

# LCA 1.01 training using SimaPro

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This course has been designed for people both new to LCA and those who want to further their knowledge in LCA models.

It consists of compulsory and easy-to-digest sessions, spread across 3 days in a hybrid format, accessible both in-person and online.

The course will cover the fundamentals of LCA and standardised procedures, and provide an overview of how LCA is undertaken in a practical sense. It also provides case studies and tutorials for self-study in between the course slots if you wish to do so.

To help prepare you for the course, we have also scheduled a 2-hour online introductory session on the Wednesday before the course begins.

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# Course content

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## **INTRODUCTORY TOPICS**

- Structure and purpose of LCA: What LCA addresses and how it's structured to do this.
- LCA standards: What are they and what do they require?
- Goal and scope definition: Key to setting up the LCA.
- Functional units: The basis for comparison. Getting them right.
- System boundaries: How deep, how wide, how do we decide?
- Inventory data: Modelling the foreground data and sourcing background data.
- Structure of Life Cycle Impact Assessment: What is characterisation, normalisation and weighting?

## **EXPLORING LCA METHODOLOGY**

- Consequential LCA: What it is and how it differs from attributional LCA.
- Dealing with coproduction: Allocation hierarchy, joint and combined production.
- Recycling loops: How best to treat recycling between different product life cycles.
- Impact Assessment: Midpoint and Endpoint methods. How do damage models work?
- Input-output analysis: Using economic data to model life cycles.

## **USING SIMAPRO**

- Structuring LCA models: Getting the answer out in the form you need.
- Using parameters: Once you go there you will never look back.
- Scenario: Building fewer models but having more scenarios.
- Making the data your own: Manipulating the inventory data for your LCA.
- Import and export: Typing in data sucks. Getting data into and back from Excel.
- SimaPro analysis: Using groups and SimaPro audit features.
- Building impact methods: Interrogating and modifying impact models.
- Uncertainty: Specifying uncertainty and understanding Monte Carlo results.

# Details

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## **WHO SHOULD DO THE COURSE?**

- People wanting to familiarise themselves with LCA, begin undertaking LCAs or managing their implementation.
- People wanting to move beyond carbon accounting into LCA.
- People who have been fumbling around in LCA for a while but never really nailed the fundamentals.

## **IT REQUIREMENTS**

- Excel
- SimaPro (will be supplied if participants do not have a working copy)  
SimaPro is designed for Windows and does not work on Mac. You will need access to a PC or laptop that runs on Windows. Alternatively, you can install a Windows emulator on your Mac.
- PIQET (will be supplied if participants do not have a working copy)

## **ABOUT YOUR TRAINER**

Based in Melbourne, Tim Grant has worked in LCA for over 20 years and has undertaken over 50 full LCA studies including the development of the Australian National Life Cycle Inventory Database. He is the founding member and current director of the Australian Life Cycle Assessment Society and is a pillar of the international Life Cycle community through his involvement with the UNEP/SETAC Life Cycle Initiative, ISO standards development committee for ISO14048 and the Forum for Sustainability through Life Cycle Innovation.

## **COST**

- Professionals: \$2,000 ex. GST
- Students: \$900 ex. GST

## **ENQUIRIES AND REGISTRATION**

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[lifecycles.com.au/life-cycle-assessment-training](http://lifecycles.com.au/life-cycle-assessment-training)