



**CONSTRUCTIONS & BIORESSOURCES**

**INTERNATIONAL SYMPOSIUM ON  
LIFE CYCLE ASSESSMENT AND CONSTRUCTION**

**July 10-12, 2012 - Nantes, France**

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## INTRODUCTION

PRESENTATION OF C&B

**Association of building biobased material created in 2011 with the support of French Ministry of Ecology, Sustainable Development and Energy and building biobased material industry**

### → Objective :

- To federate and to represent building biobased material industry and to defend his interest
- To develop the use of biobased material in building industry

### → Missions

- Knowledge : to capitalize knowledge and to make it available
- General interest : regulation and standardization, innovation and R&D, training, economic development, local development, information and communication
- Support of companies, industry, or territorial organization



- **Environmental quality is an important asset for biobased materials :**
  - C&B capitalize LCA with regard to building biobased materials
  - Participate to new LCA or Environmental Product Declaration (EPD)
  
- **For example : LCA of hemp concrete realised in 2006**
  - Main information of the LCA
    - Global environmental quality of hemp concrete
    - Difficulties to get reliable data about the end of life
    - Important impact of some component, especially binder
  - Consequences
    - R&D about new binder (for example clay-based binder)



- **Context :**
  - Development of the evaluation of building global impact with tools like Team, Elodie, or Cocon using EPD data
  - New quality label requiring the EPD of the product (for example : Label Bâtiment Biosourcés)
- **Current projects**
  - The Ministry of Ecology and Sustainable Development fund EPD for different building biobased material industries : Flax (particles board), Hemp (concrete and insulation wool), **Straw Bale Buildings**
  - EPD are realised by CETE Ile de France :
    - Start : January 2012
    - Finishing : end of 2012
    - Critical review : beginning of 2013
    - Publication (INIES database) : middle of 2013



### ▮ Data

- ▮ A large quantity of data from a long chain of production including agriculture
- ▮ A lot of variability sources: agriculture process, land of production, weather, sorts of plant, etc.
- ▮ Knowledge about end of life of this kind of products (% of mineralization, recycling, etc. )
- ▮ Knowledge about lifetime

### ▮ Decision

- ▮ Balance between variable data
- ▮ End of life
- ▮ Life time

### ▮ Debated questions :

- ▮ Relevance of collective EPD



→ Key questions :

- How to get value of CO<sub>2</sub> storage during the lifetime (including recycling) ?
- What is the reliability of a construction product LCA ? of a building LCA ?



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**Merci pour votre attention**

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