





Expert meeting

Application of ecological construction materials for energy efficient buildings:

modeling results and practical experiences
in the Baltic States

About the project

Using ecological construction materials in new, energy efficient buildings in the Baltic States

- Aims to promote the application of ecologically sound construction, insulation and finishing materials in the three Baltic states
- Implementation: **08/2009 – 03/2011**    
- Co-financed by: German Federal Foundation for the Environment
- Official Partner of the EC's Sustainable Energy Europe Campaign

Activities & Target groups

Activities:

- 1) information gathering and analyses on eco-materials available in the BS, good practice examples → recommendations
- 2) evaluation of the eco-performance of buildings by modeling → report on results
- 3) international experience exchange of experts → study visit, meetings
- 4) training of stakeholders → training materials (manual)
- 5) public awareness raising → publication (info brochure)

Target groups:

- Professional stakeholders - architects, engineers, craftsmen, experts from educational institutions, associations
- General public (consumers)

Why such topic?

Activities in the construction sector:

- Construction of new buildings - even slowed down currently, has a future perspective
- Refurbishment of existing buildings is raising

Increasing interest / demand from consumer side because of :

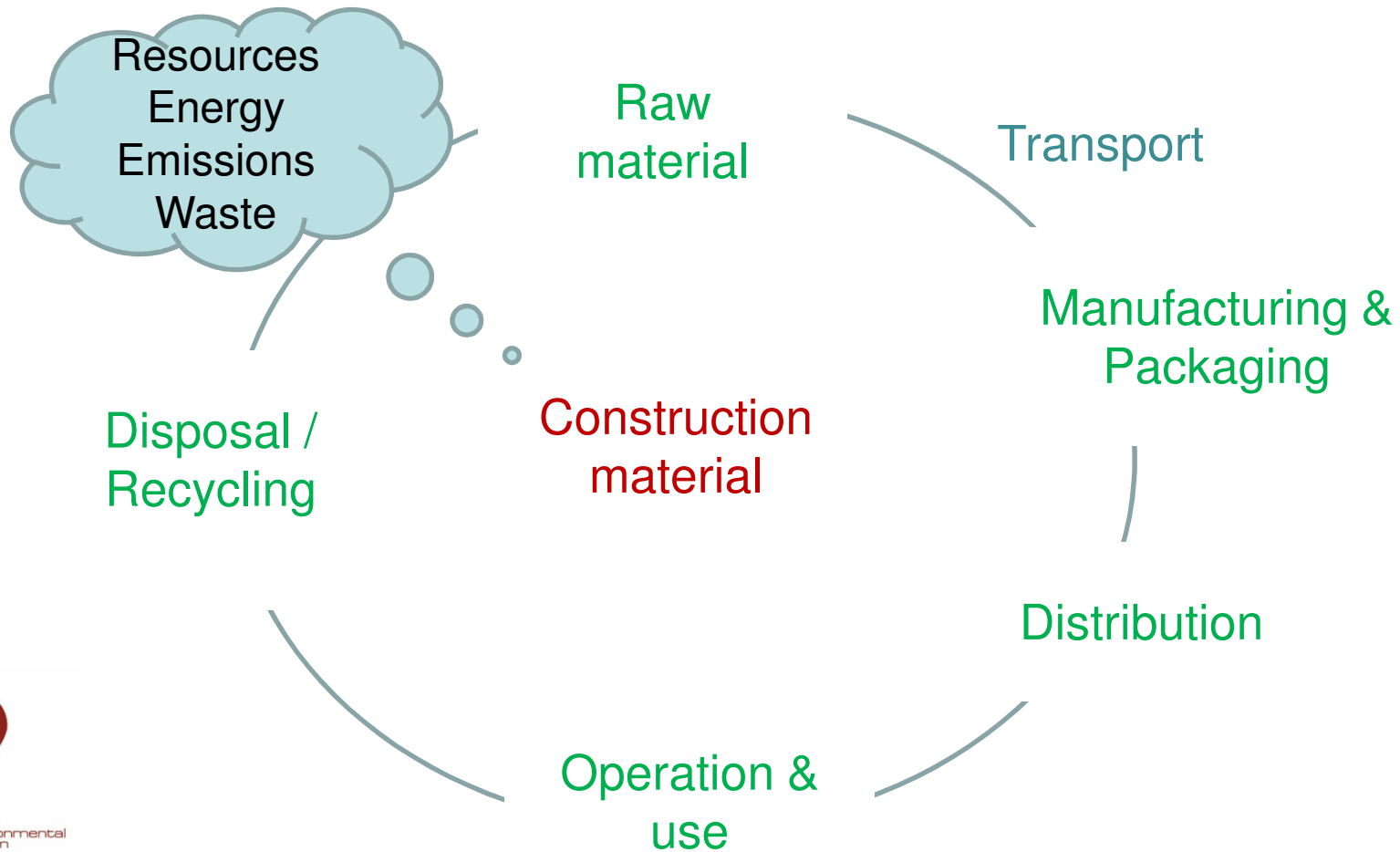
- Health concerns or “Choosing green” is in fashion
- Environmental concerns

Other related & actual aspects:

- Energy efficiency of buildings
- Economic aspects - costs /benefits



Environmental considerations



When it comes to the consumer



Health aspects

No harm when inhaling,
touching

Social aspects

Aesthetic values, variety

Economic aspects

Durability, resistance,
price, maintenance, etc.

Ecological construction materials

No common definition and criteria to follow, thus:

different understanding / interpretation



Examples of definitions:

- **Eco-materials** are those that can contribute to reduction of environmental burden through their life cycles” (Shinohara, 2004)
- **Environmentally preferable products** - those having a lesser or reduced effect on human health and the environment when compared with competing products that serve the same purpose (US EPA)
- **An ecological building material/product** is a material/product with no heavy negative environmental impact and with no negative health impact”

(Interreg IVB project CAPEM, 2010)

Various aspects / criteria to be considered / analysed / compared in a holistic way before selection of a material !

Goals of the meeting

- To discuss the results of modeling of buildings using conventional and ecological materials
- To exchange experiences and good practice examples on application of ecological materials in construction of energy efficient houses in the Baltic States
- To discuss needs for education and expert training as well as public awareness raising on ecology of materials in the Baltic States

