

# Nicolas Bertoldo

## Environmental engineer

### Working experience

- 01/11/2022 - **PhD Fellow in Sustainability in Public Procurement**, *Politecnico di Milano, Materials for Energy and Environment lab*, Milan, Italy.  
Current Development of a Life cycle thinking-based methodology to be used in Sustainable Public Procurements.  
Supervisor Prof. Giovanni Dotelli.
- 04/08/2025 - **Teaching assistant**, *Oulu University*, Oulu, Finland.  
08/08/2025 ADMA3 Summer School on Sustainability Assessment (5 ECTS).
- 01/09/2024 - **Visiting PhD**, *Aalborg University*, Aalborg, Denmark.  
28/02/2025 Circular Public Procurement.
- 01/10/2023 - **Teaching assistant**, *Politecnico di Milano*, Milan, Italy.  
Current Course: Sustainable Materials for Architecture, Prof. Giovanni Dotelli.
- 01/03/2023 - **Teaching assistant**, *Politecnico di Milano*, Milan, Italy.  
Current Course: Life Cycle Assessment of Materials and Processes, Prof. Giovanni Dotelli.
- 02/05/2022 - **Environmental consultant**, *EY S.p.A., Climate Change & Sustainability Services*, Milan, Italy.  
01/08/2022 Greenhouse Gases inventories, Sustainability reporting (GRI), CDP questionnaire (Climate change and water security).
- 13/09/2021 - **Thesis Work**, *STIIMA, National Research Council of Italy (CNR)*, Milan, Italy.  
28/04/2022 Life Cycle Assessment, Ecodesign, Footwear, Environmental sustainability.

### Education

- 24/02/2020 - **Master's degree in Environmental Engineering**, *Polytechnic of Milan*, Milan, Italy,  
28/04/2022 Grade: 102/110.  
- Thesis title: "Ecoshoe: an Ecodesign tool to enhance environmental sustainability in the Footwear Industry".  
Supervisor: Prof. Giovanni Dotelli.
- 06/03/2017 - **Bachelor's degree in Environmental Engineering**, *Polytechnic of Milan*, Milan, Italy.  
23/07/2019
- 30/09/2013 - **Bachelor's degree in Telecommunication Engineering**, *Polytechnic of Milan*, Milan, Italy.  
24/02/2017

### Language skills

Italian Mother tongue  
English Level B2: Understanding | Speaking | Writing

### Skills

- Organisational skills I have good organisational skills gained in my previous experiences, as I can complete tasks within the indicated time frame both alone and in a team. I have an excellent ability to adapt thanks to my volunteering experience, where I have carried out many different activities and tasks.
- Digital skills Brightway LCA framework | Python | Django | Microsoft Office | OpenLCA | SimaPro | R, R Studio | Matlab | GAMS | GIMP | Qgis | L<sup>A</sup>T<sub>E</sub>X

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## Publications

- Bertoldo, N., Cefis, N., Ballini, A., Gallucci, F., Paris, E., & Dotelli, G. (2025). Mechanical and environmental analysis of concretes with partial replacement of clinker by coconut shell ashes. In *Life-Cycle Performance of Structures and Infrastructure Systems in Diverse Environments* (pp. 1519-1526). CRC Press.
- Bertoldo, N., Qureshi, T., Simpkins, D., Arrigoni, A., & Dotelli, G. (2024). Concrete with Organic Waste Materials as Aggregate Replacement. *Applied Sciences*, 14(1), 108.

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## Conferences

- 09/09/2025 – Nicolas Bertoldo, Mette Alberg Mosgaard, Anja Marie Bundgaard and Giovanni Dotelli,  
12/09/2025 *"A Multi-Criteria Decision-Making tool to be used in Green and Circular Public Procurement"*, 12th International Conference on Life Cycle Management, Palermo, Italy, *Oral presentation*
- 15/07/2025 – Nicolas Bertoldo, Nicola Cefis, Andrea Ballini, Francescantonio Gallucci, Enrico Paris  
19/07/2025 and Giovanni Dotelli, *"Mechanical and environmental analysis of concretes with partial replacement of clinker by coconut shell ashes"*, Ninth International Symposium on Life-Cycle Civil Engineering 2025, Melbourne, Australia, *Oral presentation*
- 25/06/2025 – Nicolas Bertoldo, Nicola Cefis, Marco Blazina, Andrea D'Anna and Giovanni Dotelli,  
27/06/2025 *"Exploring the Use of Sewage Sludge Ash in Concrete: Assessing Mechanical Properties and Environmental Impacts"*, Sustainable Built Environment Conference, Zurich, Switzerland, *Oral presentation*
- 19/03/2025 – Nicolas Bertoldo, Andrea Bortolotti and Giovanni Dotelli, *"Life Cycle Assessment of Green Waste Management: Optimizing Composting Facility Distribution in the Milan Metropolitan Area"*, XIX Convegno dell'Associazione Rete Italiana LCA, Cortina d'Ampezzo, Italy, *Oral presentation*
- 03/07/2024 – Nicolas Bertoldo, Alessandro Salvi and Giovanni Dotelli, *"Integrating Aspen Plus Simulations with Brightway 2.5 for Sustainable Process Design"*, 4th Life Cycle Innovation Conference (LCIC), Berlin, Germany, *Oral presentation*
- 05/09/2023 – Nicolas Bertoldo, Sergio Sabbadini, Gianluca Ruggieri, Chiara Moletti and Giovanni  
08/09/2023 Dotelli, *"Retrofitting of Italian vernacular built stock with bio-based building materials: a viable solution to mitigate climate change effects?"*, The 11th International Conference on Life Cycle Management (LCM), Lille, France, *Poster presentation*
- 28/06/2023 – Nicolas Bertoldo, Elisabetta Abbate, Davide Micillo, Francesco Airoidi, Carlo Brondi  
30/06/2023 and Giovanni Dotelli, *"The potential environmental benefit of the ecodesign approach: a case study in the footwear industry"*, XVI conference of the Associazione Rete Italiana LCA, Milan, Italy, *Oral presentation*
- 28/05/2023 – Nicolas Bertoldo, Tanvir Qureshi, Dylan Simpkins, Alessandro Arrigoni and Giovanni  
01/06/2023 Dotelli, *"Sustainable Concrete from Recycled Organic Waste Materials as Aggregate Replacement"*, XVIII Italian national conference of the Associazione Italiana di Ingegneria dei Materiali (AIMAT) 2023, Catania, Italy, *Poster presentation*

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## Courses

- 9/04/2024 – *Advanced LCA – Consequential and IO-Based Life Cycle Assessment* (5 ECTS), Aalborg  
15/05/2024 University, Aalborg, Denmark. Lecturers: Prof. Jannick Schmidt, Prof. Massimo Pizzol, Assoc. Prof. Søren Løkke, Assist. Prof. Agneta Ghose. Learning outcomes:
- o Consequential Life Cycle Assessment
  - o Stochastic LCA
  - o Input-Output LCA

- 24/04/2023 – *Spatiotemporal Life Cycle Assessment with Brightway* (2 ECTS), International Life Cycle Academy, Barcelona, Spain. Lecturer: Chris Mutel. Learning outcomes:
- 28/04/2023
- Compare inventory modelling approaches in Brightway
  - Select tools from Brightway to create and modify inventory datasets
  - Choose and apply temporal distributions to inventory datasets
  - Analyse temporally differentiated life cycle inventory results
  - Describe approaches to distribute climate change impacts over time
  - Calculate temporal life cycle impact assessment of temporal inventory databases
  - Summarise approaches for creating region-specific inventory datasets
  - Outline calculation approaches regionalised life cycle impact assessment
  - Interpret regionalised life cycle impact assessment results

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## Authorization

I hereby authorise the processing of the personal data contained in my CV in accordance with Legislative Decree 196/2003 and EU Regulation 2016/679 (European Regulation concerning the protection of individuals with regard to the processing of personal data).