

<i>Personal Data</i>			
<i>Surname</i>	<i>Name</i>	<i>Organization and Position</i>	<i>Date of birth</i>
<i>Rigamonti</i>	<i>Lucia</i>	<i>Politecnico di Milano, Associate professor</i>	██████████
<i>Education and training</i>			
<p>Lucia Rigamonti is an environmental engineer graduated at Politecnico di Milano in 2003 cum laude (title of the thesis: Environmental assessment of energy recovery from waste). She accomplished in 2007 a PhD in Sanitary-Environmental Engineering with a thesis on the topic of Life Cycle Assessment (LCA) applied to different integrated municipal solid waste management systems. The thesis was awarded of the first prize in the competition Best thesis 2008 organized by ORSA (Scuola di Alta Formazione Ambientale in Palermo). During the PhD she had been visiting the Columbia University (New York) in the Henry Krumb School of Mines.</p>			
<i>Professional experience</i>			
<p>She is currently an associate professor at the Department of Civil and Environmental Engineering (DICA) of Politecnico di Milano. Her research activity is mainly about the analysis by applying the life cycle thinking approach of environmental remediation technologies (e.g. treatment of solid waste, contaminated soils, wastewater), of prevention and potentially sustainable consumption choices, of management strategies and recovery of materials, resources and energy from civil and industrial residues, and of complex systems such as those related to the capture and utilisation of CO<sub>2</sub>.</p> <p>From 2007 to 2021 she was a researcher at DICA following different projects on the topic of environmental evaluation of material and energy recovery processes from waste. She won the UQ 2015 Travel Awards for International Collaborative Research and so from 20/9/2015 to 20/11/2015 she was a visiting academic at the University of Queensland (Brisbane - Australia). In 2013 she spent three months at the research center Scion (Rotorua, New Zealand) in the team Clean Technologies (Project: Development of a decision-making framework to manage technology development programmes within the BioResource Processing Alliance - BPA).</p> <p>She was member of the Technical Secretariat for the development of the Product Environmental Footprint Category Rules (PEFCR) for intermediate paper products in the context of the European Commission project "Environmental Footprint Pilot Phase". She founded the working group DIRE (Development and Improvement of LCA methodology: Research and Exchange of Experiences), inside the Italian Network on LCA, and she coordinates the working group Management and treatment of waste of the same network. She won the Young Researcher Award LCA 2009, organized by the Italian Network on LCA and since then she has member of the award committee. She is also member of the scientific board of the Italian Network on LCA and of the Research Centre MatER (Material &amp; Energy from Refuse); she is member of the working group n. 3 "Tools to measure the circular economy" inside ICESP (Italian Circular Economy Stakeholder Platform), of the working group n. 5 "Legislative issues" inside SUN (Symbiosis Users Network), and of the working groups "Construction and demolition waste" and "Plastics" inside the Observatory for the circular economy and the energy transition by Regione Lombardia.</p> <p>She has been the project leader of many research projects stipulated between Politecnico di Milano and various organizations. The most recent ones are: Supporting activities to the Regulatory Authority for Energy, Networks and the Environment, aimed at regulating gate fees for municipal waste treatment plants - ARERA; Evaluation of the environmental impacts of the life cycle of LPG for uses as a fuel, in comparison with other types of energy sources / carriers - Federchimica - Assogasliquidi; LCA of glass packaging and comparison with other packaging materials - Assovetro; Supporting activities for updating the contents of the regional waste management program - Regione Lombardia; Supporting activities for the "Innovation of circular economy supply chains in Lombardy" call - Unioncamere Lombardia; Recovery of aluminium from incineration bottom ashes - CiAl; LCA of contaminated site remediation alternatives - Syndial Servizi Ambientali SpA.</p> <p>Organisation and scientific supervisor of scientific events: e.g MatER conferences on waste treatment and technologies: editions 2015, 2017, 2019, 2021; workshop "Waste and Life Cycle Thinking", Politecnico di Milano, editions 2021, 2019, 2017, 2015, 2010; national workshop "Carbon Capture and Utilization for CO<sub>2</sub> emissions reductions", Politecnico di Milano, 2018; national conference "Resources from waste: innovative solutions and environmental consequences of the implementation of the circular economy", inside Ecomondo 2017; international session "Materials from the recycling of packaging waste: quality and market" inside the 3rd Symposium on urban mining and circular economy, Bergamo, 2016; international conference "What is sustainable technology? The role of life cycle-based methods in addressing the challenges of sustainability assessment of technologies", with working group DIRE, Roma, 2012; national conference "sustainability assessments of technologies: which role for LCA?", with working group DIRE, Rimini (Italy), 2010.</p>			

### Scientific Publications and Congress or other Oral Communications

Total number of publications: 233 (62 papers in ISI journals, 48 papers in other journals, 5 books, 18 chapters of books, 69 papers in international conferences proceedings, 31 papers in national conferences proceedings). Scopus (Orcid: 0000-0001-5468-9577): 62 documents, h-index 25, citations 1990

Oral presentations at conferences: 57 at international conferences and 32 at national conferences

5 relevant publications:

- Rigamonti L., Mancini E. (2021). "Life cycle assessment and circularity indicators". The International Journal of Life Cycle Assessment, 26, 1937-1942.
- Tua C., Ficara E., Mezzanotte V., Rigamonti L. (2021). "Integration of a side-stream microalgae process into a municipal wastewater treatment plant: a life cycle analysis". Journal of Environmental Management 279, 111605.
- Rigamonti L., Taelman S.E., Huysveld S., Sfez S., Ragaert K., Dewulf J. (2020). "A step forward in quantifying the substitutability of secondary materials in waste management life cycle assessment studies". Waste Management, 114, 331-340.
- Zhang H., Rigamonti L., Visigalli S., Turolla A., Gronchi P., Canziani R. (2019). "Environmental and economic assessment of electro-dewatering application to sewage sludge: a case study of an Italian wastewater treatment plant". Journal of Cleaner Production, 210, 1180-1192.
- Tasca A.L., Nessi S., Rigamonti L. (2017). "Environmental sustainability of agri-food supply chains: an LCA comparison between two alternative forms of production and distribution of endive in northern Italy". Journal of Cleaner Production, 140, 725-741.

### Grants

- Task leader (task 5: LCA) in the project "Integration of microalgal based processes in wastewater treatment (IMAP)" (Fondazione Cariplo 2015)
- Task leader (WP 6.2: LCA) in the project "FReSMe - From residual steel gases to methanol" (Horizon 2020, LCE-25-2016), grant number 727504
- Work package leader of WP7 "Sustainability assessment of the FineFuture Technologies" in the H2020 project "FineFuture - Innovative technologies and concepts for fine particle flotation: unlocking future fine-grained deposits and Critical Raw Materials resources for the EU" (2019-2022), grant number 821265
- Scientific leader of the Environmental Assessment in the project "Greenrail, innovative and sustainable railway sleepers: the greener solution for railway sector - Horizon 2020 Call: H2020-SMEInst-2016-2017, Type of action: SME-2"

Date 29/04/2022

Signature

