

Agneta Ghose

Born 20 June 1988, Indian citizen

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[LinkedIn profile](#); [Google Scholar profile](#)



Work Experience:

Research:

- 2019— Present Department of Planning, Aalborg University, Denmark;
Post Doc researcher
 - Ongoing research on developing a comprehensive ontology for databases related industrial ecology. Other responsibilities include teaching and supervising student projects.
- 2018 (5 months) Directorate D- Sustainable Resources, European Commission, Joint Research Centre;
Research trainee
 - Developed models to estimate food waste from different food types for the EU and specific member states. Results of the analysis accepted for a platform presentation at the 27th European Biomass conference. A scientific publication is in preparation.
- 2014— 2018 New Zealand Life Cycle Management Centre, Massey University, New Zealand;
PhD Researcher
 - Gained skills in advanced life cycle assessment methodologies (consequential, economic Input-Output, and hybrid LCA modelling) and applied it to the case studies in my PhD research on New Zealand's building sector. Other responsibilities include teaching
- 2011— 2013 Paper and Fibre Research Institute, Trondheim, Norway;
Researcher
 - Performed life cycle assessments on wood-based products including newsprint, cardboard and bio-refinery products manufactured in Norway. Developed scientific journal article and LCA reports for environmental product declarations.
- 2012 (summer) MiSA, Trondheim, Norway;
Summer Intern
 - Developed an elaborate life cycle assessment of buildings built based on the Norwegian building standards. Project outcome- user-friendly model to develop whole building LCA for non-LCA practitioners.

Qualifications:

- 2014— 2018 Massey University, Palmerston North, New Zealand;
PhD/Life Cycle Management
 - Doctoral thesis on the environmental implications of large-scale energy efficiency refurbishments for commercial office buildings in New Zealand using Life Cycle Assessment (LCA).
 - Key outcomes include - scenario driven detailed environmental analysis of energy efficiency measures; implications of growth in construction sector related to resource constraints and waste management; developed strategic and practical suggestions to reduce the overall environmental impacts of refurbishment aimed at energy efficiency.
- 2010— 2012 Norwegian University of Science and Technology, Trondheim, Norway;
MSc/Industrial Ecology
 - Developed core competency in multiple environmental sustainability tools including LCA, Input Output, Hybrid LCA and Material Flow Analysis.
 - Collaborated with Danish enterprise Velux AS to develop the Master thesis. Performed detailed LCA of low energy consuming residential building in Stjørdal, Norway.
- 2006— 2009 Stella Maris College, Chennai, India;
BSc/Zoology and Biotechnology
 - Awarded the best outgoing student from the Department.

- Led the college Environment Club to raise awareness on local environmental issues among students.

Additional Software skills:

- Expertise in multiple LCA software- BrightWay2, SimaPro, GaBi; strong grasp in the understanding and use of major LCA databases (Ecoinvent, Exiobase, GaBi).
- Experience with statistical computing in R and Python

Awards and recognition:

- Recipient of Erasmus+ staff mobility for teaching and training at Mahidol University, Bangkok 2020
- Recipient of Best poster at 16th International Semantic Web Conference, ESWC 2019
- Recipient of Doctoral dissemination grant from Massey University
- Recipient of Doctoral scholarship from Building Research Association of New Zealand (BRANZ)
- Recipient of 2 year fully funded Erasmus Mundus Lot13 scholarship for Master's program at NTNU
- Recipient of best performing student scholarship (2006-2009); Silver medallist in final year from Department of Zoology, Stella Maris College, Madras University

Publications:

- A core ontology for modelling Life Cycle Sustainability Assessment on the Semantic Web. **Ghose, Agneta; Lissandrini, Matteo; Hansen, Emil Riis and Weidema, Bo Pedersen.** Journal article: Journal of Industrial Ecology (Revised and submitted), 2021
- What is grown, to be thrown? –Exploring approaches to estimate food waste in EU countries. **Caldeira, Carla; De Laurentiis, Valeria; Ghose, Agneta; Corrado, Sara; Sala, Serenella.** Journal article: [Resources, Conservation and Recycling](#), 2021
- Transparent Integration and Sharing of Life Cycle Sustainability Data with Provenance. **Hansen, Emil Riis, Lissandrini, Matteo; Ghose, Agneta; Løkke, Søren; Thomsen, Christian; and Hose, Katja** Conference paper: [The Semantic Web – ISWC 2020](#)
- Comprehensive environmental impact assessment of New Zealand's office building stock. **Ghose, Agneta; McLaren, J. Sarah; Dowdell, David,** Journal article: [Sustainable Cities and Society](#), 2020
- Life cycle environmental impact of refurbished office buildings: identifying priorities for impact reductions **Ghose, Agneta; Pizzol, Massimo, McLaren, J. Sarah; Phipps, Robyn; Dowdell, David,** Journal article: [International Journal of Life cycle Assessment](#), 2019
- Consequential LCA modelling of office building refurbishment in New Zealand: an evaluation of resource and waste management scenarios. **Ghose, Agneta; Pizzol, Massimo, McLaren, J. Sarah,** Journal article in: [Journal of Cleaner Production](#), 2017
- Environmental assessment of deep energy refurbishment for energy efficiency- case study of an office building in New Zealand. **Ghose, Agneta; McLaren, J. Sarah; Dowdell, David; Phipps, Robyn,** Journal article in: [Building and Environment](#), 2017,
- Environmental aspects of Norwegian production of pulp fibres and printing paper. **Ghose, Agneta; Chinga-Carrasco, Gary,** Journal article in: [Journal of Cleaner Production](#), 2013

Conferences:

- FAIRification of LCA data using the semantic web. **Ghose, Agneta** Online Platform Presentation at [BrightCon 2020](#).
- Modelling LCA data on Semantic Web. **Ghose, Agneta** Online Platform Presentation at 12th International Conference on LCA Food

- An Open Source Dataset and Ontology for Product Foot printing. **Ghose Agneta; Hose Katja; Lissandrini Matteo; and Weidema Bo Pedersen**. Poster presentation at [Extended Semantic Web Conference](#), Slovenia 2019.
- Fostering the transition to a circular bio-economy: a systematized framework for identifying the potential for food waste valorization at the macro-scale. **Ghose Agneta; Corrado Sara; Caldeira Carla; Sala Serenella**. Platform presentation at [27th European Biomass conference](#), Lisbon 2019.
- Application of hybrid LCA for environmental foot printing- insights on use of Exiobase v3. **Ghose, Agneta**; Webinar for Life Cycle Association of New Zealand , Palmerston North 2018
- Achieving New Zealand's Target 2050 with energy efficient buildings **Ghose, Agneta**; Oral Presentation for IELab / ALCAS Conference, Queensland 2017
- Do energy efficient buildings help cut emissions? **Ghose, Agneta**; Oral Presentation for Global Climate Change Week- Massey University, 2017
- Implications of resource management for building refurbishments in New Zealand. **Ghose, Agneta**; Oral presentation at: LCM and Industrial Ecology Symposium, Auckland 2017
- Environmental assessment of energy efficiency refurbishment in New Zealand's office buildings. **Ghose, Agneta**; Oral presentation at: Institute of Agriculture and Environment Student Symposium, Palmerston North 2017
- Opportunities to apply Life Cycle Management in current refurbishment trends of commercial buildings in New Zealand. **Ghose, Agneta; McLaren, Sarah; Dowdell, David**; Poster presented at: [LCM 2015, Bordeaux](#)
- The potential of LCM to mainstream bottom-up eco-innovation and alternative thinking. **De Rosa, Michele; Ghose, Agneta**; Oral presentation at: [LCM 2015, Bordeaux](#)

References:

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New Zealand

- **Prof. Sarah McLaren, Massey University**
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- **David Dowdell, Principal Scientist Sustainability, BRANZ**
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