VALDEM Project:

Objectives:

VALDEM aims to improve demolition waste treatment to reach a circular economy in North of France and Wallonia (BE):

✓ Identify waste flow and create new recycling sector.
✓ Validate the approach by using Life Cycle Assessment.
✓ Demonstrate the transferability of the results to industries.
✓ Conduct a monitoring of regulations and highlight opportunities.

General information:

- **Budget:** €3,557,608.84
- **Duration:** 4 years
- **Start:** 01.07.2016
- **Geographical area:**

What about Life Cycle Management?

Activities:

- **Upstream**
  - Dismantling/demolishing
  - Transport of waste
  - Recycled material
  - Recycling process
  - Sorting process

- **Downstream**
  - Assess environmental burdens link to collection, sorting and treatment of construction and demolition waste
  - Assess environmental burdens link to product manufacture from CDW

Scope:

- **Type of buildings (upstream):** Residential buildings, Commercial and industrial buildings
- **Sorting facilities downstream:** Concrete + brick, Mixing, Sorting on site, Concrete + plaster, Fines + mixing, Mixing on site, Fines + mixing + soil, Road/demolishing
- **Sorting facilities on site:** Concrete + brick, Mixing, Sorting on site, Concrete + plaster, Fines + mixing, Mixing on site, Fines + mixing + soil, Road/demolishing

Challenges:

- Lack of consistent, specific, detailed and reliable data
- Lack of a consensual methodology for allocation in recycling

Approach:

- Data collection at different scale (micro with sorting facilities, recyclers … and macro: regional and national statistics …)
- State of the art of current research regarding allocation in recycling (PEF …)

Connecting with related initiatives and projects (Recybeton, Studies from SNED, FEDEREC, KU Leuven …).

Bring scientific and concrete elements (based on data from the ground and at macro-level) on how recycling of CDW can improve environmental impact of buildings along their life (current and future) and move forward to a circular economy in construction sector.