



CÉDRIC FURRER

LIFE CYCLE ASSESSMENT EXPERT
MASTER OF SCIENCE, ETH

CURRICULUM VITAE



WORK EXPERIENCE

04/2026 - Now

PhD Student Leiden University

Leiden University / Leiden, NL

- Title: *"Towards enhanced agricultural life cycle assessment: accelerating LCA generation, emphasizing geospatial LCI emission modelling and ensuring consistency in background LCI databases"*

07/2025 – Now

Scientific collaborator

Agroscope / Zurich, Affoltern, CH

- Life cycle assessment of alternative plant protection strategies in Swiss agricultural production systems, with a focus on viticulture, apple and potato production.
- Further development of technical tools in life cycle assessment (i.e. Brightway).

09/2024 – 07/2025

LCA Sustainability Specialist

Quantis SARL / Zurich, CH

- Being part of Quantis' footprinting team. Calculation of client- or product-specific life cycle assessments and emission factors from cradle-to-gate, developing calculation models and working with data from ecoinvent and WFLDB databases.
- Calculation and update of GHG-protocol aligned corporate carbon footprints from raw data received by clients.
- Supporting clients by reviewing data and methodology of corporate carbon footprints. Helping clients to appropriately set SBTi aligned climate targets.
- Creating ISO 14040:14044-aligned reports, deliverables (presentations) and customer-facing reports for client marketing and communications. Presenting project results to clients and other audiences.
- Developing Python-based digital tools e.g. to automatize GHG emissions calculation from client data or to interlink excel data with Quantis' inhouse eQosphere software platform.
- Generating food-processing inventory datasets for Quantis' inhouse WFLDB database.
- Supporting Quantis' IT team in the development of specific agricultural modelling methodologies.
- Supporting of Quantis' sustainability strategist in the development of proposals by including sector-specific expertise. Estimating required time for specific project tasks.

03/2020 – 07/2024

Scientific collaborator

Agroscope / Zurich, Affoltern, CH

- Research group Life Cycle Assessment (LCA) with focus on the environmental impact assessment of the food and agricultural sector. Deepening the understanding of LCA methodology and working thoroughly with Life Cycle Inventory data using tools such as Brightway2 and SimaPro.
- Working as data analyst in industry projects by applying LCA methodology. Owning part of the project lead in the EU project „OptiSignFood“
- Communicating project results to public and to clients in oral as in written form

10/2018 – 02/2019

Internship

UFA AG / Herzogenbuchsee, CH

- Involved in the strategic planning of marketing activities
- Responsible for online marketing. (facebook, newsletters, website, etc.)
- Writing of journal articles (UFA-Revue), direct mails, Marketing-Aktuellarticles and sponsoring concepts
- Planning and coordination of fenaco-intern project "AgriInsects".Communication to external partners and data analysis.
- Contribution to UFA-intern marketing software (UFAnet)

01/2018 – 06/2018

Scientific collaborator

Group animal nutrition, ETH Zurich / Zurich, CH

PUBLICATIONS

- 2024 Interlinking environmental and food composition databases: An approach, potential and limitations.
Furrer C., Sieh D., Jank A.M., Le Bras G., Herrmann M., Reguant Closa A., Nemecek T., Journal of Cleaner Production, 470, 1-12. <https://doi.org/10.1016/j.jclepro.2024.143198>
- 2022 M-Check 2.0: "Umweltverträglicher Pflanzenschutz": Methode zur Abschätzung des Ökotoxizitätspotenzials pflanzlicher Nahrungsmittel im Kontext einer Sternenbewertung gemäss dem Konzept M-Check 2.0
Furrer C., Iten L., Nemecek T., Gaillard G., Agroscope Science, 144. <https://doi.org/10.34776/as144g>
- 2021 Umweltbewertung ausgewählter Klimaschutzmassnahmen auf Landwirtschaftsbetrieben.
Furrer C., Stüssi M., Bystricky M., Agroscope Science, 121. <https://doi.org/10.34776/as121g>
- Einfluss von Import-Herkunftsländern und Nahrungsmittelverlusten auf die Umweltwirkungen des Schweizer Agrarsektors.
Furrer C., Stüssi M., Bystricky M., Agroscope Science, 114. <https://doi.org/10.34776/as114g>

PROJECTS

07/2025 – Now

Nachhaltigkeitsbewertung von Pflanzenschutzmassnahmen zur Zielerreichung der Agrarpolitik 2050 (NABEPA)

Agroscope and FOAG funded project

- Sustainability assessment of plant protection measures in apple and potato production based on different scenarios representing past, present, and future conditions.
- Identification of trade-offs between efforts to reduce risks associated with the use of plant protection products, their environmental impacts and yield stability.

07/2025 – Now

Vino Sostenible Ticino (ViSoTi)

FOAG funded project (resource project)

- Resource project focused on reducing the environmental impacts of viticultural production. Translation of research findings into practical agricultural applications. Focus on plant protection strategies in response to regulatory restrictions.
- Comprehensive analysis of the environmental impacts of common and promising viticultural production systems, as well as innovative cultivation and plant protection strategies.

05/2025 – 07/2025

Life cycle impacts of a cloud-based software platform

- Conducting a life cycle assessment for a cloud-based software IT platform. Compare the outcome with best practices in the market through a benchmark and assess the alignment with the TNFD LEAP framework.

04/2025 – 07/2025

Review of corporate carbon footprint of an event company. Supporting the company in setting SBTi-aligned climate targets

- Review carbon footprint methodology, identifying any potential gaps with key frameworks such as GHG Protocol, provide recommendation for alignment, define and submit science-based targets.

03/2025 – 06/2025

Creation of label-specific emission factors for meat products

- Customize existing meat emission factors for chicken, pork and cattle with supplier-specific data from labels and guidelines. Include the life cycle impacts of land use change free soybean production.

03/2025 – 05/2025

Creation of label-specific emission factors for coffee products

- Customize existing coffee emission factors for 15 different countries by adjusting the land use change and fertilizer management according to standards defined in the respective production guidelines.

02/2025 – 06/2025

Creation of supplier-specific palm oil emission factors from direct land use change assessment and integration into corporate footprint

- Matching of client corporate data to customized supplier-specific palm oil emission factors. Updating the corporate carbon footprint using the GHG protocol/methodology for all relevant scopes (1, 2 and 3).

10/2024 – 02/2025

Corporate carbon footprint calculation of Food & Beverage company

- Creating data collection template, supporting client in data collection, cleansing and sense checking client data, modeling of environmental impacts, analyzing results and preparing client report.

10/2024 – 11/2024

Client-specific packaging database update + creation of food processing datasets

- Updating clients specific packaging emission factor database to the latest version of ecoinvent and providing the FLAG and GAS split. Creating customized datasets for “roasting” activities.

09/2024 – 12/2024

Carbon footprint assessment for chemical products

- Assessing the climate impacts of 11 chemical products via product carbon footprints following ISO 14040, 14044 and 14067 standards. Collecting data, creating emission models and calculating climate impact results. Identifying hotspots and specific levers for reduction. Creating customer-facing deliverables for external results communication.

07/2020 – 07/2024

OptiSignFood

EU funding project ([link to website](#))

- Developing a holistic and integrated approach to predict and optimise the quality of food, as well as its appearance and safety, nutritional value and environmental impact.
- Collecting available and assembling new food Life Cycle Inventory data for integration into the food optimization software „OptiSignFood“

09/2020 – 01/2023

Potential Ecotoxicity of Food

Migros third party funding project ([link to report](#))

- Developing an LCA-based methodology to predict the ecotoxicity of different food products from several European countries by applying ecotoxicity factors from LCA impact assessment methods.
- Validation of methodology and communication/presentation of results

03/2020 – 06/2021

IP-Suisse Point Protection System

IP-Suisse third party funding project together with the Swiss federal agency for agriculture ([link to report](#))

- Evaluating greenhouse gas mitigation measures for farms using the LCA methodology
- Assessing the environmental performance of Swiss farms using the Agroscope LCA tool “SALCA” for the approximation of on-farm emissions

09/2020 – 03/2021

LCA of Food Imports and Food Waste

Agroscope ([link](#) to report)

- Analysing the contribution of food imports and food waste on the overall Swiss Food Sector

05/2019 – 12/2019

Master Thesis

ETH Zurich

- LCA of wheat bran-based alternative products (bio fuel, bio plastic, animal fodder). Assembling of Life Cycle Inventories for alternative products to assess the impact on the environment and evaluate the substitution potential

03/2018 – 08/2018

Solid Waste Management in the Seychelles

Transdisciplinary Case Study ([link](#) to report)

- Developing ideas and strategies for a sustainable solid waste management plan on a national level in the Seychelles
- Specifically, demonstration of the technological and economic feasibility of an anaerobic digestion facility to treat organic material in order to reduce waste volume, generate energy and lower the environmental impact

EDUCATION

08/2021

Project Management Course

Ausbildungszentrum der Bundesverwaltung / Bern

- Know the basic project management technical competencies and apply them practically on own projects
- Applying methods and techniques in project management, understanding the different roles in project management and the importance of project planning and project controlling and closing

09/2017 – 12/2019

Master Studies in Agricultural Sciences

ETH Zurich / Zurich

- Focus on Plant Science with special interest in Plant Pathology (Biological and Chemical control), Algae Production, Forage Crops (and alternatives), Insect Ecology and Ecosystem Fluxes
- Minor interest in Ruminant Science on Animal Welfare, Applied Ethology and Efficiency of Ruminal Digestion

09/2014 – 09/2017

Bachelor Studies in Agricultural Sciences

ETH Zurich / Zurich

- Bachelor thesis on the entomopathogenic control of *Drosophila Suzukii* with *Metarhizium anisopliae* as biological control agent and different yeast species as attractants
- Field of Environmental Science, mainly focusing on Plant Science. Further knowledge in Plant Pathology, Plant Ecophysiology and Nutrition, Forage Cropping, Sustainable Agroecosystems, Herbology and Population Genetics
- Additional knowledge in Animal Science (Animal Welfare and Nutrition) and Agricultural Economics (Development Economics and World Food Economy and Agricultural Markets)

09/2000– 09/2014

Elementary and High School

Willisau

- Intercultural exchange year in Chile, 2011 - 2012

SOFTWARE



Brightway2
Life Cycle Assessment



Python
Programming



Microsoft Office
Word, Excel, Powerpoint



SimaPro
Life Cycle Assessment



R-Studio
Data and statistical analysis



Adobe Creative Cloud
Graphic visualization

LANGUAGES

	Basic	Conversational	Fluent	Native
(Swiss-)German	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
English	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Spanish	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
French	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>