

Presentation of the BONSAI Board 2018



Dr. Christopher Mutel, Chair

As a student, consultant, and, since 2014, scientist at the Paul Scherrer Institute, I have used and researched life cycle assessment (LCA) for the last 10 years. My research interests include locating inventory data in space and time; prospective assessment, especially together with integrated assessment models; and uncertainty and sensitivity analysis. I am also the principle author of the Brightway2 software framework and assorted support libraries. Being at the intersection of LCA research and implementation in software gives me a clear perspective on the challenges and possibilities of the BONSAI project.

As a strong advocate of open source software and open data, I am convinced that BONSAI is an essential part of modern sustainability assessment. We must have data and choices that can be read and questioned by all stakeholders, and we must do a better job integrating existing data generation pipelines. As a community, we have the opportunity and capabilities to make substantial advancements over current practice, and the ideas, data, and software that BONSAI will provide are a key to realizing that future.



Prof. Bo Weidema, Vice-Chair

Founder of the BONSAI initiative. Professor at Aalborg University, committed to trans-disciplinary research that bridges economic, social, engineering and environmental sciences. With a background in the fair trade and sustainable agriculture movements, I have now 25 years of academic and consulting experience with environmental life cycle assessments. I developed the original SPOLD LCI dataformat in the 1990'ies, and worked from 2008 to 2014 as Executive Manager and Chief Scientist of the ecoinvent database.

My motivation for working with BONSAI is a realisation that an open community and crowd-sourcing approach, relying on the latest developments in data science and technology, is the only way we can ever obtain and maintain the amount and quality of data necessary for serious sustainability assessments of products.



Dr. Jannick H Schmidt, treasurer

Managing Director of 2.-0 LCA consultants and Associate Professor at Aalborg University. I have worked professionally with life cycle assessment and databases since 2002. My main areas of expertise and experience are related to the development of hybrid input-output databases (Exiobase and FORWAST), methods for modelling in life cycle inventory (consequential and attributional), modelling of agri-food systems, modelling of indirect land use changes. The combination of research and consultancy gives a valuable insight in advanced methodologies as well as the needs from the end-users of LCA (user-interface and communication).

My motivation for contributing to Bonsai is to bring together the best from different database approaches (top-down and bottom-up) and available data, and then make broader use of it to enhance sustainable development.



Dr.-Ing. Andreas Ciroth

I am founder and director of GreenDelta, and work since almost 20 years in sustainability life cycle approaches in research and consultancy, including environmental LCA and social LCA. At GreenDelta we develop the free and open source LCA software openLCA which is becoming increasingly used and which fits nicely to the idea of

BONSAI to increase data availability. We have also created, with very little funds, a format converter to convert between LCA data formats to help overcome the sometimes heated debate about data formats.

I am personally very interested in increasing data interoperability and data availability for life cycle approaches and think the current ways of collecting, sharing and using information relevant for life cycle based decision support is really underdeveloped, and even embarrassing, seeing developments in other areas – so that the current practices can be done a lot better, for the benefit of all. I am happy to be able via BONSAI to contribute to these improvements and to shifting data availability and usage in life cycle approaches to more up to date practices.



Dr. Pascal Lesage

I have been working as both consultant and researcher in the field of LCA for 15 years and am presently a research officer at the CIRAIG. My three core motivations in my LCA work align well with BONSAI's mission: (1) democratization of life cycle data and tools, allowing a greater use of life cycle information in decision-making; (2) more transparent consideration of uncertainty (and their specific sources) in life cycle models; and (3) development of data, tools and modelling approaches

that allow a strategic and efficient increase of the robustness of life cycle information.

The combination of a top-down approach (using an IO framework to ensure completeness) and bottom-up approach (e.g. crowd-sourcing data collection, data harvesting), the focus on social involvement in data creation and review and, of course, the condition that the resulting data and approaches be free and open source, make BONSAI a unique and important initiative.