

Simone Gingrich

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Personal Details

Academic degrees	Priv.-Doz. in Social Ecology (2020), Dr.phil in Social Ecology (2010); Mag.rer.nat in Ecology (2004)
Current position	Tenure track position in Social Ecology, focus on long-term socio-ecological research, Institute of Social Ecology, Department of Economics and Social Sciences, University of Natural Resources & Life Sciences Vienna (BOKU)
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ResearcherID	L-4862-2016
Nationality	Austrian
Children	Ida and Dominik, *2011

Research interests

Long-term socio-ecological research (LTSER) at local to global scales; land and resource use; socio-ecological metabolism; application of socio-metabolic accounting to various spatio-temporal contexts; inter- and transdisciplinary sustainability research

Professional employment history

2020-	Tenure track position in Social Ecology, focus on long-term socio-ecological research at Institute of Social Ecology, Department of Economics and Social Sciences, BOKU
2018-2020	Researcher and lecturer at Institute of Social Ecology, Department of Economics and Social Sciences, BOKU
2005-2018	Researcher and lecturer at Institute of Social Ecology, AAU
2011-2012	parental leave (20.5 months)
2003-2005	Freelance researcher and curator at the Technical Museum Vienna
2004	Freelance researcher at the Institute of Social Ecology, AAU

Education and academic qualification

2020	Venia Legendi in Social Ecology, BOKU. Thesis: "The shifting sustainability problems of land use during industrialization. A socio-ecological perspective".
2006-2010	PhD in Social Ecology, AAU. Thesis: "A social ecology of European industrialisation: energy, material, carbon and the socio-ecological transition". Supervisor: Fridolin Krausmann
Oct-Dec 2009	research stay as visiting PhD student at Sustainability Research Institute, University of Leeds, United Kingdom
May 2009	research stay at Pablo Olavide University, Seville, Spain
1998-2004	Mag. in Ecology, University of Vienna. Thesis: „Veränderungen von Landnutzung und Energieflüssen in ausgewählten Agrarökosystemen Oberösterreichs 1866 bis 2000“. Supervisor: Marina Fischer-Kowalski
2002-2003	Erasmus semester at Université Montpellier II, France

Research projects (selection)

2020	UNRAVEL - Towards enhancing the carbon stocks in forests: Unravelling the wood production potentials under sustainability conditions for Austria (Austrian Climate Research Panel); WP lead
2018-	HEFT – Hidden Emissions of Forest Transitions: GHG effects of socio-metabolic processes reducing pressures on forests (ERC Starting Grant 757995); PI
2018-	CoBALUCE – Consumption-based accounts of land-use change related carbon emissions (Deutsche Forschungsgemeinschaft (DFG) 397106073); contributor
2017-2019	ILLAS – Integrating Land use Legacies in Landslide Risk Assessment to support Spatial Planning (Austrian Climate Research Panel); Co-PI
2016-2018	LTSER Concept II (Austrian Academy of Sciences); PI of SEC contribution
2012-2017	SFS – Sustainable Farm Systems (Canadian Social Sciences and Humanities Research Council Partnership Grant 895-2011-1020); deputy PI of SEC contribution
2014-2015	LTSER Concept (Austrian Academy of Sciences); deputy PI of SEC contribution
2012-2013	VOLANTE – Visions of land-use transitions in Europe (EU FP7 grant agreement 265104); contributor
2010-2011	ENVIEDAN – Environmental History of the Viennese Danube 1500-1890 (Austrian National Science Fund P 22265); contributor
2008-2011	GLOMETRA – the global metabolic transition (Austrian National Science Fund P 21012); contributor
2008-2011	Analyzing global HANPP (Austrian National Science Fund P 20812); contributor
2008-2010	Our Environment has a History (Ministry of Science and Research, Sparkling Science Programme); deputy PI
2008-2009	cc.alps (MAVA foundation for nature); deputy PI of SEC contribution
2007-2008	Adaptation Study (Austrian Ministry of Agriculture, Forestry, Environment and Water); deputy PI of SEC contribution
2005-2009	Long-Term Socio-Ecological Research Eisenwurzen (Austrian Ministry of Education, Science and Culture, ProVision Programme); contributor
2005-2007	Global HANPP (Austrian National Science Fund P 16692); contributor
2005-2007	TransEurope (Austrian National Science Fund P 16759); contributor
2005-2008	Carbon AUT 1830-2000 (Austrian Academy of Sciences, Global Change Programme); contributor

Teaching activities

2021-	Guided Reading Long-term socio-ecological research and environmental history (with M. Schmid, BOKU, MA-level)
2021-	Specific Seminar Social Ecology (with K.-H. Erb, BOKU, MA level)
2019-	Lecture Resource Use and Resource Economics (with J. Schmidt, BOKU, BA level)
2020-2021	Master/Doctoral Seminar Land Use and Global Change (with K.-H. Erb and H. Haberl, AAU, PhD and MA levels)
2019	Lecture and Discussion The UN Sustainable Development Goals: towards global sustainable resource use? (University of Applied Arts Vienna, BA level)
2018-2019	Bachelor Seminar Environment and Bio-Resources Management (BOKU, BA level)
2018-2019	Seminar Conflicts over land: socio-ecological perspectives (with M. Pichler, AAU, MA level)
2018	Peer Seminar in Social Ecology (with N. Eisenmenger, AAU, PhD level)
2018	Master/Doctoral Seminar Environmental History (with F. Krausmann and M.

- Schmid, AAU, PhD and MA levels)
- 2015-2018 Introductory Seminar Social Ecology (4 times with changing partners (M. Schmid, T. Kastner, C. Görg, N. Eisenmenger), AAU, MA level)
- 2008-2014 Seminar Environmental History Austria (4 times with M. Schmid, AAU, MA level)
- 2008-2010 Introductory course Interdisciplinary Studies (3 times with changing partners (M. Schmid, W. Haas), AAU, MA level)
- 2006-2008 Lecture Series Social Ecology (3 times with M. Fischer-Kowalski, AAU, MA level)

Supervision of graduate students

- 2018- Supervision and co-supervision of 3 PhD students (all ongoing) at BOKU
- 2014- Supervision and co-supervision of 9 master students (2 ongoing, 7 completed) at AAU (MA Social and Human Ecology) and University of Vienna (MAs Ecology, History)

Institutional responsibilities

- 2020- Co-lead of working group on sustainability research at BOKU (with G. Gratzner)
- 2020- Deputy member of ethics commission at BOKU
- 2018- Member of Transdisciplinary Advisory Board to Joint Programming Initiative Climate
- 2018- Elected representative at Department Collegium (WiSo Department at BOKU)
- 2010- Member of master exam committees (examiner: 15 times, chair: 21 times) at AAU and BOKU
- 2016- Research coordinator of thematic area “Long-term socio-ecological research and Environmental History” at the Institute of Social Ecology, AAU (2016-2018; 2020-)
- 2016- Member of PhD defense tribunals (Universidade de Santiago de Compostela, Universitat de Barcelona, Université Pierre & Marie Curie, AAU) and external reviewer of PhD thesis (Universität Innsbruck)
- 2020 Member of working group on habilitation procedures at BOKU
- 2005-2011 Coordinator of the Center for Environmental History (ZUG), AAU
- 2005-2008 Coordinator of teaching agendas, Institute of Social Ecology, AAU

Awards and commissions of trust

- 2018- Member of the Austrian Academy of Sciences (Young Academy)
- 2017 ERC Starting Grant for project “Hidden Emissions of Forest Transitions”
- 2010 Award of Excellence for PhD dissertation, awarded by the Austrian Ministry of Science and Research
- 2020 Awarded with IOP Trusted Reviewer status
- 2009- Reviewer for >25 scientific journals, including: Anthropocene, Ecological Economics, Ecological Indicators, Energy Policy, Environmental Research Letters, Environmental Science & Policy, Forests, Global Change Biology, Global Environmental Change, Historia Agraria, Journal of Cleaner Production, Journal of Industrial Ecology, Journal of Land Use Science, Land Use Policy, Nature Communications, Scandinavian Economic History Review, Science of the Total Environment
- 2016- Reviewer for project proposals to “OeNB Anniversary Fund” (Austria) and “Le Studium” (France)
- 2015 Reviewer for conference contributions: Conference of the European Society of Ecological Economics (ESEE 2015) in Leeds, United Kingdom

Publications

Journal articles

1. **Gingrich, S**, Lauk, C, Krausmann, F, Erb, K-H, Le Noë, J, 2021. Changes in energy and livestock systems largely explain the forest transition in Austria (1830–1910). *Land Use Policy* 109, 105624. <https://doi.org/10.1016/j.landusepol.2021.105624>
2. Bhan, M, **Gingrich, S**, Roux, N, Le Noë, J, Kastner, T, Matej, S, Schwarzmüller, F, Erb, K-H, 2021. Quantifying and attributing land use-induced carbon emissions to biomass consumption: A critical assessment of existing approaches. *Journal of Environmental Management* 286, 112228. <https://doi.org/10.1016/j.jenvman.2021.112228>
3. Bertsch-Hoermann, B, Egger, C, Gaube, V, **Gingrich, S**, 2021. Agroforestry trade-offs between biomass provision and aboveground carbon sequestration in the alpine Eisenwurzen region, Austria. *Reg Environ Change* 21, 77. <https://doi.org/10.1007/s10113-021-01794-y>
4. Billen, G, Aguilera, E, Einarsson, R, Garnier, J, Gingrich, S, Grizzetti, B, Lassaletta, L, Le Noë, J, Sanz-Cobena, A, 2021. Reshaping the European agro-food system and closing its nitrogen cycle: The potential of combining dietary change, agroecology, and circularity. *One Earth* 4, 839–850. <https://doi.org/10.1016/j.oneear.2021.05.008>
5. Knevels, R, Brenning, A, **Gingrich, S**, Heiss, G, Lechner, T, Leopold, P, Plutzer, C, Proske, H, Petschko, H, 2021. Towards the Use of Land Use Legacies in Landslide Modeling: Current Challenges and Future Perspectives in an Austrian Case Study. *Land* 10, 954. <https://doi.org/10.3390/land10090954>
6. Le Noë, J, Erb, K-H, Matej, S, Magerl, A, Bhan, M, **Gingrich, S**, 2021. Socio-ecological drivers of long-term ecosystem carbon stock trend: An assessment with the LUCCA model of the French case. *Anthropocene*, 33, 100275. <https://doi.org/10.1016/j.ancene.2020.100275>
7. Pichler, M, Schmid, M, **Gingrich, S**, 2021. Mechanisms to exclude local people from forests: Shifting power relations in forest transitions. *Ambio*, Online first. <https://doi.org/10.1007/s13280-021-01613-y>
8. Pichler, M, Bhan, M, **Gingrich, S**, 2021. The social and ecological costs of reforestation. Territorialization and industrialization of land use accompany forest transitions in Southeast Asia. *Land Use Policy*, 101, 105180. <https://doi.org/10.1016/j.landusepol.2020.105180>
9. Eisenmenger, N, Pichler, M, Krenmayr, N, Noll, D, Plank, B, Schalmann, E, Wandl, M-T, **Gingrich, S**, 2020. The Sustainable Development Goals prioritize economic growth over sustainable resource use: a critical reflection on the SDGs from a socio-ecological perspective. *Sustainability Science* 15, 1101-1110 <https://doi.org/10.1007/s11625-020-00813-x>
10. Knevels, R, Brenning, A, **Gingrich, S**, Gruber, E, Lechner, T, Leopold, P, Petschko, H, Plutzer, C, 2020. Kulturlandschaft im Wandel: Ein indikatorenbasierter Rückblick bis in das 19. Jahrhundert. Fallstudie anhand der Gemeinden Waidhofen/Ybbs und Paldau. *moegg* 1, 255–285. <https://doi.org/10.1553/moegg162s255>
11. Le Noë, J, Roux, N, Billen, G, **Gingrich, S**, Erb, K, Krausmann, F, Thieu, V, Silvestre, M, Garnier, J, 2020. The phosphorus legacy offers opportunities for agro ecological transition (France 1850-2075). *Environmental Research Letters*, 15, 064022. <https://doi.org/10.1088/1748-9326/ab82cc>
12. Le Noë, J, Matej, S, Magerl, A, Bhan, M, Erb, K, **Gingrich, S**, 2020. Modelling and empirical validation of long-term carbon sequestration in forests (France, 1850-2015). *Global Change Biology* 26, 2421-2434. <https://doi.org/10.1111/gcb.15004>
13. Scheidel, A, **Gingrich, S**, 2020. Toward sustainable and just forest recovery: research gaps and potentials for knowledge integration. *One Earth* 3, 680-690. <https://doi.org/10.1016/j.oneear.2020.11.005>
14. **Gingrich, S**, Lauk, C, Niedertscheider, M, Pichler, M, Schaffartzik, A, Schmid, M, Magerl, A, Le Noë, J, Bhan, M, Erb, K-H, 2019. Hidden emissions of forest transitions: a socio-ecological reading of forest change. *Current Opinion in Environmental Sustainability* 38, 14–21. <https://doi.org/10.1016/j.cosust.2019.04.005>

15. Magerl, A, Le Noë, J, Erb, K, Bhan, M, **Gingrich, S**, 2019. A comprehensive data-based assessment of forest ecosystem carbon stocks in the U.S. 1907-2012. *Environmental Research Letters* 14, 125015. <https://doi.org/10.1088/1748-9326/ab5cb6>
16. Marull, J, Cattaneo, C, **Gingrich, S**, de Molina, M.G, Guzmán, G.I, Watson, A, MacFadyen, J, Pons, M, Tello, E, 2019. Comparative Energy-Landscape Integrated Analysis (ELIA) of past and present agroecosystems in North America and Europe from the 1830s to the 2010s. *Agricultural Systems* 175, 46–57. <https://doi.org/10.1016/j.agsy.2019.05.011>
17. **Gingrich, S**, Krausmann, F, 2018. At the core of the socio-ecological transition: Agroecosystem energy fluxes in Austria 1830–2010. *Science of The Total Environment* 645, 119–129. <https://doi.org/10.1016/j.scitotenv.2018.07.074>
18. **Gingrich, S**, Marco, I, Aguilera, E, Padró, R, Cattaneo, C, Cunfer, G, Guzmán, G.I, MacFadyen, J, Watson, A, 2018a. Agroecosystem energy transitions in the old and new worlds: trajectories and determinants at the regional scale. *Regional Environmental Change* 18, 1089–1101. <https://doi.org/10.1007/s10113-017-1261-y>
19. **Gingrich, S**, Theurl, M.C, Erb, K, Krausmann, F, 2018b. Regional specialization and market integration: agroecosystem energy transitions in Upper Austria. *Regional Environmental Change* 18, 937–950. <https://doi.org/10.1007/s10113-017-1145-1>
20. Angelstam, P, Manton, M, Elbakidze, M, Sijtsma, F, Adamescu, M.C, Avni, N, Beja, P, Bezak, P, Zyblikova, I, Cruz, F, Bretagnolle, V, Díaz-Delgado, R, Ens, B, Fedoriak, M, Flaim, G, **Gingrich, S**, Lavi-Neeman, M, Medinets, S, Melecis, V, Muñoz-Rojas, J, Schäckermann, J, Stocker-Kiss, A, Setälä, H, Stryamets, N, Taka, M, Tallec, G, Tappeiner, U, Törnblom, J, Yamelynets, T, 2018. LTSER platforms as a place-based transdisciplinary research infrastructure: learning landscape approach through evaluation. *Landscape Ecology*. <https://doi.org/10.1007/s10980-018-0737-6>
21. Dick, J, Orenstein, D.E, Holzer, J.M, Wohner, C, Achard, A.-L, Andrews, C, Avriel-Avni, N, Beja, P, Blond, N, Cabello, J, Chen, C, Díaz-Delgado, R, Giannakis, G.V, **Gingrich, S**, Izakovicova, Z, Krauze, K, Lamouroux, N, Leca, S, Melecis, V, Miklós, K, Mimikou, M, Niedrist, G, Piscart, C, Postolache, C, Psomas, A, Santos-Reis, M, Tappeiner, U, Vanderbilt, K, Van Ryckegem, G, 2018. What is socio-ecological research delivering? A literature survey across 25 international LTSER platforms. *Science of The Total Environment* 622–623, 1225–1240. <https://doi.org/10.1016/j.scitotenv.2017.11.324>
22. Erb, K.-H, Kastner, T, Plutzer, C, Bais, A.L.S, Carvalhais, N, Fetzel, T, **Gingrich, S**, Haberl, H, Lauk, C, Niedertscheider, M, Pongratz, J, Thurner, M, Luysaert, S, 2018. Unexpectedly large impact of forest management and grazing on global vegetation biomass. *Nature* 553, 73–76. <https://doi.org/10.1038/nature25138>
23. Gizicki-Neundlinger, M, **Gingrich, S**, Güldner, D, Krausmann, F, Tello, E, 2017. Land, food, and labour in pre-industrial agro-ecosystems. A socio-ecological perspective on early 19th century seigneurial systems. *Historia Agraria* 71, 37–78.
24. **Gingrich, S**, Schmid, M, Dirnböck, T, Dullinger, I, Garstenauer, R, Gaube, V, Haberl, H, Kainz, M, Kreiner, D, Mayer, R, Mirtl, M, Sass, O, Schauppenlehner, T, Stocker-Kiss, A, Wildenberg, M, 2016. Long-Term Socio-Ecological Research in Practice: Lessons from Inter- and Transdisciplinary Research in the Austrian Eisenwurzen. *Sustainability* 8, 743. <https://doi.org/10.3390/su8080743>
25. Galán, E.S, Padró, R, Marco, I, Tello, E, Cunfer, G, Guzman, G.I, Gonzalez de Molina, M, Krausmann, F, **Gingrich, S**, Sacristán, V, Moreno, D, 2016. Widening the analysis of Energy Return On Investment (EROI) in agro-ecosystems: Socio-ecological transitions to industrialized farm systems (the Vallès County, Catalonia, c.1860 and 1999). *Ecological Modelling* 336, 13–25. <https://doi.org/10.1016/j.ecolmodel.2016.05.012>
26. Tello, E, Galán, E, Sacristán, V, Cunfer, G, Guzmán, G.I, González de Molina, M, Krausmann, F, **Gingrich, S**, Padró, R, Marco, I, Moreno-Delgado, D, 2016. Opening the black box of energy throughputs in farm systems: A decomposition analysis between the energy returns to external inputs, internal biomass reuses and total inputs consumed (the Vallès County, Catalonia, c.1860 and 1999). *Ecological Economics* 121, 160–174. <https://doi.org/10.1016/j.ecolecon.2015.11.012>

27. **Gingrich, S**, Haidvogel, G, Krausmann, F, Preis, S, Garcia-Ruiz, R, 2015a. Providing Food While Sustaining Soil Fertility in Two Pre-industrial Alpine Agroecosystems. *Human Ecology* 43, 395–410. <https://doi.org/10.1007/s10745-015-9754-0>
28. **Gingrich, S**, Niedertscheider, M, Kastner, T, Haberl, H, Cosor, G, Krausmann, F, Kuemmerle, T, Müller, D, Reith-Musel, A, Jepsen, M.R, Vadineanu, A, Erb, K.-H, 2015b. Exploring long-term trends in land use change and aboveground human appropriation of net primary production in nine European countries. *Land Use Policy* 47, 426–438. <https://doi.org/10.1016/j.landusepol.2015.04.027>
29. Grešlová, P, **Gingrich, S**, Krausmann, F, Chromý, P, Jančák, V, 2015. Social metabolism of Czech agriculture in the period 1830–2010. *AUC GEOGRAPHICA* 50, 23–35. <https://doi.org/10.14712/23361980.2015.84>
30. Schaffartzik, A, Mayer, A, **Gingrich, S**, Eisenmenger, N, Loy, C, Krausmann, F, 2014. The global metabolic transition: Regional patterns and trends of global material flows, 1950–2010. *Global Environmental Change* 26, 87–97. <https://doi.org/10.1016/j.gloenvcha.2014.03.013>
31. Dullinger, S, Essl, F, Rabitsch, W, Erb, K.-H, **Gingrich, S**, Haberl, H, Hulber, K, Jarosik, V, Krausmann, F, Kuhn, I, Pergl, J, Pysek, P, Hulme, P.E, 2013. Europe's other debt crisis caused by the long legacy of future extinctions. *Proceedings of the National Academy of Sciences* 110, 7342–7347. <https://doi.org/10.1073/pnas.1216303110>
32. Gierlinger, S, Haidvogel, G, **Gingrich, S**, Krausmann, F, 2013. Feeding and Cleaning the city: The role of the urban waterscape in provision and disposal in Vienna during the industrial transformation. *Water History* 5, 219–239. <https://doi.org/doi:10.1007/s12685-013-0075-1>
33. Krausmann, F, Erb, K.-H, **Gingrich, S**, Haberl, H, Bondeau, A, Gaube, V, Lauk, C, Plutzer, C, Searchinger, T.D, 2013. Global human appropriation of net primary production doubled in the 20th century. *Proceedings of the National Academy of Sciences* 110, 10324–10329. <https://doi.org/doi:10.1073/pnas.1211349110>
34. **Gingrich, S**, Haidvogel, G, Krausmann, F, 2012. The Danube and Vienna: urban resource use, transport and land use 1800–1910. *Regional Environmental Change* 12, 283–294. <https://doi.org/doi:10.1007/s10113-010-0201-x>
35. Haberl, H, Steinberger, J.K, Plutzer, C, Erb, K.-H, Gaube, V, **Gingrich, S**, Krausmann, F, 2012. Natural and socioeconomic determinants of the embodied human appropriation of net primary production and its relation to other resource use indicators. *Ecological Indicators* 23, 222–231. <https://doi.org/10.1016/j.ecolind.2012.03.027>
36. Niedertscheider, M, **Gingrich, S**, Erb, K.-H, 2012. Changes in land use in South Africa between 1961 and 2006: an integrated socio-ecological analysis based on the human appropriation of net primary production framework. *Regional Environmental Change* 12, 715–727. <https://doi.org/10.1007/s10113-012-0285-6>
37. Krausmann, F, **Gingrich, S**, Haberl, H, Erb, K.-H, Musel, A, Kastner, T, Kohlheb, N, Niedertscheider, M, Schwarzlmüller, E, 2012. Long-term trajectories of the human appropriation of net primary production: Lessons from six national case studies. *Ecological Economics* 77, 129–138. <https://doi.org/doi:10.1016/j.ecolecon.2012.02.019>
38. Lauk, C, Haberl, H, Erb, K.-H, **Gingrich, S**, Krausmann, F, 2012. Global socioeconomic carbon stocks in long-lived products 1900–2008. *Environmental Research Letters* 7, 034023. <https://doi.org/10.1088/1748-9326/7/3/034023>
39. Singh, S.J, Krausmann, F, **Gingrich, S**, Haberl, H, Erb, K.-H, Lanz, P, Martinez-Alier, J, Temper, L, 2012. India's biophysical economy, 1961–2008. Sustainability in a national and global context. *Ecological Economics* 76, 60–69. <https://doi.org/10.1016/j.ecolecon.2012.01.022>
40. **Gingrich, S**, 2011. Foreign trade and early industrialisation in the Habsburg Monarchy and the United Kingdom — Two extremes in comparison. *Ecological Economics* 70, 1280–1288. <https://doi.org/10.1016/j.ecolecon.2010.08.013>
41. **Gingrich, S**, Kušková, P, Steinberger, J.K, 2011. Long-term changes in CO₂ emissions in Austria and Czechoslovakia—Identifying the drivers of environmental pressures. *Energy Policy* 39, 535–543. <https://doi.org/10.1016/j.enpol.2010.10.006>

42. Krausmann, F, **Gingrich, S**, Nourbakhch-Sabet, R, 2011. The Metabolic Transition in Japan: A Material Flow Account for the Period From 1878 to 2005. *Journal of Industrial Ecology* 15, 877–892. <https://doi.org/10.1111/j.1530-9290.2011.00376.x>
43. Weisz, U, **Gingrich, S**, Winiwarter, V, Radits, F, Soukup-Altrichter, K, Schmied, C, Spranz, A, Antić, A, Bosina, C, Ecker, I, 2011. Schüler (innen) auf der Suche nach den Wurzeln unserer Umweltprobleme. *Umwelthistorische Forschung in technischen Schulen als Beitrag zur Bildung für nachhaltige Entwicklung. GAIA-Ecological Perspectives for Science and Society* 20, 122–128. <https://doi.org/10.14512/gaia.20.2.9>
44. Erb, K.-H, Krausmann, F, Gaube, V, **Gingrich, S**, Bondeau, A, Fischer-Kowalski, M, Haberl, H, 2009. Analyzing the global human appropriation of net primary production—processes, trajectories, implications. An introduction. *Ecological Economics* 69, 250–259. <http://dx.doi.org/10.1016/j.ecolecon.2009.07.001>
45. Krausmann, F, **Gingrich, S**, Eisenmenger, N, Erb, K.-H, Haberl, H, Fischer-Kowalski, M, 2009. Growth in global materials use, GDP and population during the 20th century. *Ecological Economics* 68, 2696–2705. <https://doi.org/10.1016/j.ecolecon.2009.05.007>
46. Krausmann, F, Haberl, H, Erb, K.-H, Wiesinger, M, Gaube, V, **Gingrich, S**, 2009. What determines geographical patterns of the global human appropriation of net primary production? *Journal of Land Use Science* 4, 15–33. <https://doi.org/10.1080/17474230802645568>
47. Erb, K.-H, **Gingrich, S**, Krausmann, F, Haberl, H, 2008. Industrialization, Fossil Fuels, and the Transformation of Land Use. *Journal of Industrial Ecology* 12, 686–703. <https://doi.org/10.1111/j.1530-9290.2008.00076.x>
48. Krausmann, F, Erb, K.-H, **Gingrich, S**, Lauk, C, Haberl, H, 2008. Global patterns of socioeconomic biomass flows in the year 2000: A comprehensive assessment of supply, consumption and constraints. *Ecological Economics* 65, 471–487. <https://doi.org/10.1016/j.ecolecon.2007.07.012>
49. Kuskova, P, **Gingrich, S**, Krausmann, F, 2008. Long term changes in social metabolism and land use in Czechoslovakia, 1830–2000: An energy transition under changing political regimes. *Ecological Economics* 68, 394–407. <https://doi.org/10.1016/j.ecolecon.2008.04.006>
50. **Gingrich, S**, Erb, K.-H, Krausmann, F, Gaube, V, Haberl, H, 2007. Long-term dynamics of terrestrial carbon stocks in Austria: a comprehensive assessment of the time period from 1830 to 2000. *Regional Environmental Change* 7, 37–47. <https://doi.org/10.1007/s10113-007-0024-6>
51. Haberl, H, Erb, K.H, Krausmann, F, Gaube, V, Bondeau, A, Plutzer, C, **Gingrich, S**, Lucht, W, Fischer-Kowalski, M, 2007. Quantifying and mapping the human appropriation of net primary production in earth's terrestrial ecosystems. *Proceedings of the National Academy of Sciences* 104, 12942–12947. <https://doi.org/10.1073/pnas.0704243104>

Special Issue

1. **Gingrich, S**, Cunfer, G, Aguilera E., 2018. Energy transitions in agroecosystems: Long-term changes in agroecosystem energy efficiencies on both sides of the Atlantic. *Regional Environmental Change*, 18, pp. 929–1101.

Book chapters and editorials

1. **Gingrich, S**, Güldner, D, Schmid, M, 2020. Eine sozial-ökologische Interpretation der „Forest Transition“ in den österreichischen Alpenländern des 19. Jahrhunderts. In: Schanbacher, A (Ed.), *Ressourcen in historischer Perspektive. Landschaft, Literatur und Nachhaltigkeit*, Universitätsverlag Göttingen, Göttingen, pp. 117–146.
2. **Gingrich, S**, Cunfer, G, Aguilera, E, 2018. Agroecosystem energy transitions: exploring the energy-land nexus in the course of industrialization. Editorial to special issue. *Regional Environmental Change* 18, pp. 929–936. <https://doi.org/10.1007/s10113-018-1322-x>
3. Winiwarter V, Bürkner M, **Gingrich S**, Groß R, Haidvogel G, Hohensinner S, Schmid M, Krausmann F, 2018. Environmental Histories of contemporary Austria: An Introduction, in: Landry, M, Kupper, P. (Eds.), *Austrian Environmental History, Contemporary Austrian Studies*. Innsbruck University Press, pp. 25–48.

4. Gizicki-Neundlinger M, **Gingrich S**, Güldner D, 2017. Sustainability Challenges of Pre-industrial Local Food Systems—Insights from Long-Term Socio-Ecological Research in Austria. In: Fraňková, E, Haas, W, Singh, S.J. (Eds.), *Socio-Metabolic Perspectives on the Sustainability of Local Food Systems*. Springer, pp. 165–191.
5. **Gingrich S**, Lauk C, Kastner T, Krausmann F, Haberl H, Erb K.-H., 2016. A Forest Transition: Austrian Carbon Budgets 1830–2010. In: Haberl, H, Fischer-Kowalski, M, Krausmann, F, Winiwarter, V. (Eds.), *Social Ecology: Society-Nature Relations across Time and Space*. Springer, pp. 417–431.
6. Niedertscheider, M, Fetzl, T, Haberl, H, Krausmann, F, Gaube, V, **Gingrich, S**, Lauk, C, Plutzer, C, Erb, K.H., 2016. Africa's Land System Trajectories 1980–2005, in: Haberl, H., Fischer-Kowalski, M., Krausmann, F., Winiwarter, V. (Eds.), *Social Ecology. Society-Nature Relations across Time and Space*. Springer International Publishing, Cham, pp. 361–373.
7. **Gingrich, S**, Schmid, M, Gradwohl, M, Krausmann, F, 2013 How Material and Energy Flows Change Socio-natural Arrangements: The Transformation of Agriculture in the Eisenwurzen Region, 1860-2000, in: Singh, S.J, Haberl, H, Chertow, M, Mirtl, M, Schmid, M. (Eds.), *Long Term Socio-Ecological Research. Studies in Society - Nature Interactions Across Spatial and Temporal Scales, Human - Environment Interactions*. Springer, pp. 297–313.
8. Haberl, H, Erb, K.-H, Gaube, V, **Gingrich, S**, Singh, S.J, 2013. Socioeconomic Metabolism and the Human Appropriation of Net Primary Production: What Promise Do They Hold for LTSER?, in: Singh, S.J, Haberl, H, Chertow, M, Mirtl, M, Schmid, M. (Eds.), *Long Term Socio-Ecological Research. Studies in Society - Nature Interactions Across Spatial and Temporal Scales*. Springer, pp. 29–52.
9. Haidvogel, G, **Gingrich, S**, 2010. Wasserstraße Donau: Transport Und Handel Im Machland Und Auf Der Donau Im 19. Und 20. Jahrhundert, in: Winiwarter, V, Schmid, M. (Eds.), *Umwelt Donau: Eine Andere Geschichte. Katalog Zur Ausstellung Des Niederösterreichischen Landesarchivs Im Ehemaligen Pfarrhof In Ardagger Markt*. NÖ Institut für Landeskunde, pp. 91–103.

Reports and Working Papers

1. Tello E, Galán E, Cunfer G, Guzmán-Casado GI, González de Molina M, Krausmann F, Gingrich S, Sacristán V, Marco I, Padró R, Moreno-Delgado D, 2015. A proposal for a workable analysis of Energy Return On Investment (EROI) in agroecosystems. Part I: Analytical approach. *Social Ecology Working Papers 156*, IFF Social Ecology, Vienna.
2. Gingrich S, Gaube V, Haberl H, 2009. Energie im Klimawandel, ein Hintergrundbericht der CIPRA. CIPRA international, Schaan.
3. Gingrich S, Krausmann F, 2008. Der soziale Metabolismus lokaler Produktionssysteme. Reichraming in der oberösterreichischen Eisenwurzen 1830-2000, *Social Ecology Working Papers 107*. IFF Social Ecology, Vienna.