## **Hungarian LCA Centre Association**



Report on the state of the Hungarian LCA

Renáta SÁNDOR

Klára SZITA TÓTHNÉ György GRÖLLER



### **Evolution of the Hungarian LCA community** 1991 **Publicity** 2000's Light application, education 2005 First collaboration First Life Cycle Conference, Szeged 2006 2008 **Establish of the Association** 2011 SETAC Europe 17th LCA case symposium Student section on the conference 2013 2017 International conference 2019 First big international project

#### Members of the Hungarian LCA community

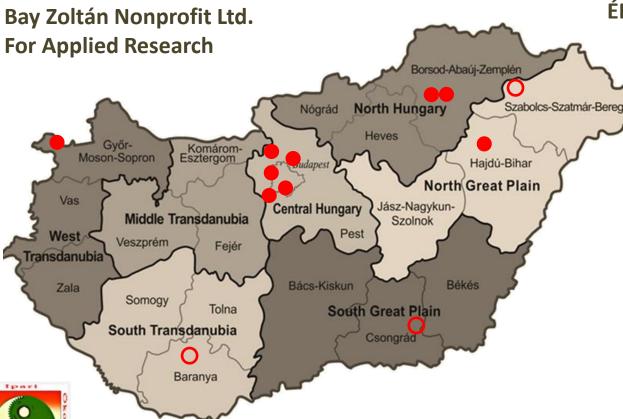


#### 2 companies





ÉMI Quality control of Building Innovation Nonprofit Ltd.



4 universities

Óbuda

**Technical Uni. of Budapest** 

Debrecen

Sopron

10 private persons

1 association

### **Application of LCA**



#### What type of work is needed?

- Assessments LCA, Carbon calculation
- Education, exchange of information
- EPD (Environmental Product Declaration)
- Buildings (energetics, materials, etc.)

#### **Application**

Industrial work or national/international tenders, projects



Calculation and education by software GaBi, SimaPro, OpenLCA

#### **Annual LCA Conference in Hungary**



# Life Cycle Assessment Conference in Hungary (2006-)

- In different cities, but mainly in Budapest
- Increasing the numbers of participants (60-150 peoples from companies, universities or only other interests)
- Wide range of topics (construction, product manufacturing, engineering, chemical, food industry, waste management, etc.)
- National/International
- 2days conference students

## **Annual LCA Conference in Hungary**









The 9th International Conference on Life Cycle Management

#### **Events and magazine**



ECO-Matrix

### We organized

- The 1st HUPLEE LCA seminar (2006),
- the SETAC Europe 17<sup>th</sup> LCA case study symposium (2011) Budapest

#### We attended international conferences

- Singapore, South Korea,
- Italy, Poland, Danmark, Luxemburg, etc.

### We have an **Annual Magazine**:

**ECO-Matrix** 

#### **Education**



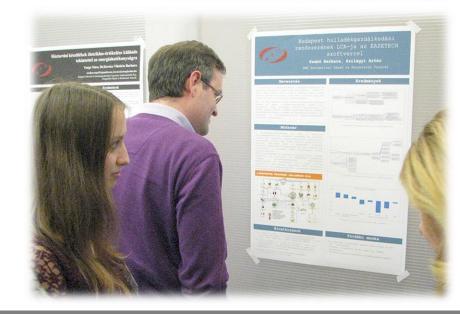
#### **Education**

- For students of universities (semester, some lessons, practice...)
- Theoretic and software using
- For employee of companies



#### **Students**

Thesis, diploma thesis, thesis for the doctor's degree



#### **Co-operation**



#### Helping each others in different ways:

- For the education,
- Offer the relevant work for the members
- Tender together
- Working together in different parts of LCM: LCA, SLCA, LCC

## Co-operation – good practice CENTRAL



Aims of the CIRCE2020 international project are to explore and develop business models and technologies for industrial symbiosis and circular economy in the selected industrial areas. The project focuses on that waste streams which can be recycled to the production stage or other producer can use it as raw materials.

#### THE CASE

- 4200 tonnes composite plastic waste produced in a year which contains several types of plastic (PP, PE, PET, aPET, EVA, PVC, PA) and organic material
- Instead of energy recovery we would like to find an alternative solution and move forward in the waste hierarchy
- There are some companies that can make valuable products with use of waste plactic: plastic enclosures or outdoor garden furniture & accessories
- Testing and experimenting are needed, because the PE, PVC and organic content can cause difficulties in the processing
- Possible stakeholders who we can involve: research institues, waste









https://www.circe2020-wiki.eu/





#### **Corporate work**



# IS-SusCon - Spread of Innovative Solution for Sustainable Construction

Promotion of life-cycle thinking

- Sustainability perspective of the construction materials
- Whole life cycle approach of the housing
- For the building and construction industry and the customers
- By web application

Project duration: 24months

#### **Partners**

- Hungarian LCA Association Hungary
- Ecoinnovazione srl. Italy
- Bionova Ltd. Finland
- ÉMI Quality control of Building Innovation Nonprofit Ltd. - Hungary





# Thank you for your attention!

Renáta Sándor LCA Research Group Leader

renata.sandor@bayzoltan.hu

www.lcacenter.hu