagging behind the target of 70% of recovery (WFD 2008/98/EC). Such investments could be supported by the Investment Plan for Europe.

Workshop 16 November 2017



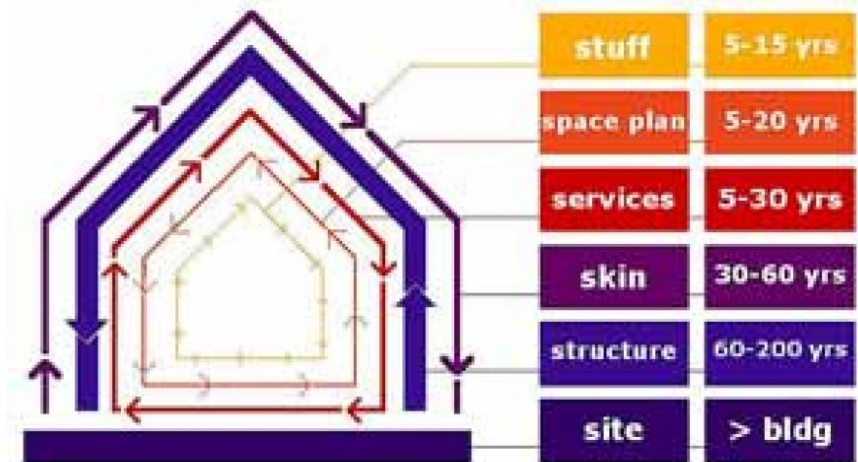
IDEA Consult 2017



Looking forward

- Develop **principles and rules for the design of buildings** in order to generate less waste and facilitate recycling.
- Increase the **durability and recyclability** of building components
 - Building design improvements , durability, adaptability, reversibility.
 - Design for Deconstruction (DfD), Design for Disassembly

Construction 2020 TG3 meeting 23 November 2017



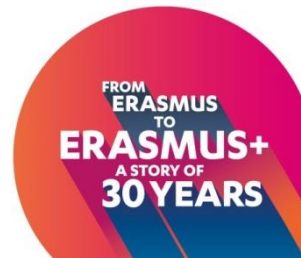
Stewart Brand's Six S's / 'Layers of Change' diagram
(Brand. 1994)

Looking forward

- **Digital technologies** to raise efficiency of construction processes
 - BIM handbook <http://www.eubim.eu/handbook/>
- **Address skills needs** for the modernisation/digitalisation of the construction sector
 - "Blueprints for Sectorial cooperation on skills".
 - General Erasmus+ Call for Proposals 2018 published in the OJ on 25 October 2017.



Construction



Thank you for your attention

