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Forskningsområde

Circular Economy, Industrial Ecology, Waste and Resources Management, Life Cycle Assessment

Professional experience

2022- Head of Programme for MSc. Engineering – Environmental Engineering
2021- Associate professor, Department of Green Technology, University of Southern Denmark
2019–2021 Postdoctoral fellow, funded by Independent Research Fund Denmark (IRFD) at the Norwegian University of Science and Technology (NTNU)
2016–2019 Postdoctoral fellow, SDU Life Cycle Engineering, University of Southern Denmark

Education

2016 PhD Energy and Environmental Efficient Technologies (March 2016), University of Southern Denmark. Dissertation: "Central Sorting Systems in Municipal Solid Waste Management"
2014 External research stay in the Department of Processing and Recycling, RWTH Aachen University, Germany
2013 MSc in Environmental Engineering, University of Southern Denmark

Publikationer

Tracking the post-1990 sociometabolic transitions in Eastern Europe with dynamic economy-wide material flow analysis
Zhu, W., Cimpan, C., Sun, K., Liu, Q., Veipa, A. & Liu, G., dec. 2023, I: Resources, Conservation and Recycling. 199, 10 s., 107280.

Ten questions concerning prospective LCA for decision support for the built environment

Bruhn, S., Sacchi, R., Cimpan, C. & Birkved, M., 15. aug. 2023, I: Building and Environment. 242, 11 s., 110535.

Exploring the Impact of Recycling on Demand–Supply Balance of Critical Materials in Green Transition: A Dynamic Multi-Regional Waste Input–Output Analysis

Bella, S. D., Sen, B., Cimpan, C., Rocco, M. V. & Liu, G., 18. jul. 2023, I: Environmental Science & Technology. 57, 28, s. 10221–10230

Effects of Circularity Interventions in the European Plastic Packaging Sector

Cimpan, C., Bjelle, E. L., Budzinski, M., Wood, R. & Strømman, A. H., 11. jul. 2023, I: Environmental Science & Technology. 57, 27, s. 9984–9995

Keep circularity meaningful, inclusive and practical: A view into the plastics value chain

Cimpan, C., Iacovidou, E., Rigamonti, L. & Thoden van Velzen, E. U., 1. jul. 2023, I: Waste Management. 166, s. 115-121

Plastic packaging flows in Europe: A hybrid input-output approach

Cimpan, C., Bjelle, E. L. & Strømman, A. H., dec. 2021, I: Journal of Industrial Ecology. 25, 6, s. 1572–1587

The living, the dead, and the obsolete: A characterization of lifetime and stock of ICT products in Denmark

Zhilyaev, D., Cimpan, C., Cao, Z., Liu, G., Askegaard, S. & Wenzel, H., jan. 2021, I: Resources, Conservation and Recycling. 164, 11 s., 105117.

How the Dead Storage of Consumer Electronics Creates Consumer Value

Nøjgaard, M., Smaniotta, C., Askegaard, S., Cimpan, C., Zhilyaev, D. & Wenzel, H., jul. 2020, I: Sustainability. 12, 14, 16 s., 5552.

Life Cycle Assessment of prospective MSW management based on integrated management planning in Campo Grande, Brazil

De Moraes Lima, P., Olivo, F., Paulo, P. L., Schalch, V. & Cimpan, C., 1. maj 2019, I: Waste Management. 90, s. 59-71

The climate footprint of imports of combustible waste in systems with high shares of district heating and variable renewable energy

Pizarro Alonso, A. R., Cimpan, C. & Münster, M., sep. 2018, I: Waste Management. 79, s. 800-814

The economic value of imports of combustible waste in systems with high shares of district heating and variable renewable energy

Pizarro-Alonso, A., Cimpan, C., Ljunggren Söderman, M., Ravn, H. & Münster, M., sep. 2018, I: Waste Management. 79, s. 324-338

Electronic waste and informal recycling in Kathmandu, Nepal: challenges and opportunities

Parajuly, K., Thapa, K. B., Cimpan, C. & Wenzel, H., 2018, I: Journal of Material Cycles and Waste Management. 20, 1, s. 656-666

Environmental assessment of end-of-life textiles in Denmark

Koligkioni, A., Parajuly, K., Sørensen, B. L. & Cimpan, C., 2018, I: Procedia CIRP. 69, s. 962-967

Environmental assessment of existing and alternative options for management of municipal solid waste in Brazil

Lima, P. D. M., Colvero, D. A., Gomes, A. P., Wenzel, H., Schalch, V. & Cimpan, C., 2018, I: Waste Management. 78, s. 857-870

Integration of Energy Systems Analysis (ESA) with waste LCA to account consequences of present and future waste-to-energy (WtE)

Pizarro Alonso, A. R. & Cimpan, C., 2018.

Optimized collection of EoL electronic products for Circular economy: A techno-economic assessment

Angouria-Tsorochidou, E., Cimpan, C. & Parajuly, K., 2018, I: Procedia CIRP. 69, s. 986-991

Synergi i fynske ressourcestrategier – SYFRE: sammendrag

Cimpan, C., Sørensen, B. L., Mehlsen, T., Rabbani, R. A. & Wenzel, H., 20. dec. 2017, Odense: Syddansk Universitet. 32 s.

Future consequences of strategies for household waste management in Copenhagen, Denmark

Cimpan, C., Nedenskov, J., Leisner, I. & Wenzel, H., 28. nov. 2017.

Collection and recycling of waste from households on Funen: Status and analysis on the reference year 2014

Cimpan, C. & Wenzel, H., 25. nov. 2016, Centre for Life Cycle Engineering, SDU. 27 s.

Cost-efficient management of organic household waste: Collection, pre-treatment and digestion

Cimpan, C. & Wenzel, H., 25. nov. 2016, Centre for Life Cycle Engineering, SDU. 28 s.

Integration of Refuse Derived Fuel in District Heating Systems: Analysis for Svendborg and Odense District heating systems

Rabbani, R. A., Gabert, M. C., Gamborg, F., Pedersen, M. R., Cimpan, C. & Wenzel, H., 25. nov. 2016, Centre for Life Cycle Engineering, SDU. 71 s.

Implications of synergetic indirect effects and increased flexibility for municipal solid waste management within future framework conditions

Cimpan, C., Rothmann, M. & Wenzel, H., 20. sep. 2016. 1 s.

Techno-economic assessment of central sorting at material recovery facilities: the case of lightweight packaging waste

Cimpan, C., Maul, A., Wenzel, H. & Pretz, T., 20. jan. 2016, I: *Journal of Cleaner Production*. 112, 5, s. 4387–4397

Central sorting systems in Municipal Solid Waste management

Cimpan, C., 2016, Syddansk Universitet.

End-of-life resource recovery from emerging electronic products: a case study of robotic vacuum cleaners

Parajuly, K., Habib, K., Cimpan, C., Liu, G. & Wenzel, H., 2016, I: *Journal of Cleaner Production*. 137, s. 652-666

Materialestrømsanalyse, carbon footprint og økonomisk vurdering af alternative veje til indsamling og behandling af fynsk husholdningsaffald

Cimpan, C., Rothmann, M. & Wenzel, H., 26. okt. 2015, SDU Livscykluscenter. 111 s.

Towards increased recycling of household waste: Documenting cascading effects and material efficiency of commingled recyclables and biowaste collection

Cimpan, C., Rothmann, M., Hamelin, L. & Wenzel, H., 1. jul. 2015, I: *Journal of Environmental Management*. 157, 1 July, s. 69-83

Optimization of resource recovery from MSW by combining source separation and central sorting: a case study for Funen, Denmark

Cimpan, C., Rothmann, M. & Wenzel, H., jul. 2015. 1 s.

Insight into economies of scale for waste packaging sorting plants

Cimpan, C., Wenzel, H., Maul, A. & Pretz, T., 15. mar. 2015, *Proceedings of the 30th International Conference on Solid Waste Technology and Management*. Widener University, Department of Civil Engineering, s. 250-261 (International Conference on Solid Waste Technology. Proceedings).

Central sorting and recovery of MSW recyclable materials: A review of technological state-of-the-art, cases, practice and implications for materials recycling

Cimpan, C., Maul, A., Jansen, M., Pretz, T. & Wenzel, H., 2015, I: *Journal of Environmental Management*. 156, June, s. 181-199 19 s.

Material flow analysis, carbon footprint and economic assessment of alternative collection and treatment of domestic household waste from the region of Funen, Denmark

Cimpan, C., Rothmann, M. & Wenzel, H., 2015, Centre for Life Cycle Engineering, SDU. 111 s.

Karbon implikationer af sorteringsystemer - et KISS værktøj til strategiske beslutninger i affaldssektoren

Wenzel, H., Sørensen, B. L., Wesnæs, M., Cimpan, C., Leinikka Dall, O. & Hamelin, L., 24. nov. 2014.

Shredder Residues: Problematic substances in relation to resource recovery

Hyks, J., Oberender, A., Hjelm, O., Cimpan, C., Wenzel, H., Hu, G. & Cramer, J., 14. maj 2014, Miljøstyrelsen. (Miljøprojekt; Nr. No. 1568).

Energy implications of mechanical and mechanical-biological treatment compared to direct waste-to-energy

Cimpan, C. & Wenzel, H., 2013, I: *Waste Management*. 33, s. 1648–1658

The effects of Dual-Stream commingled collection of recyclables from households in Sønderborg, Denmark: 2nd International Conference WASTES: Solutions, Treatments and Opportunities, September 11th-13th 2013

Cimpan, C. & Wenzel, H., 2013. 6 s.

Alternative Pathways of Future Energy and Materials Recovery from Mixed MSW. Proceedings of the International Conference "ISWA World Solid Waste Congress", 17th - 19th September 2012, in Florence, Italy.

Cimpan, C. & Wenzel, H., 2012, *Proceedings of the International Conference "ISWA World Solid Waste Congress", 17th - 19th September 2012, in Florence, Italy..* ISWA, 10 s.

Undervisning og vejledning

Eco-efficient Engineering

Cimpan, C.
01/09/2023 → 31/01/2024

Solid Waste Processing and Recycling (EM-SWPR)

Cimpan, C.
03/09/2018 → 31/01/2019

Waste Management - from Waste to Resources

Cimpan, C.
01/02/2023 → 30/06/2023