

# FROM EPD DATA TO PRACTICE

## BIM automated life cycle assessment for building design and certification

– eight hour on-site training for LEED APs–

**Date:** November 16<sup>th</sup> 2016, Berlin

**Venue:** ParkInn Hotel Alexanderplatz, Alexanderplatz 7, 10178 Berlin

**Registration fee:** 350 € (net) per person

### Training program:

<b>09:00 – 09:15</b>	Morning coffee and introductions
<b>09:15 – 10:15</b>	Building Product EPDs
<b>10:15 – 10:45</b>	Whole building LCA –what and why? (Theory)
<b>10:45 – 11:30</b>	Applications for building LCA (practical examples of real life cases)
<b>11:30 – 12:30</b>	Lunch break
<b>12:30 – 13:50</b>	LCA for certifications: DGNB, LEED and BREEAM
<b>13:50 – 15:00</b>	Calculation exercise, building LCA according to EN-standard (using LCA tool)
<b>15:30 – 16:30</b>	Calculation exercise, building LCA using day-to-day design tool data (using LCA tool)
<b>16:30 – 17:00</b>	Questions and answers

Please register (binding) until October 18<sup>th</sup>, 2016 via email to: [info@ibu-epd.com](mailto:info@ibu-epd.com)

Hosted by:

Institut Bauen und Umwelt e.V. (Germany) & bionova Ltd (Finland)



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For detailed information please see next page.

## **About the training**

Life-Cycle Assessment (LCA) is a methodology that allows evaluating the carbon and other environmental impacts of building materials over the entire lifespan of the building. LCA is a core credit in DGNB (ENV1.1 and ENV2.1) and BREEAM (worth up to 7 credits) and the major new credit in LEED v4 (worth up to 4 points). Environmental product declarations (EPDs) provide the basis for the assessment by providing information of the impacts of building materials.

The classic LCA processes and leveraging EPD data have perceived to be costly and complex which has made project teams reluctant to use LCA and thus unable to reach its potential in green building design. However, BIM and commonly utilized building modelling tools already capture the material data needed for automated LCA.

This course introduces the key concepts and methods required to understand the basics of LCA and EPDs and shows how the standard based LCA can be completed fast, easy and reliably with automation from BIM and building design tools. Building on the acquired knowledge, the course explains the requirements for earning the LCA credits in certification projects. Learn how to use LCA in practice to achieve better building design and certification credits - get the facts, tips and practical examples from the experts in this on-site training!

Attendees complete a practical LCA exercise during the training using their own laptops. Training language will be English. Support in German is available by the IBU staff, who are present the whole training.

The LEED related parts of the training are accredited by GBCI and offer LEED Aps (BD+C) and LEED Green Associates a possibility to earn 2 continuing education hours ([read more](#)).

## **Aim of the course and learning objectives**

This course familiarizes the participants with the concept of LCA and EPD and the associated standards as well as the requirements for achieving LCA credits in DGNB, LEED v4, BREEAM International rating systems. The course also includes a practical exercise. Upon completion of the course, the participants will be able to:

- understand relevant industry standards and whole building life-cycle assessment and methodology
- content of EPD and how they can be used for whole building LCA and building design
- explain their clients and project team the certification LCA credits, and the benefits and requirements of pursuing these credits in projects
- complete an LCA to qualify for these credits in their projects, and
- employ day-to-day design software to enable automated building life-cycle assessment

## **Who should be participating?**

This project benefits green building consultants, architects, engineers, project managers, developers and construction clients working on certified construction projects, especially with DGNB, LEED or BREEAM. Furthermore, the course will be beneficial for material suppliers serving such projects.

## **About the trainers**

Trainer Stefan Zwerenz is a consultant at Institut Bauen und Umwelt e.V. (IBU). He has a Master of Engineering in the field of sustainable structures. He will introduce the IBU EPD-Program and is in charge of the EPD Online Tool and the verification process.

Trainer Panu Pasanen is a building LCA expert with years of LCA training experience and over 10000 hours of practical LCA experience. Besides working with certifications, he is also actively participating in LCA standardization.