

Publikationen mit Beteiligung der LCA-Plattformmitglieder (2021-24)

Jahr	Zitat	Link
2021	Dreyer M, Hortenhuber S, Zollitsch W, Jager H, Schaden L, Gronauer A, Kral I. Environmental life cycle assessment of yellow mealworm (<i>Tenebrio molitor</i>) production for human consumption in Austria - a comparison of mealworm and broiler as protein source. International Journal of Life Cycle Assessment. 2021;26(11):2232-47. doi: https://doi.org/10.1007/s11367-021-01980-4	Link
	Amon, B., Çınar, G., Anderl, M., Dragoni, F., Kleinberger-Pierer, M., and Hörtenhuber, S. (2021). Inventory reporting of livestock emissions: The impact of the IPCC 1996 and 2006 Guidelines. Environmental Research Letters 16. doi: https://doi.org/10.1088/1748-9326/ac0848	Link
	Herzog, A., Winckler, C., Hörtenhuber, S., and Zollitsch, W. (2021). Environmental impacts of implementing basket fans for heat abatement in dairy farms. Animal 15. doi: https://doi.org/10.1016/j.animal.2021.100274	Link
	Kirchweger, S., Mayer, A., Kantelhardt, J., Hörtenhuber, S., Kaufmann, L., Baaske, W. E., et al. (2021). Animal husbandry in the field of tension between climate protection and farm value creation – A regional view based on the coupling of two models. Austrian Journal of Agricultural Economics and Rural Studies 31, 63–71. doi: https://doi.org/10.15203/OEGA_31.9	Link
	Ruckli, A. K., Dippel, S., Durec, N., Gebska, M., Guy, J., Helmerichs, J., et al. (2021). Environmental sustainability assessment of pig farms in selected european countries: Combining lca and key performance indicators for biodiversity assessment. Sustainability (Switzerland) 13. doi: https://doi.org/10.3390/su132011230	Link
	Schauberger, G., Schönhart, M., Zollitsch, W., Hörtenhuber, S. J., Kirner, L., Mikovits, C., et al. (2021). Economic risk assessment by weather-related heat stress indices for confined livestock buildings: A case study for fattening pigs in Central Europe. Agriculture (Switzerland) 11, 1–22. doi: https://doi.org/10.3390/agriculture11020122	Link
	Scheurich, A., Penicka, A., Hörtenhuber, S., Lindenthal, T., Quendler, E., and Zollitsch, W. (2021). Elements of social sustainability among austrian hay milk farmers: Between satisfaction and stress. Sustainability (Switzerland) 13. doi: https://doi.org/10.3390/su132313010	Link
2022	Krexner T, Kral I, Gronauer A, Medel-Jiménez FJ, Bauer A. Comparison of a system expansion and allocation approach for the handling of multi-output processes in life cycle assessment – a case study for nano-cellulose and biogas production from elephant manure. Die Bodenkultur: Journal of Land Management, Food and Environment. 2022;72 (3):113-21. doi: https://doi.org/10.2478/boku-2021-0012	Link
	Krexner T, Bauer A, Zollitsch W, Weiland K, Bismarck A, Gronauer A, Kral I. Environmental life cycle assessment of nano-cellulose and biogas production from manure. Journal of Environmental Management. 2022;314:-. doi: https://doi.org/10.1016/j.jenvman.2022.115093	Link
	Medel-Jimenez F, Piringer G, Gronauer A, Barta N, Neugschwandtner R, Krexner T, Kral I. Modelling soil emissions and precision agriculture in fertilization life cycle assessment-A case study of wheat production in Austria. Journal of Cleaner Production. 2022;380. doi: https://doi.org/10.1016/j.jclepro.2022.134841	Link
	Medel-Jiménez F, Gronauer A, Barta N, Krexner T, Neugschwandtner R, Kral I. Partial budgeting for acquiring and operating a ground-based optical crop sensor for variable rate nitrogen application. Die Bodenkultur: Journal of Land Management, Food and Environment. 2022;73 (3):123-32. doi: https://doi.org/https://doi.org/10.2478/boku-2021-0013	Link

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- Amirahmadi E, Moudry J, Konvalina P, Hortenhuber S, Ghorbani M, Neugschwandtner R, Jian Z, Krexner T, Kopecký M. Environmental Life Cycle Assessment in Organic and Conventional Rice Farming Systems: Using a Cradle to Farm Gate Approach. *Sustainability* (Switzerland). 2022;14(23). doi: <https://doi.org/10.3390/su142315870> [Link](#)
- Fürtner, D., Perdomo Echenique, E. A., Hörtenhuber, S. J., Schwarzbauer, P., and Hesser, F. (2022). Beyond Monetary Cost-Benefit Analyses: Combining Economic, Environmental and Social Analyses of Short Rotation Coppice Poplar Production in Slovakia. *Forests* 13. doi: <https://doi.org/10.3390/f13020349> [Link](#)
- Hörtenhuber, S. J., Seiringer, M., Theurl, M. C., Größbacher, V., Piringer, G., Kral, I., et al. (2022). Implementing an appropriate metric for the assessment of greenhouse gas emissions from livestock production: A national case study. *Animal* 16. doi: <https://doi.org/10.1016/j.animal.2022.100638> [Link](#)
- Lauk, C., Kaufmann, L., Theurl, M. C., Wittmann, F., Eder, M., Hörtenhuber, S., et al. (2022). Demand side options to reduce greenhouse gas emissions and the land footprint of urban food systems: A scenario analysis for the City of Vienna. *Journal of Cleaner Production* 359. doi: <https://doi.org/10.1016/j.jclepro.2022.132064> [Link](#)
- Ruckli, A. K., Hörtenhuber, S. J., Ferrari, P., Guy, J., Helmerichs, J., Hoste, R., et al. (2022). Integrative Sustainability Analysis of European Pig Farms: Development of a Multi-Criteria Assessment Tool. *Sustainability* (Switzerland) 14. doi: <https://doi.org/10.3390/su14105988> [Link](#)
- Schauberger, G., Schönhart, M., Zollitsch, W., Hörtenhuber, S. J., Kirner, L., Mikovits, C., et al. (2022). Reduction of the Economic Risk by Adaptation Measures to Alleviate Heat Stress in Confined Buildings for Growing-Fattening Pigs Modelled by a Projection for Central Europe in 2030. *Agronomy* 12. doi: <https://doi.org/10.3390/agronomy12020248> [Link](#)
- 2023**
- Mirzaei M, Anari M, Saronjic N, Sarkar S, Kral I, Gronauer A, Mohammed S, Callero-Calvo A. Environmental impacts of corn silage production: influence of wheat residues under contrasting tillage management types. *Environmental Monitoring and Assessment*. 2023;195(1). doi: <https://doi.org/10.1007/s10661-022-10675-8> [Link](#)
- Zajicek L, Drapalík M, Kral I, Liebert W. Energy efficiency and environmental impacts of horizontal small wind turbines in Austria. *Sustainable Energy Technologies and Assessments*. 2023;59. doi: <https://doi.org/10.1016/j.seta.2023.103411> [Link](#)
- Brunnhuber N, Windsperger A, Perdomo Echenique EA, Hesser F (2023). Sustainable Production, Life Cycle Engineering and Management Implementing Ecodesign During Product Development: An Ex-Ante Life Cycle Assessment of Wood-Plastic Composites (Hesser F, Kral I, Obersteiner G, Hörtenhuber S, Kühmaier M, Zeller V, Schebek L eds.), pp. 23–40. Springer International Publishing; Imprint Springer, Cham.
- Hörtenhuber, S. J., Größbacher, V., Schanz, L., and Zollitsch, W. J. (2023). Implementing IPCC 2019 Guidelines into a National Inventory: Impacts of Key Changes in Austrian Cattle and Pig Farming. *Sustainability* (Switzerland) 15. doi: <https://doi.org/10.3390/su15064814> [Link](#)
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- Ruckli, A. K., Hörtenhuber, S., Dippel, S., Ferrari, P., Gebkska, M., Heinonen, M., et al. (2024). Access to bedding and outdoor runs for growing-finishing pigs: is it possible to improve welfare without increasing environmental impacts? *Animal* 18. doi: <https://doi.org/10.1016/j.animal.2024.101155> [Link](#)
- Zerbe, M., Mörlein, D., Hörtenhuber, S.J. (2024). Towards climate neutrality: Comparison of mitigation strategies for agricultural emissions using GWP100 and GWP* metrics. *Environmental Challenges*, 2025, 18, 101060 [Link](#)
- Zanon, T., Hörtenhuber, S., Fichter, G., ... Gatterer, M., Gauly, M. (2024). Effect of management system and dietary seasonal variability on environmental efficiency and human net food supply of mountain dairy farming systems. *Journal of Dairy Science*, 2025, 108(1), pp. 597–610 [Link](#)
- Quevedo-Cascante, M., Dorca-Preda, T., Mogensen, L., Zollitsch, W., Waqas, M.- A., Hörtenhuber, S., Geßl, R., Kongsted, A.G., Knudsen, M.T. (2024) Life cycle assessment and modeling approaches in silvopastoral systems: A case study of egg production integrated in an organic apple orchard. *Journal of Environmental Management*, 2024, 372, 123377 [Link](#)
- Amirahmadi, E., Ghorbani, M., Krexner, T., Hörtenhuber, S. J., Bernas, J., Neugschwandtner, R. W., Konvalina, P., Moudrý, J. (2024). Life cycle assessment of biochar and cattle manure application in sugar beet cultivation – Insights into root yields, white sugar quality, environmental aspects in field and factory phases. *Journal of Cleaner Production*, 2024, 476, 143772 [Link](#)
- Puntigam, R., Müller, M., Weber, M., Hörtenhuber, S.J. (2024). Amino acid supplementation and substitution of soybean meal in crude protein- and phosphorus-reduced diets for grower-finisher pigs: Effects on performance and modelled environmental impact. *Livestock Science*, 2024, 288, 105556 [Link](#)
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- Eisert, J., Sahraei, A., Knob, D.A., Lambertz, C., Zollitsch, W., Hörtenhuber, S., Kral, I., Breuer, L., Gattinger, A. (2024). Transforming the feeding regime towards low-input increases the environmental impact of organic milk production on a case study farm in central germany. *International Journal of Life Cycle Assessment*, 2024 [Link](#)
- Böhm, J., Holzheid, F. M., Schäfer, M., & Krexner, T. (2024). Life cycle assessment of electricity from wind, photovoltaic and biogas from maize in combination with area-specific energy yields – a case study for Germany. *Environmental Research Communications*, 6(10), 105022. doi: <https://doi.org/10.1088/2515-7620/ad7dd9> [Link](#)
- Krexner, T., Bauer, A., Gronauer, A., Mikovits, C., Schmidt, J., & Kral, I. (2024). Environmental life cycle assessment of a stilted and vertical bifacial crop-based agrivoltaic multi land-use system and comparison with a mono land-use of agricultural land. *Renewable & Sustainable Energy Reviews*, 196, 114321. doi: <https://doi.org/10.1016/j.rser.2024.114321> [Link](#)
- Medel-Jiménez, F., Krexner, T., Gronauer, A., & Kral, I. (2024). Life cycle assessment of four different precision agriculture technologies and comparison with a conventional scheme. *Journal of Cleaner Production*, 434, 140198. doi: <https://doi.org/10.1016/j.jclepro.2023.140198> [Link](#)