

Literaturliste zum Beitrag:

Hochverarbeitete Lebensmittel: Ein Problem für die Umwelt

Heil, E. *UGBforum* 5/25, S. 221-223

1. Agrawal, K. and Kumar, N. (2025) 'AI-MR Applications in Agriculture and Food Processing', in: Food and Industry 5.0: Transforming the Food System for a Sustainable Future. Springer.
2. BMEL (2022) 'Der Markt für Lebensmittel allgemein in Indonesien'. Available at: https://www.agrarexportfoerderung.de/fileadmin/SITE_MASTER/content/files/Marktstudien/2022/Marktstudie_Indonesien_LM_final.pdf (Accessed: 08 September 2025).
3. BMLEH Statistik (2023) 'Energieverbrauch des produzierenden Ernährungsgewerbes'. Available at: <https://www.bmel-statistik.de/ernaehrung/ernaehrungsgewerbe/lebensmittelindustrie> (Accessed: 08 September 2025).
4. BMLEH Statistik (2024) 'Betriebe mit Anbau von Hauptkultur- und Fruchtarten nach Größenklassen der landwirtschaftlich genutzten Fläche'. 3070700-0000.xlsx. (Accessed: 08 September 2025).
5. Borrelle, S.B., Ringma, J., Lavender Law, K. et al. (2020) 'Predicted growth in plastic waste exceeds efforts to mitigate plastic pollution', *Science*, 369, pp. 1515–1518.
6. BUKN (2023) 'Welche Umweltrisiken gehen von freigesetzten gentechnisch veränderten Organismen aus?' Available at: <https://www.bundesumweltministerium.de/faq/welche-umweltrisiken-gehen-von-freigesetzten-gentechnisch-veraenderten-organismen-aus> (Accessed: [Datum, falls erforderlich]).
7. Burger, A., Cayé, N., Jaegermann, C., and Schüler, K. (2021) 'Aufkommen und Verwertung von Verpackungsabfällen in Deutschland im Jahr 2019'. Umweltbundesamt.
8. Canning, P., Charles, A., Huang, S., Polenske, K.R., and Waters, A. (2010) 'Energy Use in the U.S. Food System', Economic Research Report Number 94.
9. da Silva, J.T., Felleger, J.M., Rauber, F. et al. (2021) 'Greenhouse gas emissions, water footprint, and ecological footprint of food purchases according to their degree of processing in Brazilian metropolitan areas: a time-series study from 1987 to 2018', *The Lancet Planetary Health*, 5(11), e775-e785.
10. FAO (2010) *The Second Report on the State of the World's Plant Genetic Resources for Food and Agriculture*. Rome. Available at:

UGB *forum*

<https://openknowledge.fao.org/server/api/core/bitstreams/1c21b500-833d-40b3-9dd6-a69a3f7d743d/content> (Accessed: 08 September 2025).

11. FAO (2019) The State of the World's Biodiversity for Food and Agriculture. Edited by J. Bélanger & D. Pilling. FAO Commission on Genetic Resources for Food and Agriculture Assessments. Rome. Available at: <http://www.fao.org/3/CA3129EN/CA3129EN.pdf> (Accessed: 09 September 2025).
12. Flores, B.M., Montoya, E., Sakschewski, B. et al. (2024) 'Critical transitions in the Amazon forest system', *Nature*, 626, pp. 555–564. <https://doi.org/10.1038/s41586-023-06970-0>
13. Golicz, K., Ghazaryan, G., Niether, W. et al. (2021) 'The Role of Small Woody Landscape Features and Agroforestry Systems for National Carbon Budgeting in Germany', *Land*, 10(10), 1028. <https://doi.org/10.3390/land10101028>
14. Gühl, S., Schwarz, M. and Schimmel, M., 'Energiewende in der Industrie. Branchensteckbrief der Nahrungsmittelindustrie'.
15. Hirschberger, P. (2011) Die Wälder der Welt – ein Zustandsbericht. 2nd edn. WWF Schweiz, WWF Deutschland.
16. IEA (2021) Final consumption – Key World Energy Statistics 2021 – Analysis. IEA.
17. Maalouf, A. and Mavropoulos, A. (2022) 'Re-assessing global municipal solid waste generation', *Waste Management & Research*, 41, pp. 936–947.
18. Maalouf, A., Mavropoulos, A. and El-Fadel, M. (2020) 'Global municipal solid waste infrastructure: Delivery and forecast of uncontrolled disposal', *Waste Management & Research*, 38, pp. 1028–1036.
19. OECD (2022) 'Modelling approaches used to compose the OECD Global Plastics Outlook Database', in *Global Plastics Outlook*. Available at: <https://www.oecd.org/environment/plastics/Technical-Report-Modelling-plastics-in-ENV-Linkages.pdf> (Accessed: 08 September 2025).
20. Sutton, M.A., Bleeker, A., Howard, C.M. et al. (2013) Our Nutrient World: The challenge to produce more food and energy with less pollution. Global Overview of Nutrient Management. Centre for Ecology and Hydrology, Edinburgh on behalf of the Global Partnership on Nutrient Management and the International Nitrogen Initiative.
21. Turo, K.J., Reilly, J.R., Fijen, T.P.M. et al. (2024) 'Insufficient pollinator visitation often limits yield in crop systems worldwide', *Nature Ecology & Evolution*, 8, pp. 1612–1622. <https://doi.org/10.1038/s41559-024-02460-2>
22. Umweltbundesamt. Available at: <https://www.umweltbundesamt.de/themen/abfallressourcen/produktverantwortung-in-der-abfallwirtschaft/verpackungen> (Accessed: 08 September 2025).

UGB *forum*

23. WWF. Available at: https://www.wwf.de/fileadmin/fm-wwf/Publikationen-PDF/Plastik/WWF-Auswirkungen_von_Plastikverschmutzung_im_Ozean_auf_marine_Arten__Biodiversit%C3%A4t_und_%C3%96kosysteme.pdf (Accessed: 08 September 2025).