IN-SOURCE Publications + Presentations + Theses (DE+A)

German Team

1. Luigi Varriale: Wastewater Treatment Plant: Model of an activated Sludge Process for the Energy Demand Analysis. Bachelorthesis an der Universität Napoli, betreut von U. Eicker, September 2018
2. V. Weiler, P. Würstle, A. Schmitt, J. Stave, R. Braun, M. Zirak, V. Coors, U. Eicker (2018). Methoden zur Integration von Sachdaten in CityGML Dateien zur Verbesserung der energetischen Analyse von Stadtquartieren und deren Visualisierung, BauSIM 2018. 26.-28.09.2018, Karlsruhe
3. Alaa Saffour: Analysis of the existing conveyor systems of the city of Markgröningen under technical and economic aspects. Projektarbeit innerhalb des SENCE Masterprogramms an der HFT. Oktober 2018
4. U. Eicker, J. Schumacher, U. Pietzsch, F. Bashiri, E. Jacobs, R. Braun, V. Weiler, L. Varriale, V. Costa, A. Borzymowska, V. Rappa, D. Fricken, A. Helble: Analysis of the water-energy nexus in a regional district, SDEWES 2018 Conference, Palermo, 30.9. – 4.10. 2018
5. Verena Weiler, Jonas L. Stave, Ursula Eicker: Assessment of different renewable energy generation scenarios using 3D urban modelling tools. SDEWES 2018 Conference, Palermo, 30.9. – 4.10. 2018
6. Verena Weiler, Jonas L. Stave, Ursula Eicker: Renewable Energy Generation Scenarios Using 3D Urban Modeling Tools. Methodology for Heat Pump and Co-Generation Systems with Case Study Application. Energies 2019, doi: 10.3390/en12030403, https://www.researchgate.net/publication/330684465_Renewable_Energy_Generation_Scenarios_Using_3D_Urban_Modeling_Tools-Methodology_for_Heat_Pump_and_Co-Generation_Systems_with_Case_Study_Application
7. Lara Dobisch: Systematic approach to the description of food metabolism based on the Ludwigsburg district. Projektarbeit im Masterkurs SENCE an der HFT, Februar 2019.
8. Erik Jakobs: Current situation and potentials of food and organic waste utilization in New York City. Masterthesis im Masterkurs SENCE an der HFT, Februar 2019.
9. Dana Laureen Schmidt: Ecological assessment of regional marketing of dairy products taking the example district Ludwigsburg. Masterthesis im Masterkurs SENCE an der HFT, Februar 2019.
10. U. Eicker, J. Schumacher, V. Weiler, R. Braun: On the design of an urban modelling platform and its application for a New York analysis. Conference paper Building Simulation 2019, Rome. https://www.researchgate.net/publication/337831919_On_the_design_of_an_urban_modelling_platform_and_its_application_for_a_New_York_analysis
11. Raffaele Speranza: Anaerobic Digester Model for the prediction of biomethane production. 5.9.2019. IN-SOURCE Projektarbeit innerhalb eines Austauschstipendiums an der HFT.
12. Vincenzo Costa: Development of a simulation model for a wastewater treatment plant in INSEL environment: energy and economic analysis. Masterthesis, November 2019
13. Padsala, Rushikesh, Bao, Keyu, Kesnar, Chris, Coors, Volker and Schröter, Bastian (2019) "GIS-based assessment of regional biomass potentials for heat and power generation at the example of Ludwigsburg county, Germany". In Food-Water-Energy Nexus conference organized by American Institute of Chemical Engineers and New York Institute of Technology, 5./6. Dec. 2019.

14. Bao K, Padsala R, Coors V, Thrän D, Schröter B (2020). A Method for Assessing Regional Bioenergy Potentials Based on GIS Data and a Dynamic Yield Simulation Model. Energies 2020, 13(24), DOI 10.3390/en13246488
15. Bao K, Padsala R, Thrän D, Schröter B (2020). Urban Water Demand Simulation in Residential and Non-Residential Buildings based on a CityGML Data Model. ISPRS Int. J. Geo-Inf. 2020, 9(11), 642; https://doi.org/10.3390/ijgi9110642
16. Bao K, Padsala R, Coors V, Thrän D, Schröter B (2020): GIS-Based Assessment of Regional Biomass Potentials at the Example of Two Counties in Germany. In European Biomass Conference and Exhibition Proceedings, pp. 77–85. DOI: 10.5071/28thEUBCE2020-1CV.4.15
17. Rushikesh Padsala, Theresa Fink, Jan Peters-Anders, Ernst Gebetsroither-Geringer, Volker Coors: From Urban Design to Energy Simulation – A Data Conversion Process Bridging the Gap Between Two Domains in REAL CORP 2020 proceedings, https://conference.corp.at/archive/CORP2020_54.pdf
18. Würstle, P., Santhanavanich, T., Padsala, R., & Coors, V. (2020). The Conception of an Urban Energy Dashboard using 3D City Models. Proceedings of the Eleventh ACM International Conference on Future Energy Systems. Presented at the e-Energy '20: The Eleventh ACM International Conference on Future Energy Systems. Juni 2020. https://doi.org/10.1145/3396851.3402650
19. Bao, K., Padsala R., Thrän, D., Schröter, B.: Urban Water Demand Simulation in Residential and Non-Residential Buildings Based on a CityGML Data Model. ISPRS Int. J. Geo-Inf. 2020, 9, 642. https://doi.org/10.3390/ijgi9110642
20. Bao, Keyu & Padsala, Rushikesh & Coors, Volker & Thrän, Daniela & Schröter, Bastian. (2020). A Method for Assessing Regional Bioenergy Potentials Based on GIS Data and a Dynamic Yield Simulation Model. Land. 10.3390/land10080880. 12/2020, https://doi.org/10.3390/en13246488
21. Bao, Keyu & Padsala, Rushikesh & Coors, Volker & Thrän, Daniela & Schröter, Bastian. (2021). A GIS Based Simulation Method for Regional Food Potential and Demand. Energies. 13. 10.3390/en13246488. 6/2021, https://doi.org/10.3390/land10080880
22. Rushikesh Padsala, Ernst Gebetsroither-Geringer, Keyu Bao, Volker Coors: The Application of CityGML Food Water Energy ADE to Estimate the Biomass Potential for a Land. In REAL CORP 2021, 9/2021, https://archive.corp.at/cdrom2021/papers2021/CORP2021_50.pdf
23. R. Padsala, E. Gebetsroither-Geringer, J. Peters-Anders, and V. Coors. 2021. 'INCEPTION OF HARMONISING DATA SILOS AND URBAN SIMULATION TOOLS USING 3D CITY MODELS FOR SUSTAINABLE MANAGEMENT OF THE URBAN FOOD WATER AND ENERGY RESOURCES'. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences VIII-4/W1-2021 (September): 81–88.
24. Ursula Pietzsch, Keyu Bao, Rushikesh Padsala, Ernst Gebetsroither-Geringer, Barbara Smetschka, Jeffrey Raven, Volker Coors: Stakeholder-supported Research on the Food-Water-Energy Nexus with three International Case Studies. In REAL CORP 2021, https://archive.corp.at/cdrom2021/papers2021/CORP2021_51.pdf
25. HosseiniHaghighi, SeyedehRabeeh & Uribarri, Pilar & Padsala, Rushikesh & Eicker, Ursula. (2021). Characterizing and Structuring Urban GIS Data for Housing Stock Energy Modelling and Retrofitting. Energy and Buildings. 256. 111706. 10.1016/j.enbuild.2021.111706. http://dx.doi.org/10.1016/j.enbuild.2021.111706

Austrian Team

1. Smetschka, B., Gaube, V., 2020. Co-creating formalized models: Participatory modelling as method and process in transdisciplinary research and its impact potentials. Environ. Sci. Policy 103, 4149. https://doi.org/10.1016/j.envsci.2019.10.005
2. Smetschka, B., Wiedenhofer, D., Egger, C., Haselsteiner, E., Moran, D., Gaube, V. 2019: Time matters: the carbon footprint of everyday activities in Austria. Ecological Economics 164, 106357. - DOI: 10.1016/j.ecolecon.2019.106357
3. Christian Lauk, Lisa Kaufmann, Michaela C. Theurl, Fritz Wittmann, Michael Eder, Stefan Hörtenhuber, Bernhard Freyer, Fridolin Krausmann: "Demand side options to reduce greenhouse gas emissions and the land footprint of urban food systems: A scenario analysis for the City of Vienna"
4. Christina Plank, Christoph Görg, Gerald Kalt, Lisa Kaufmann, Stefan Dullinger, Fridolin Krausmann: "Biomass from somewhere": Governing the spatial mismatch of Viennese biomass consumption and its impact on biodiversity"
5. Kalt, Gerald, Lisa Kaufmann, Thomas Kastner, and Fridolin Krausmann. 2021. „Tracing Austria's Biomass Consumption to Source Countries: A Product-Level Comparison between Bioenergy, Food and Material". Ecological Economics 188 (October): 107129. - https://doi.org/10.1016/j.ecolecon.2021.107129.
6. Smetschka, Barbara, Veronika Gaube. 2020. „Co-Creating Formalized Models: Participatory Modelling as Method and Process in Transdisciplinary Research and Its Impact Potentials". Environmental Science & Policy 103 (January): 41–49. - https://doi.org/10.1016/j.envsci.2019.10.005.

Conference Proceedings

1. Kaufmann, Lisa, Barbara Smetschka, Sarah Matej, Karl Heinz Erb, Anna Kozlowksa, and Ernst Gebetsroither-Geringer. 2021. „Urban Land Use and Food Supply: The Example of Vienna". In Cities 20.50. Creating Habitats for the 3rd Millennium: Smart – Sustainable – Climate Neutral. Proceedings of the 26th International Conference on Urban Planning, Regional Development and Information Society, herausgegeben von Manfred Schrenk, Vasily V. Popovich, Peter Zeile, Pietro Elisei, Clemens Beyer, Judith Reyser, und Gernot Stöglehner, 997–1006. University of Natural Resources and Life Sciences, Vienna, Austria: Verein CORP – Competence Center of Urban and Regional Planning. https://archive.corp.at/cdrom2021/files/CORP2021_proceedings.pdf.
2. Pietzsch, Ursula, Keyu Bao, Rushikesh Padsala, Ernst Gebetsroither-Geringer, Barbara Smetschka, Jeffrey Raven, and Volker Coors. 2021. „Stakeholder-Supported Research on the Food-Water-Energy Nexus with Three International Case Studies". In REAL CORP 2021: Cities 20.50 Creating Habitats for the 3rd Millennium Smart – Sustainable – Climate Neutral. Proceedings of the 26th International Conference on Urban Planning, Regional Development and Information Society, herausgegeben von Manfred Schrenk, Vasily V. Popovich, Peter Zeile, Pietro Elisei, Clemens Beyer, Judith Reyser, und Gernot Stöglehner, 1225–31. University of

Natural Resources and Life Sciences, Vienna, Austria: Verein CORP – Competence Center of Urban and Regional Planning.

3. Smetschka, B; Gaube, V; Egger, C; Wiedenhofer, D 2021: "Limited Time. Or how quality of life relates to sustainable urban transformation". In: HM Hochschule München (Hrsg.), Urbane Transformationen. Ressource. Material - Zeit - Raum - Energie. Book of Abstracts INUAS Konferenz 2021 / 3.-5. März, pp. 198-200. https://www.inuas.org/wp-content/uploads/2021/03/INUAS2021_Book-of-Abstract_FINAL.pdf

4. Padsala, Rushikesh, Theresa Fink, Jan Peters-Anders, Ernst Gebetsroither-Geringer, und Volker Coors. 2020. „From Urban Design to Energy Simulation – a Data Conversion Process Bridging the Gap Between Two Domains". *RealCORP 2020 Conference Proceedings*, 365–75.

5. Padsala, Rushikesh, Ernst Gebetsroither-Geringer, Keyu Bao, und Volker Coors. 2021. „The Application of CityGML Food Water Energy ADE to Estimate the Biomass Potential for a Land Use Scenario". In , 851–61. CORP–Competence Center of Urban and Regional Planning.

6. Stollnberger, Romana, und Ernst Gebetsroither-Geringer. 2020. „Integrated Qualitative and Quantitative Analysis of Causal Urban Food-Water-Energy Relations towards more Climate-Resilient Cities". In REAL CORP 2020: SHAPING URBAN CHANGE, 469–78. Aachen, Germany. https://conference.corp.at/archive/CORP2020_127.pdf

7. Padsala, R., E. Gebetsroither-Geringer, J. Peters-Anders, and V. Coors. 2021. 'INCEPTION OF HARMONISING DATA SILOS AND URBAN SIMULATION TOOLS USING 3D CITY MODELS FOR SUSTAINABLE MANAGEMENT OF THE URBAN FOOD WATER AND ENERGY RESOURCES'. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences VIII-4/W1-2021 (September): 81–88. https://doi.org/10.5194/isprs-annals-VIII-4-W1-2021-81-2021.

8. Rushikesh Padsala, Ernst Gebetsroither-Geringer, Keyu Bao, Volker Coors: The Application of CityGML Food Water Energy ADE to Estimate the Biomass Potential for a Land. In REAL CORP 2021 https://archive.corp.at/cdrom2021/papers2021/CORP2021_50.pdf

Presentations

1. Brandner, E; Ivanceanu, I; Smetschka, B; Tiran, K 2019: A Future Caravan for Austria: How to Address Sustainable Development Goals in Small Towns and Villages. [Poster] International Symposium: Global Sustainable Development Goals in a Mediatized World, APR 4-5, 2019, Austrian Academy of Sciences, Vienna, AUSTRIA

2. Egger, C; Theurl, MC; Mayer, A; Kaufmann, L; Matej, S; Erb, KH 2019: Starting with livestock induced biomasse flows and feasible food systems in 2050 and ending with choices at the farm level. Annual Meeting of European Federation of Animal Science (EAAP 2019): Animal Farming for a Healthy World, AUG 26-30, 2019, Ghent, BELGIUM

3. Gaube, V; Smetschka, B 2020: How can participatory modelling support considering and tackling complexity? 11th International Sustainability Transition (IST) Conference 2020: Governance in an Era of Change – Making Sustainability Transitions Happen, AUG 18-21, 2020, Vienna, AUSTRIA [online conference]

4. Kaufmann, L, Barbara Smetschka, Anna Kozlowska, and Ernst Gebetsroither-Geringer 2021. „Urban Land Use and Food Supply: The Example of Vienna".26th International Conference on Urban Planning and Regional Development in the Information Society (REAL CORP 2021): Cities 2050 - Creating Habitats for the 3rd Millennium. Smart – Sustainable – Climate Neutral, Vienna, Austria.

5. Kaufmann, L, Barbara Smetschka, Anna Kozlowska, and Ernst Gebetsroither-Geringer. 2021. „Analysing and Presenting Footprints of Urban Land-Use and Food Supply InVienna - the Interactive HANPP Explorer, SUGI Project IN-SOURCE". Symposium on the Food-Water-Energy Nexus in parallel with the SDSC 2021: 6th International conference on Smart Data and Smart Cities (SDSC), Stuttgart, Germany.

6. Kaufmann, L, Christian Lauk, Michaela Clarissa Theurl, Barbara Smetschka, and Fridolin Krausmann. 2021. „Potentials for an Ecological Transition of Urban Food Systems – the Case of Vienna". 2021 Joint Conference of ISEE, ESEE and DEGROWTH: Building Alternative Livelihoods in times of ecological and political crisis, Manchester, UK [online].

7. Kaufmann, L. 2020. „Die ökologischen Auswirkungen der Wiener Ernährung". Zukunftserwachen - Das Festival für lokale Vielfalt & gelebte Utopien. Impulsvortrag zur Podiumsdiskussion „Was is(s)t Wien morgen?", September 19.

8. Kaufmann, L; Smetschka, B 2019: Biodiv Vienna. Wiens Biodiversitäts-Fußabdruck – Möglichkeiten zur Verringerung des städtischen Drucks auf die Biodiversität. Stadt-Umland-Konferenz (SUM) 2019: Klimawandelanpassung in der Stadtregion, NOV 11, 2019, Wien, AUSTRIA

9. Kaufmann, L; Smetschka, B 2019: Die Zukunft urbaner Lebensmittel – FOOD. Szenarios für das Wiener Lebensmittelsystem. Stadt-Umland-Konferenz (SUM) 2019: Klimawandelanpassung in der Stadtregion, NOV 11, 2019, Wien, AUSTRIA

10. Pietzsch, U, Keyu Bao, Rushikesh Padsala, Ernst Gebetsroither, Barbara Smetschka, Jeffrey Raven, and Volker Coors. 2021. „Stakeholder-supported Research on the Food-Water-Energy Nexus with three International Case Studies". 26th International Conference on Urban Planning and Regional Development in the Information Society (REAL CORP 2021): Cities 2050 - Creating Habitats for the 3rd Millennium. Smart – Sustainable – Climate Neutral, Vienna, Austria.

11. Smetschka, B, Lisa Kaufmann. 2019. „INSOURCE". Stadt-Umland-Konferenz (SUM) 2019: Klimawandelanpassung in der Stadtregion, Wien, November 11.

12. Smetschka, B, Lisa Kaufmann. 2020. „Food-Water-Energy Nexus in Vienna – Feeding and Greening the City".11th International Sustainability Transition (IST) Conference 2020: Governance in an Era of Change – Making Sustainability Transitions Happen, Vienna, Austria [online conference], August 20.

13. Smetschka, B; Plutzar, C 2019: Klimaresiliente Stadt-Umland Kooperation. Regionale Innovationen energetischer Biomassenutzung und Governance (KlimalnnoGovernance). Stadt-Umland-Konferenz (SUM) 2019: Klimawandelanpassung in der Stadtregion, NOV 11, 2019, Wien, AUSTRIA

14. Smetschka, B; Wiedenhofer, D; Egger, C 2019: Time Use and Energy Use in Austria 2010. 13th International Conference of the European Society for Ecological Economics (ESEE): Co-Creation - Making Ecological Economics Matter / Special session "International contexts of energy use: how much and what for?", JUN 18-21, 2019, Turku, FINLAND

15. Stollnberger, R., Gebetsroither-Geringer, E., 2020. Integrated Qualitative and Quantitative Analysis of Causal Urban Food-Water-Energy Relations towards more Climate-Resilient Cities, in: REAL CORP 2020: SHAPING URBAN CHANGE. Aachen, Germany, pp. 469–478.

16. Weidinger, F, Lisa Kaufmann, Barbara Smetschka, and Karl Heinz Erb. 2021. „HANPP Footprint of Densly Populated Areas - Insights from Two Case Studies in Ludwigsburg and Vienna, SUGI Project IN-SOURCE“. Symposium on the Food-Water-Energy Nexus in parallel with the SDSC 2021: 6th International conference on Smart Data and Smart Cities (SDSC), Stuttgart, Germany.

Thesis

1. Weidinger, Florian. 2021. ‘Landnutzung im dicht besiedelten Raum. Eine räumlich explizite Analyse mit Fokus auf eine wenig beachtete Landnutzungskategorie am Beispiel des Landkreises Ludwigsburg, Deutschland’. Master thesis at Klagenfurt University

2. Matejka, Victoria. 2021. ‘Darstellungsformen und Anwendungsbereiche von HANPP für außerwissenschaftliche Praxisakteur*innen‘. Master thesis at Klagenfurt University

3. Ulrike Magerl: "Renewable Energy Resources for Optimized Operation of Urban Agricultural Systems-Sustainable Food-Energy Analysis using the single-case-study Zukunftshof in Vienna"; Betreuer/in(nen): E. Gebetsroither-Geringer, J. Schmidt; BOKU Vienna Institute for Sustainable Economic Development, 2020; Abschlußprüfung: 26.11.2020.