

Publikationsliste

4.1 Journalpublikationen

1. Bjørndal, E., Bjørndal, M., Coniglio, S., Körner, M., Leinauer, C., & Weibelzahl, M. (2023). Energy Storage Operation and Electricity Market Design: On the Market Power of Monopolistic Storage Operators, *European Journal of Operational Research*, 307(2).
2. Bichler, M., Buhl, H.U., Knörr, J., Maldonado, F., Schott, P., Waldherr, S., & Weibelzahl, M. (2022). Electricity Markets in a Time of Change: A Call to Arms for Business Research. *Schmalenbach Journal of Business Research*, 74, 77-102.
3. Halbrügge, S., Buhl, H.U., Fridgen, G., Schott, P., Weibelzahl, M., & Weißflog, J. (2022). How Germany Achieved a Record Share of Renewables While Relying on Foreign Nuclear Power. *Energy*, 246.
4. Hanny, L., Wagner, J., Buhl, H.U., Körner, M., Schöpf, M., & Weibelzahl, M. (2022). Slow Progress in Flexibility and Grid Charges in Light of the Energy Transition: The Case of Germany. Forthcoming: *Energy Policy*.
5. Heine, M., Fridgen, G., Körner, M., Neumann, C., Sedlmeir, J., & Weibelzahl, M. (2022). Systemic Risks in Electricity Systems: A Perspective on the Potential of Digital Technologies. *Energy Policy*, 164.
6. Leinauer, C., Schott, P., Fridgen, G., Keller, R., Ollig, P., & Weibelzahl, M. (2022). Obstacles to Demand Response: Why Industrial Companies Do Not Adapt Their Power Consumption to Volatile Power Generation. *Energy Policy*, 165.
7. Coniglio, S., Sirvent, M., & Weibelzahl, M. (2021). Airport Capacity Extension, Fleet Investment, and Optimal Aircraft Scheduling in a Multi-Level Market Model: Quantifying the Cost of Imperfect Markets. *OR Spectrum*, 43(2), 367-408.
8. Fridgen, G., Körner, M., Weibelzahl, M., & Walters, S. (2021). Not All Doom and Gloom: How Energy-Intensive and Temporally Flexible Data Center Applications May Actually Promote Renewable Energy Sources. *Business & Information Systems Engineering*, 63(3), 243-256.
9. Fridgen, G., Thimmel, M., Wolf, L. & Weibelzahl, M. (2021). Smarter Charging: Power Allocation Accounting for Travel Time of Electric Vehicle Drivers. *Transportation Research Part D: Transport and Environment*, 97.
10. Grimm, V., Martin, A., Sölch, C., Weibelzahl, M., & Zöttl, G. (2021). Market-Based Redispatch May Result in an Inefficient Dispatch. *The Energy Journal*, 43(5).
11. Halbrügge, S., Schott, P., Weibelzahl, M., Buhl, H.U., Fridgen, G., & Schöpf, M. (2021). How did the German and other European Electricity Systems React to the COVID-19 Pandemic? *Applied Energy*, 285.
12. Heffron, R., Halbrügge, S., Körner, M., Obeng-Darko, N., Sumarno, T., Wagner, J., & Weibelzahl, M. (2021). Justice in Solar Energy Development. *Solar Energy*, 218.
13. Heffron, R., Körner, M., Schöpf, M., Wagner, J., Weibelzahl, M. (2021). The Role of Flexibility in the Light of the COVID-19 Pandemic and Beyond: Contributing to a Sustainable and Resilient Energy Future in Europe. *Renewable & Sustainable Energy Reviews*, 140.
14. Heffron, R., Körner, M., Sumarno, T., Wagner, J., Weibelzahl, M., & Fridgen, G. (2021). How Different Electricity Pricing Systems Impact the Energy Trilemma: Assessing Indonesia's Electricity Market Transition. *Energy Economics*, 107.
15. Rövekamp, P., Schöpf, M., Wagon, M., Weibelzahl, M., & Fridgen, G. (2021). Renewable Electricity Business Models in a Post Feed-in Tariff Era. *Energy*, 216.

16. Fridgen, M., Halbrügge, S., Olenberger, C. & Weibelzahl, M. (2020). The Insurance Effect of Renewable Distributed Energy Resources Against Uncertain Electricity Price Developments. *Energy Economics*, 91.
17. Fridgen, M., Michaelis, A., Rinck, R., Schöpf, M. & Weibelzahl, M. (2020). The Search for the Perfect Match: Aligning Power Market Products to the Energy Transition. *Energy Policy*, 144.
18. Haupt, L., Schöpf, M., Wederhake, L., & Weibelzahl, M. (2020). The Influence of Electric Vehicle Charging Strategies on the Sizing of Electrical Energy Storage Systems in Charging Hub Microgrids. *Applied Energy*, 273.
19. Heffron, R., Wagner, J., Weibelzahl, M. & Fridgen, G. (2020). Industrial Demand-Side Flexibility: A Key Element of a Just Energy Transition and Industrial Development. *Applied Energy*, 269.
20. Weibelzahl, M., & März, A. (2020). Optimal Storage and Transmission Investments in a Bilevel Electricity Market Model. *Annals of Operations Research*, 287(2), 911-940.
21. Ländner, E. M., März, A., Schöpf, M., & Weibelzahl, M. (2019). From Energy Legislation to Investment Determination: Shaping Future Electricity Markets with Different Flexibility Options. *Energy Policy*, 129, 1100-1110.
22. Schöpf, M., Weibelzahl, M., & Nowka, L. (2018). The Impact of Substituting Production Technologies on the Economic Demand Response Potential in Industrial Processes. *Energies*, 11(9), 2217-2229.
23. Weibelzahl, M., & März, A. (2018). On the Effects of Storage Facilities on Optimal Zonal Pricing in Electricity Markets. *Energy Policy*, 113, 778-794.
24. Weibelzahl, M. (2017). Nodal, Zonal, or Uniform Electricity Pricing: How to Deal with Network Congestion? *Frontiers in Energy*, 2(11), 210-232.
25. Grimm, V., Martin, A., Schmidt, M., Weibelzahl, M., & Zöttl, G. (2016). Transmission and Generation Investment in Electricity Markets: The Effects of Market Splitting and Network Fee Regimes. *European Journal of Operational Research*, 254(2), 493-509.
26. Grimm, V., Martin, A., Weibelzahl, M., & Zöttl, G. (2016). On the Long-Run Effects of Market Splitting: Why More Price Zones Might Decrease Welfare. *Energy Policy*, 94, 453-467.

4.2 Weitere Veröffentlichungen

27. Hanny, L., Körner, M., Leinauer, C., Michaelis, A., Strüker, J., Weibelzahl, M., & Weissflog, J. (2022). How to Trade Electricity Flexibility using Artificial Intelligence - An Integrated Algorithmic Framework. *HICSS-55: Hawai'i International Conference on System Sciences*.
28. Hanny, L., Pichlmeier, M., Stohr, A., Weibelzahl, M. (2022). *Ressourcenströme der Zukunft. Möglichkeiten, Anforderungen und Herausforderungen bei Modellierung und Analyse von technischen und sozialen Innovationen*. Institutsteil Wirtschaftsinformatik, Fraunhofer-Institut für Angewandte Informationstechnik FIT, Augsburg und Bayreuth.
29. Held, A., Bekk, A., Fahl, U., Müller, T., Pahle, M. Buhl, H. U., Hanny, L., Rockstuhl, S., Wagon, F., Weibelzahl, M., Niessen, S., Fechner, S., Mohringer, N., Frank, D., Schmid, E., Powalla, O., & Pflug, V. (2022): Regulatorische Handlungsoptionen für ein klimaneutrales Energiesystem. Kopernikus-Projekte, Karlsruhe/Berlin.
30. Keller, R., Stohr, A., Weibelzahl, M., & Wolf, L. (2022): *Elektromobilität im ländlichen Raum - Handlungsempfehlungen für die Gestaltung der Mobilität von Morgen*. Institutsteil Wirtschaftsinformatik, Fraunhofer-Institut für Angewandte Informationstechnik FIT, Augsburg und Bayreuth.

31. Michaelis, A., Halbrügge, S., Körner, M., Fridgen, G., & Weibelzahl, M. (2022). Artificial Intelligence in Energy Demand Response: A Systematic Assessment of Algorithms' Input Data Requirements. *International Conference on Business & Information Systems Engineering*.
32. Ahunbay, M., Ashour Novirdoust, A., Bhuiyan, R., Bichler, M., Bindu, S., Bjørndal, E., Bjørndal, M., Buhl, H. U., Chaves-Avila, J. P., Gerard, H., Gross, S., Hanny, L., Knörr, J., Köhnen, C. S., Marques, L., Monti, A., Neuhoff, K., Neumann, C., Ocenic, E., Ott, M., Pichlmeier, M., Richstein, J. C., Rinck, M., Röhrich, F., Röhrig, P. M., Sauer, A., Strüker, J., Troncia, M., Wagner, J., Weibelzahl, M., Zilke, P. (2021). *Electricity Market Design 2030-2050: Shaping Future Electricity Markets for a Climate-Neutral Europe*.
33. Ashour Novirdoust, A., Bhuiyan, R., Bichler, M., Buhl, H. U., Fridgen, G., Fugger, C., Gretschnko, V., Hanny, L., Knörr, J., Neuhoff, K., Neumann, C., Ott, M., Richstein, J. C., Rinck, M., Röhrich, F., Schöpf, M., Sitzmann, A., Wagner, J., & Weibelzahl, M. (2021). *Electricity Market Design 2030-2050: Moving Towards Implementation*.
34. Ashour Novirdoust, A., Bichler, M., Bojung, C., Buhl, H. U., Fridgen, G., Gretschnko, V., Hanny, L., Knörr, J., Maldonado, F., Neuhoff, K., Neumann, C., Ott, M., Richstein, J., Rinck, M., Schöpf, M., Schott, P., Sitzmann, A., Wagner, Joh., Wagner, Jon., & Weibelzahl, M. (2021). *Electricity Spot Market Design 2030-2050*.
35. Buhl, H.U., Schöpf, M., Schott, P., Weibelzahl, M., & Weissflog, J. (2021): *Bewertung von Flexibilitätsoptionen im deutschen Stromsystem 2021 bis 2035 unter Berücksichtigung der Holzverfeuerung*. Projektgruppe Wirtschaftsinformatik des Fraunhofer-Instituts für Angewandte Informationstechnik FIT.
36. Buhl, H.U., Gabrek, N., Gerdes, J., Kaymakci, C., Rauland, K., Richter, F., Sauer, S., Schneider, C., Schott, P., Seifermann, S., Tristán, A., Wagner, J., Wagon, F., Weibelzahl, M, Weissflog, J., & Zachmann, B. (2021): *Industrial Flexibility Options and their Applications in a Future Energy System*.
37. Gimpel, H., Hanny, L., Ott, M., Wagner, J., Weibelzahl, M., Bichler, M. & Ober, S. (2021). *Market Success: The Quest for the Objectives and Success Factors of Markets*. In: Gimpel, H. et al. (eds) *Market Engineering*.
38. Strüker J., Weibelzahl M., Körner M.-F., Kießling A., Franke-Sluijk A., Hermann, M. (2021). *Decarbonisation through Digitalisation: Theses on the Transformation of the Energy Industry*. University of Bayreuth, Project Group Business & Information Systems Engineering of the Fraunhofer FIT, and TenneT.
39. Weibelzahl, M. (2021). Flexibility in Times of Increasing Uncertainty: A plea for the Expansion of Sustainable and Flexible Energy Systems. *SPEKTRUM-Magazine*, 17(1), 76-79.
40. Buhl, H.U., Fridgen, G., & Weibelzahl, M. (2019). Das energieflexible Markt- und Stromsystem der Zukunft. In: Sauer, A., Abele, E., & Buhl, H.U. (eds) *Energieflexibilität in der deutschen Industrie: Ergebnisse aus dem Kopernikus-Projekt Synchronisierte und energieadaptive Produktionstechnik zur flexiblen Ausrichtung von Industrieprozessen auf eine fluktuierende Energieversorgung*.
41. Fridgen, G., Körner, M., Sedlmeir, J., & Weibelzahl, M. (2019). (How) Can Blockchain Contribute to the Management of Systemic Risks in Global Supply Networks? *Proceedings of the First Workshop on Systemic Risks in Global Networks, 15th Int. Business Informatics Congress*.