### The 6<sup>th</sup> International Summer School

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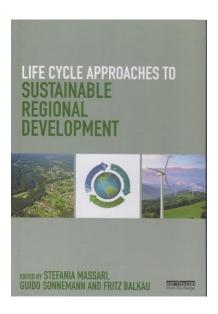
### Life cycle approaches for sustainable regional development

Theme for 2017

# "The life cycle tool box for regions"

Luxembourg

1-3 September 2017



organised by

LCASRD Group, in collaboration with FSLCI

# **BACKGROUND and DESCRIPTION**

Sustainability objectives are more	e likely to be achieved if regional	administrations adopt a longer-term,

holistic, life cycle approach to development decision-making.

The sixth Life Cycle Summer School is an opportunity for professionals and regional managers to become familiar with expanded LCA approaches to sustainable development at regional level. The objective is to encourage a greater degree of life cycle thinking by influential social partners who wish to enhance the effectiveness of their sustainability programmes, and who have not so far employed these techniques extensively. The Summer School is aimed at administrators in regional institutions, academics, and consultants as well as industry managers and associations and other partners that have an interest in promoting regional sustainability

The Summer School aims to develop familiarity with, and insights into, life cycle management approaches that can contribute to regional sustainability. It expands the managerial toolbox currently employed for the promotion of, for example, circular economy, maintaining a vibrant SME industrial sector, developing local resource-based economies, and in gaining a better understanding of waste and pollution challenges in regional communities. Life cycle approaches can also assist in enhancing landscape and natural resource management.

The Summer School is based on a recent book "*Life cycle approaches to sustainable regional development* (2017)". A number of the summer school lecturers are authors of important chapters in this publication.

This 2017 edition of the summer school will explore selected topics such as expanded LCA approaches for mapping regional materials flows, use of LCA for mobility policy, life cycle techniques for landscape and land-use, as well as building a LCM toolbox for SMEs. Through lectures and workshops, these instruments will be examined for their role in strengthening regional programmes in circular economy, in industrial innovation and in building a bio-economy. Mature students enrolled in the course will be encouraged to share their experience in these subjects.

For those wishing to enhance their knowledge on basic LCA, a one-day refresher course will also be offered for a small extra fee.

This year's Summer School is linked with the *International Conference on Life Cycle Management 2017*, <a href="http://lcm2017.org">http://lcm2017.org</a>, in Luxembourg 3-6 September 2017. The global life cycle community association 'Forum for Sustainability through Life Cycle Innovation' (FSLCI) is closely associated with both events <a href="https://fslci.org">https://fslci.org</a>. For information about previous editions of the Summer School, visit <a href="https://ssci.org">www.lcss.unisalento.it</a>

#### **OBJECTIVES OF THE 2017 SUMMER SCHOOL**

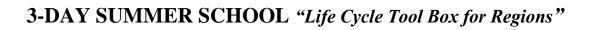
**Purpose** – improve the practical use of life cycle approaches that can lead to a higher level of sustainable development at regional level.

**Objective** – enhance participants' knowledge of, and ability to apply, available life cycle tools, and their application to regional sustainability planning.

#### 1-DAY LCA INDUCTION/REFRESHER COURSE (Optional)

This one-day course on 31 August 2017 ahead of the summer school is intended for persons wishing to update their knowledge on life cycle assessment, as well as for persons looking for a first introduction on how LCA works, and how it can be applied. The content includes:

- The LCA world and its environment, its clients and its practitioners
  - Review of LCA and its applications. Purpose of LCA. LCA and the sustainability agenda.
  - LCA models and calculations. Uses and limitations.
  - Expanding the scope of LCA to new issues
  - Managing LCA studies. Transition from LCA to LCM.



## Provisional programme

#### D1 – 1 September – Sustainable regional development and the life cycle tool box

- Introduction to summer school. Outline of programme.
- Background on life cycle issues in regional development. Presentation of book
- Keynote lecture "Managing sustainability at regional level"
- Thematic lecture & discussion "Analytical basis of regional LCM- a tool box overview"
- Lunch break
- Thematic lecture and discussion "Extended LCA Life cycle approaches to landscape and land-use management"
- Workshop on LCM implementation. Summary of students' work on this theme
- Synthesis of the day, panel, and feedback

#### **D2** – 2 September – **Expanded LCA for regions**

- Short student presentation to start the day
- Thematic lecture "Materials flow as basis for regional development decisions"
- Workshop "Managing Circular Economy as a life cycle initiative"
- Lunch break
- Thematic lecture and workshop "Life cycle aspects of a regional bio-economy"
- Interactive Workshops/role play/problem exercises on expanded LCA techniques
- Synthesis of the day, expert panel, and feedback

#### D3 – 3 September – Regional applications of LCM toolbox

- Short student presentation to start the day
- Thematic lecture "Agent-based life cycle modelling for regional mobility"
- Thematic lecture & workshop "Industry interface –LCM tool box for regional SMEs"
- Lunch break
- Keynote lecture "LCA applications in a regional setting"
- Round table, Synthesis and Conclusions. Next steps.
- Evaluation & feedback.
- (4pm) Final allocution and farewell. Transition to LCM17.

#### **ENROLMENT and FEES**

The Summer School is funded from students' fees. Lecturers and organisers are giving their time free of charge. Fees are being kept to a minimum, covering essential meeting costs, course materials, lunches and coffee breaks, and expenses for international experts. Students pay their own travel to Luxembourg, budget accommodation, and meals (other than lunches).

The school will take place with a minimum of 15 applicants (maximum 30).

The LCA Refresher course will take place with a minimum of 8 applicants.

The registration fee is  $380 \in$  for the 3-day Summer School. 'Early-bird' registrations before 31 May are eligible for a reduced final fee  $350 \in$ .

The fee for the optional *LCA Initiation-Refresher Course* offered on the 31 August is 80 €.

FSLCI members are eligible for a 30 € rebate on the registration fee!

(Note: FSLCI members are also eligible for a reduced registration fee for LCM2017)

Deadline for registration is 30 June 2017.

Application and Registration on <a href="https://fslci.org/events/lcss2017/">https://fslci.org/events/lcss2017/</a>
For more information contact info@fslci.org

### **LOCATION:**

Maison du Savoir 2, Avenue de l'Université L-4365 Esch-sur-Alzette, Luxemburg

## SUMMER SCHOOL FACULTY\*

#### LCASRD Group:

Prof. Guido Sonnemann – University of Bordeaux, France

Prof. Stefania Massari - University of Salento, Italy

Dr. Fritz Balkau – Sustainable solutions, France

#### Invited lecturers:

Prof. Wouter Achten, Université libre de Bruxelles, Belgium

Dr. Naeem Adibi, cd2e, France

Dr. Enrico Benetto, LIST, Luxembourg

Dr. Alberto Bezama, Helmholtz Institute, Leipzig, Germany

Mr. Timothy Grant, Lifecycle Strategies, Australia

Prof. Wouter de Soete, University of Ghent, Belgium. Chair of FSLCI Education Committee

Rapporteur, session tutor and event support - Mr Philip Strothmann, FSLCI Event host and meeting support - LIST, Luxembourg

<sup>\*</sup> Short biographical summaries for the above persons are available on the LCSS section of the FSLCI website.

ORGANIZERS, SPONSORS, PARTNERS and ASSOCIATES				

This summer school, the sixth in the series, is co-organized by the FSLCI and the LCASRD Group, a group of individuals who came together in 2011 to run the first series of such events in Lecce, Italy, and subsequently enlisted further experts to enable the publication of the book Life cycle approaches to sustainable regional development (2017). The group brings together individuals and organizations as partners to promote life cycle approaches for regions.

The University of Salento initiated the Summer School series in 2011 and remains an important partner to its conduct also in other locations. The summer school in 2015 was held in the context of the LCM 2015 and with the support of the Université de Bordeaux and the FSLCI.





This year's Summer School is linked with an event on sustainability and life cycle thinking, in Messina (Italy) 3-7 July 2017, and with the International Conference on Life Cycle Management 2017, in Luxembourg 3-6 September 2017. Applicants to the Summer School may wish to continue their exposure to LCM by also participating in this conference: <a href="http://lcm2017.org">http://lcm2017.org</a>



Important contributions are also coming from:

- cd2e, France
- Helmholtz Centre for Environmental Research UFZ, FRG
- University of Ghent, Belgium
- Université libre de Bruxelles, Belgium

**Readings:** Ref: <a href="https://www.routledge.com/Life-Cycle-Approaches-to-Sustainable-Regional-Development/Massari-Sonnemann-Balkau/p/book/9781138940604">https://www.routledge.com/Life-Cycle-Approaches-to-Sustainable-Regional-Development/Massari-Sonnemann-Balkau/p/book/9781138940604</a>

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