Dario Caro List of publications (Scopus h-index=23).

Peer-reviewed publications

1. Patrizi, N., **Caro, D.**, Pulselli, F.M., Bjerre, A.B., Bastianoni, S., 2013. Feasibility of partial substitution of gasoline with ethanol in Siena Province (Italy): an LCA approach. Journal of Cleaner Production 47, 388-395.
2. **Caro, D.**, Bastianoni, S., Borghesi, S., Pulselli, F.M., 2014. On the feasibility of a consumer-based allocation method in national GHG inventories. Ecological Indicators 36, 640-643.
3. **Caro, D.**, Davis, S.J., , Bastianoni, S., Caldeira, K., 2014. Global and regional trends in greenhouse gas emissions from livestock consumption and production. Climatic Change, 126, 203-216.
4. **Caro, D.**, LoPresti A., Davis, S.J., Caldeira, K., Bastianoni, S., 2014. CH_4 and N_2O emissions embodied in international trade of meat. Environmental research letters, 9, (11) 114005.
5. **Caro, D.**, Pulselli, F.M., Marchettini N., 2014. The pathway of the Province of Siena toward the "Siena Carbon Free" goal. Sustainable city 2014. WIT Transactions on Ecology and the Environment, Section environmental management, 2, 1227-1237.
6. Bastianoni, S., **Caro, D.**, Borghesi, S., Pulselli, F.M., 2014. The effect of a consumption-based accounting method in national GHG inventories: a trilateral application at macro and micro scale. Frontiers in Energy Research, 2 (4), 1-8.
7. Bastianoni, S., Marchi, M., **Caro, D.**, Casprini, P., Pulselli, F.M., 2014. The connection between 2006 IPCC GHG inventory methodology and ISO 14064-1 certification standard – A reference point for the environmental policies at sub-national scale (Tuscany, central Italy). Environmental Science and Policy 44, 97-107.
8. **Caro, D.**, Rugani, B., Benetto, E., Pulselli, F.M., 2015. Implications of a consumer-based perspective for the estimation of GHG emissions. The illustrative case of Luxembourg. Science of the Total Environment, 508, 67-75.
9. **Caro, D.**, Kebreab, E., Mitloehner F., 2016. Mitigation of enteric fermentation from global livestock systems through nutrition strategies. Climatic Change, 137, 467-480.
10. Kebreab, E., Liedke A., **Caro, D.**, Deimling, S., Binder, M., Finkbeiner, M., 2016. Environmental impact of using specialty feed ingredients in swine and poultry production: a life cycle assessment. Journal of Animal Science, 94, 2664-2681.
11. Thomsen, M., Seghetta, M., Mikkelsen, M.H., Gyldenkærne, S., Becker, T., **Caro, D.,** Frederiksen, P., 2017. Comparative life cycle assessment of biowaste to ressource management systems: a Danish case study. Journal of Cleaner Production, 142, 4050-4058.
12. **Caro, D.**, Pulselli, F.M., Borghesi, S., Bastianoni, S. 2017. Mapping the international flows of GHG emissions within a more feasible consumption-based framework, Journal of Cleaner Production, 147, 142-151.
13. **Caro, D**., Frederiksen P., Thomsen M., Pedersen A.B., 2017. Toward a more consistent combined approach of reduction targets and climate policy regulations: the illustrative case of a meat tax in Denmark. Environmental Science and Policy, 76, 78-81.
14. Cong, R., **Caro, D**., Thomsen, M., 2017. Is it beneficial to use biogas in the Danish transport sector? An environmental-economic analysis. Journal of Cleaner Production, 165, 1025-1035.
15. **Caro, D.**, Mitloehner F., Kebreab, E., 2018. Land use change emissions from soybean feed embodied in Brazilian pork and poultry meat. Journal of Cleaner Production, 172, 2646-2654.

16. Thomsen, M., Romeo D., **Caro, D.,** Seghetta, M., Schmidt, J.H., Cong, R.G., 2018. Environmental-economic analysis of integrated organicwaste and wastewater management systems: A case study from Aarhus City (Denmark). Sustainability, 10, 3742.
17. **Caro, D.**, 2018. Carbon footprint. Encyclopedia of Ecology, 2nd Edition, 252-257. ISBN: 978-044464130-4 Publisher: Elsevier.
18. **Caro, D.,** 2018. Greenhouse Gas and Livestock Emissions and Climate Change. Encyclopedia of Food Security and Sustainability,. 228–232. ISBN: 978-012812688-2;978-012812687-5 Publisher: Elsevier.
19. **Caro, D.,** 2018. Greenhouse Gas, Livestock and Trade. Encyclopedia of Food Security and Sustainability,. 88–92. ISBN: 978-012812688-2;978-012812687-5 Publisher: Elsevier.
20. Bastianoni, S., Coscieme, L., **Caro, D.,** Marchettini, N., Pulselli, S. 2019. The needs of Sustainability: The overarching contribution of a systems approach. Ecological indicators, 100, 69-73.
21. Fezzigna, P. Borghesi, S., **Caro, D.,** 2019. Revising emission responsibilities through consumption-based accounting: a European and post-Brexit perspective. Sustainability 11, 488.
22. Taherzadeh, O. **Caro, D.,** 2019. Drivers of water and land use embodied in international soybean trade. Journal of Cleaner Production, 223, 83-93.
23. Chavez, C.S., **Caro, D**., Thomsen, M., 2019. Environmental assessment of alternatives for biowaste treatment in Mexico City. Frontiers in Energy Research, 7, doi: 10.3389/fenrg.2019.00030
24. Zhuang, M., Li, X., **Caro, D.**, Gao, J., Zhang, J., Cullen, B., Li, Q. 2019. Emissions of non-CO_2 greenhouse gases from livestock in China during 2000-2015: magnitude, trends and spatiotemporal patterns. Journal of Environmental Management, 242, 40-45.
25. **Caro, D.,** Mikkelsen, MH, Thomsen, M., Frederiksen, P. 2018. Non-CO2 emissions embodied in trade of Danish pork meat. Carbon Management 10, 323-331.
26. Bruno, M., Thomsen, M., Pulselli, F.M., Patrizi, N., Marini, M., **Caro, D.** 2019. The carbon footprint of Danish diets. Climatic Change, 156, 489-507.
27. Owusu-Osei, A.K., Kastner, T., de Ruiter, H., Thomsen, M., **Caro, D.** 2019. The global carbon footprint of Denmark's food supply 2000-2013. Global Environmental Change, 58, 101978.
28. Zhuang, M., Shan, N., Wang, Y., **Caro, D.**, Fleming, R.M., Wang, L. 2020. Different characteristics of greenhouse gases and ammonia emissions from conventional stored dairy cattle and swine manure in China. Science of the Total Environment 722, 137693.
29. Conticini E., Frediani F., **Caro, D.** 2020. Can atmospheric pollution be considered a co-factor in extremely high level of SARS-CoV-2 lethality in Northern Italy? Environmental Pollution 261, 114465.
30. Rugani, B., **Caro, D.,** 2020. Impact of COVID-19 outbreak measures of lockdown on the Italian carbon footprint. Science of the Total Environment 737, 139806.
31. Osei-Owusu, A.K., Thomsen, M., Lindahl, J., Javakhishvili-Larsen, N., **Caro, D.** 2020. Tracking the carbon emissions of Denmark's five regions from a producer and consumer perspective. Ecological Economics, 177, 106778.
32. Marini, M., **Caro, D.**, Thomsen, M. 2020. The new Fertilizer Regulation: a starting point for Cadmium control in European arable soils? Science of the Total Environment, 745, 140876.

33. Marini, M., Angouria-Tsorochidou, E., **Caro, D.,** Thomsen, M. 2021. Daily intake of heavy metals and minerals in food – a case study of four Danish dietary profiles. Journal of Cleaner Production 180, 124279.

34. Sporchia, F., Thomsen, M., **Caro, D.** 2021. Drivers and trade-offs of multiple environmental stressors from global rice. Sustainable Production and Consumption, 26, 16-32.

35. Sporchia, F., Kebreab, E., **Caro, D.** 2021. Assessing the multiple resource use associated with pig feed consumption in the European Union. Science of the Total Environment, 759, 144306.

36. **Caro, D.,** Alessandrini, A., Sporchia, F., Borghesi, S. 2020. Global virtual water trade of avocado. Journal of Cleaner Production, 124917. doi: https://doi.org/10.1016/j.jclepro.2020.124917

37. Sporchia, F., Taherzadeh, O., **Caro, D. 2021**. Stimulating environmental degradation: A global study of resource use in cocoa, coffee, tea and tobacco supply chains. Current research in Environmental Sustainability 3, 100029.

38. Osei-Owusu, A., Wood, R., Bjelle, E.L., **Caro, D.,** Thomsen, M. 2021. Understanding the trends in Denmark's global food trade-related greenhouse gas and resource footprint. Journal of Cleaner Production 313, 127785.

39. Sporchia, F., Paneni, A., Pulselli, F.M., **Caro, D.**, Bartolini, S., Coscieme, L. 2021. Investigating environment-society-economy relations in time series in Europe using a synthetic input-state-output framework. Environmental Science and Policy 125, 54-65.

40. Zucchinelli, M., Sporchia, F., Piva, M., Thomsen, M., Lamastra, L., **Caro, D.** 2021. Effects of different Danish food consumption patterns on Water Scarcity Footprint. Journal of Environmental Management 300, 113713.

41. Rugani, B., Cobticini E., Frediani, B., **Caro, D.** 2022. Decrease in life expectancy due to COVID-19 disease not offset by reduced environmental impacts associated with lockdowns in Italy. Environmental Pollution, 292, 118224.

42. Bonato, V.B., Pacheco, D.A., ten Caten, C.S., **Caro, D.** 2022. Circularity in small breweries' value chain: Unveiling strategies for waste management and biomass valorization. Journal of Cleaner Production, 336, 130275.

43. Tonini, D., Albizzati, P.A., Caro, D., De Meester, S., Garbarino, E., Blengini, G.A. 2022. Quality of recycling: Urgent and undefined. Waste Management 146, 11-19.

44. Zhuang, M., **Caro, D.**, Wei Q., Chun, W., Xiaolin, Y., Rui, L., Zhang, L. 2022. Spatial heterogeneity of greenhouse gas emissions from cereal crop production in China. Environmental Chemistry Letters. Doi: 0.1007/s10311-022-01504-y

45. Sporchia, F., **Caro, D.,** Bruno, M., Patrizi, N., Marchettini, N., Pulselli, F.M. 2023. Estimating the impact on water scarcity due to coffee production, trade, and consumption worldwide and a focus on EU. Journal of Environmental Management 327, 116881 doi: https://doi.org/10.1016/j.jenvman.2022.116881

46. **Caro, D.** 2023. Sustainability of food systems and reinforcement of the science-policy interface: Re-focusing on priorities. Editorial: Resources, Environment and Sustainability 11, 100100 doi: https://doi.org/10.1016/j.resenv.2022.100100

47. Saputra Lase I., Tonini D., **Caro D.,** Albizzati P.F., Cristobal J., Roosen M., Kusenberg M., Ragaert K., Van Geem K.M., Dewulf J., De Meester S. 2023. How much can chemical recycling contribute to plastic waste recycling in Europe? An assessment using material flow analysis modelling. Resources, Conservation & Recycling 192, 106916. https://doi.org/10.1016/j.resconrec.2023.106916

48. Sporchia, F., Galli, A., Kastner, T., Pulselli, F.M., **Caro, D.** 2023. The environmental footprints of the feeds used by the EU chicken meat industry. Science of the Total Environment 886, 163960.
49. Sporchia, F., **Caro, D.** 2023. Exploring the potential of circular solutions to replace inorganic fertilizers in the European Union. Science of The Total Environment 892, 164636.
50. Cristobal, J., Albizzati, P.F., Giavini, M., **Caro, D.,** Manfredi, S., Tonini, D. 2023. Management practices for compostable plastic packaging waste: impacts, challenges and recommendations. Waste Management 170, 166-176.
51. Roosen, M., Tonini, D., Albizzati, F.P., **Caro, D.,** Cristobal, J., Saputra Lase, I., Ragaert, K., Dumoulin, A., De Meester, S. 2023. Operational framework to quantify "qualiti of recycling" across different material types. Environmental Science & Technology 57, 13669-13680.
52. Galli, A., Antonelli, M., Wambersie, L., Bach-Faig, A., Bartolini, F., **Caro, D.,** Iha, K., Lin, D., Mancini, M.S., Sonnino, R., Vanham, D., Wackernagel, M. 2023. EU-27 ecological footprint was primarily driven by food consumption and exceeded regional biocapacity from 2004 to 2014. Nature Food 4, 810-812.
53. **Caro, D.,** Sporchia, F., Antonelli, M., Galli, A. 2023. Beyond the IPCC for food: an overarching framework for food systems sustainability assessment. Sustainability, 15, 14107.
54. Graupman, M., Vikesland, P.J., Bolyard, S.C., Brazil, B., Mondal, P.P., Bezbaruah, A.N., Rusch, K.A., **Caro, D.**, Iskander, S. 2023. Evaluating the ecological footprint of landfills: a framework and case study of Fargo, North Dakota. Environmental Science and Technology 57, 21113-21123.
55. Marini, M., **Caro, D.,** Thomsen, M. 2023. Investigating local policy instruments for different types of urban agriculture in four European cities: a case study analysis on the use and effectiveness of the applied policy instruments. Land use policy 131, 106695.
56. Caro, D., Lodato, C., Damgaard, A., Cristobal, J., Foster, G., Flachenecker, F., Tonini, D., 2024. Environmental and socio-economic effects of construction and demolition waste recycling in the European Union. Science of the total environment 908, 168295.
57. Pristera, G., Tonini, D., Tornaghi, M.L., Caro, D., Sala, S. 2024. Taxonomy of design for deconstruction options to enable circular economy in buildings. Resources, Environment and Sustainability 15, 100153.