

PROF. DR. JOHAN ROCKSTRÖM

Scientific Publications



Top 10 peer-reviewed publications

- Rockström, Johan, Louis Kotzé, Svetlana Milutinović, Frank Biermann, Victor Brovkin, Jonathan Donges, Jonas Ebbesson, et al. 2024. **'The Planetary Commons: A New Paradigm for Safeguarding Earth-Regulating Systems in the Anthropocene'**. *Proceedings of the National Academy of Sciences* 121 (5): e2301531121. <https://doi.org/10.1073/pnas.2301531121>.
- Richardson, Katherine, Will Steffen, Wolfgang Lucht, Jørgen Bendtsen, Sarah E. Cornell, Jonathan F. Donges, Markus Drüke, et al. 2023. **'Earth beyond Six of Nine Planetary Boundaries'**. *Science Advances* 9 (37): eadh2458. <https://doi.org/10.1126/sciadv.adh2458>.
- Rockström, Johan, Joyeeta Gupta, Dahe Qin, Steven J. Lade, Jesse F. Abrams, Lauren S. Andersen, David I. Armstrong McKay, et al. 2023. **'Safe and Just Earth System Boundaries'**. *Nature* 619 (7968): 102–11. <https://doi.org/10.1038/s41586-023-06083-8>.
- Sureth, Michael, Matthias Kalkuhl, Ottmar Edenhofer, and Johan Rockström. 2023. **'A Welfare Economic Approach to Planetary Boundaries'**: *Jahrbücher Für Nationalökonomie Und Statistik*, March. <https://doi.org/10.1515/jbnst-2022-0022>.
- Armstrong McKay, David I., Arie Staal, Jesse F. Abrams, Ricarda Winkelmann, Boris Sakschewski, Sina Loriani, Ingo Fetzer, Sarah E. Cornell, Johan Rockström, and Timothy M. Lenton. 2022. **'Exceeding 1.5°C Global Warming Could Trigger Multiple Climate Tipping Points'**. *Science* 377 (6611). <https://doi.org/10.1126/science.abn7950>.
- Willett, Walter, Johan Rockström, Brent Loken, Marco Springmann, Tim Lang, Sonja Vermeulen, Tara Garnett, et al. 2019. **'Food in the Anthropocene: The EAT–Lancet Commission on Healthy Diets from Sustainable Food Systems'**. *The Lancet* 393 (10170): 447–92. [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4).
- Steffen, Will, Johan Rockström, Katherine Richardson, Timothy M. Lenton, Carl Folke, Diana Liverman, Colin P. Summerhayes, et al. 2018. **'Trajectories of the Earth System in the**

Anthropocene. *Proceedings of the National Academy of Sciences of the United States of America* 115 (33): 8252–59. <https://doi.org/10.1073/pnas.1810141115>.

Rockström, Johan, Owen Gaffney, Joeri Rogelj, Malte Meinshausen, Nebojsa Nakicenovic, and Hans Joachim Schellnhuber. 2017. **'A Roadmap for Rapid Decarbonization'**. *Science* 355 (6331): 1269–71. <https://doi.org/10.1126/science.aah3443>.

Steffen, Will, Katherine Richardson, Johan Rockström, Sarah E. Cornell, Ingo Fetzer, Elena M. Bennett, Reinette Biggs, et al. 2015. **'Planetary Boundaries: Guiding Human Development on a Changing Planet'**. *Science* 347 (6223): 1259855. <https://doi.org/10.1126/science.1259855>.

Rockström, Johan, Will Steffen, Kevin Noone, Åsa Persson, F. Stuart Chapin, Eric F. Lambin, Timothy M. Lenton, et al. 2009. **'A Safe Operating Space for Humanity'**. *Nature* 461 (7263): 472–75. <https://doi.org/10.1038/461472a>.

Complete publication list

2024

Peer-reviewed journals

Bai, Xuemei, Syezlin Hasan, Lauren Seaby Andersen, Anders Bjørn, Şiir Kilkış, Daniel Ospina, Jianguo Liu, et al. 2024. **'Translating Earth System Boundaries for Cities and Businesses'**. *Nature Sustainability* 7 (2): 108–19. <https://doi.org/10.1038/s41893-023-01255-w>.

Fuso Nerini, Francesco, Mariana Mazzucato, Johan Rockström, Harro van Asselt, Jim W. Hall, Stelvia Matos, Åsa Persson, Benjamin Sovacool, Ricardo Vinuesa, and Jeffrey Sachs. 2024. **'Extending the Sustainable Development Goals to 2050 — a Road Map'**. *Nature* 630 (8017): 555–58. <https://doi.org/10.1038/d41586-024-01754-6>.

Gupta, Joyeeta, Xuemei Bai, Diana M. Liverman, Johan Rockström, Dahe Qin, Ben Stewart-Koster, Juan C. Rocha, et al. 2024. **'A Just World on a Safe Planet: A Lancet Planetary Health–Earth Commission Report on Earth-System Boundaries, Translations, and Transformations'**. *The Lancet Planetary Health*, September. [https://doi.org/10.1016/S2542-5196\(24\)00042-1](https://doi.org/10.1016/S2542-5196(24)00042-1).

Humpenöder, Florian, Alexander Popp, Leon Merfort, Gunnar Luderer, Isabelle Weindl, Benjamin Leon Bodirsky, Miodrag Stevanović, et al. 2024. **'Food Matters: Dietary Shifts Increase the Feasibility of 1.5°C Pathways in Line with the Paris Agreement'**. *Science Advances* 10 (13): eadj3832. <https://doi.org/10.1126/sciadv.adj3832>.

Lawrence, Michael, Thomas Homer-Dixon, Scott Janzwood, Johan Rockström, Ortwin Renn, and Jonathan F. Donges. 2024. **'Global Polycrisis: The Causal Mechanisms of Crisis Entanglement'**. *Global Sustainability* 7 (January): e6. <https://doi.org/10.1017/sus.2024.1>.

Möller, Tessa, Annika Ernest Högnér, Carl-Friedrich Schleussner, Samuel Bien, Niklas H. Kitzmann, Robin D. Lamboll, Joeri Rogelj, Jonathan F. Donges, Johan Rockström, and Nico Wunderling. 2024. **'Achieving Net Zero Greenhouse Gas Emissions Critical to Limit Climate Tipping Risks'**. *Nature Communications* 15 (1): 6192. <https://doi.org/10.1038/s41467-024-49863-0>.

- Nyasulu, Maganizo Kruger, Ingo Fetzer, Lan Wang-Erlandsson, Fabian Stenzel, Dieter Gerten, Johan Rockström, and Malin Falkenmark. 2024. '**African Rainforest Moisture Contribution to Continental Agricultural Water Consumption**'. *Agricultural and Forest Meteorology* 346 (March):109867. <https://doi.org/10.1016/j.agrformet.2023.109867>.
- Orasche, Jürgen, Kari C. Nadeau, Antonia Schuster, Johan Rockström, Cezmi A. Akdis, and Claudia Traidl-Hoffmann. 2024. '**Climate Crisis Paralysis: Accelerating Global Action for Health Resilience in a Changing World**'. *Allergy* 79 (7): 1653–55. <https://doi.org/10.1111/all.16096>.
- Porkka, Miina, Vili Virkki, Lan Wang-Erlandsson, Dieter Gerten, Tom Gleeson, Chinchu Mohan, Ingo Fetzer, et al. 2024. '**Notable Shifts beyond Pre-Industrial Streamflow and Soil Moisture Conditions Transgress the Planetary Boundary for Freshwater Change**'. *Nature Water* 2 (3): 262–73. <https://doi.org/10.1038/s44221-024-00208-7>.
- Ripple, William J, Christopher Wolf, Jillian W Gregg, Johan Rockström, Michael E Mann, Naomi Oreskes, Timothy M Lenton, et al. 2024. '**The 2024 State of the Climate Report: Perilous Times on Planet Earth**'. *BioScience*, October, biae087. <https://doi.org/10.1093/biosci/biae087>.
- Rockström, Johan. 2024. '**Reflections on the Past and Future of Whole Earth System Science**'. *Global Sustainability* 7 (May):e32. <https://doi.org/10.1017/sus.2024.15>.
- Rockström, Johan, Jonathan F. Donges, Ingo Fetzer, Maria A. Martin, Lan Wang-Erlandsson, and Katherine Richardson. 2024. '**Planetary Boundaries Guide Humanity's Future on Earth**'. *Nature Reviews Earth & Environment* 5 (11): 773–88. <https://doi.org/10.1038/s43017-024-00597-z>.
- Rockström, Johan, Louis Kotzé, Svetlana Milutinović, Frank Biermann, Victor Brovkin, Jonathan Donges, Jonas Ebbesson, et al. 2024. '**The Planetary Commons: A New Paradigm for Safeguarding Earth-Regulating Systems in the Anthropocene**'. *Proceedings of the National Academy of Sciences* 121 (5): e2301531121. <https://doi.org/10.1073/pnas.2301531121>.
- Rockström, Johan, Lan Wang-Erlandsson, Carl Folke, Dieter Gerten, Line J. Gordon, and Patrick W. Keys. 2024. '**Malin Falkenmark: Water Pioneer Who Coined the Notion of Water Crowding and Coloured the Water Cycle**'. *Ambio* 53 (5): 657–63. <https://doi.org/10.1007/s13280-024-01989-7>.
- Rockström, Johan, Lila Warszawski, and Antonia Schuster. 2024. '**A Stable Planet Is a Prerequisite for Development: Sustainable or Otherwise**'. *Horizons: Journal of International Relations and Sustainable Development* 27 (September):36–48.
- Tobian, Arne, Dieter Gerten, Ingo Fetzer, Sibyll Schaphoff, Lauren Seaby Andersen, Sarah Cornell, and Johan Rockström. 2024. '**Climate Change Critically Affects the Status of the Land-System Change Planetary Boundary**'. *Environmental Research Letters* 19 (5): 054060. <https://doi.org/10.1088/1748-9326/ad40c2>.
- Whitmee, Sarah, Rosemary Green, Kristine Belesova, Syreen Hassan, Soledad Cuevas, Peninah Murage, Roberto Picetti, et al. 2024. '**Pathways to a Healthy Net-Zero Future: Report of the Lancet Pathfinder Commission**'. *The Lancet* 403 (10421): 67–110. [https://doi.org/10.1016/S0140-6736\(23\)02466-2](https://doi.org/10.1016/S0140-6736(23)02466-2).

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- Caesar, Levke, Boris Sakschewski, Lauren Seaby Andersen, Tim Beringer, Johanna Braun, Donovan Dennis, Dieter Gerten, et al. 2024. '**Planetary Health Check Report 2024**'. Potsdam, Germany:

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https://www.planetaryhealthcheck.org/storyblok-cdn/f/301438/x/a4efc3f6d5/planetaryhealthcheck2024_report.pdf.

Future Earth, The Earth League, and WCRP. 2024. **'10 New Insights in Climate Science 2024/2025'**. Stockholm: Future Earth, The Earth League, The World Climate Research Programme.
<https://doi.org/10.5281/ZENODO.13950098>.

Global Commission on the Economics of Water. 2024. **'The Economics of Water: Valuing the Hydrological Cycle as a Global Common Good'**.
<https://economicsofwater.watercommission.org/>.

2023

Peer-reviewed journals

Anderies, John M., Wolfram Barfuss, Jonathan F. Donges, Ingo Fetzer, Jobst Heitzig, and Johan Rockström. 2023. **'A Modeling Framework for World-Earth System Resilience: Exploring Social Inequality and Earth System Tipping Points'**. *Environmental Research Letters* 18 (9): 095001.
<https://doi.org/10.1088/1748-9326/ace91d>.

Boonstra, Wiebren Johannes, Rakhyun E. Kim, Louis J. Kotzé, Michelle Lim, Paulo Magalhães, Brian J. Preston, Johan Rockström, and Prue Taylor. 2023. **'Earth Steward: Will Steffen's Contributions to Earth System Science, Governance and Law'**. *Ambio* 52 (6): 995–1003.
<https://doi.org/10.1007/s13280-023-01867-8>.

Bustamante, Mercedes, Joyashree Roy, Daniel Ospina, Ploy Achakulwisut, Anubha Aggarwal, Ana Bastos, Wendy Broadgate, et al. 2023. **'Ten New Insights in Climate Science 2023/2024'**. *Global Sustainability*, December, 1–58. <https://doi.org/10.1017/sus.2023.25>.

Folke, Carl, Johan Rockström, and Katherine Richardson. 2023. **'Obituary – Will Steffen, the Father of Earth System Science'**. *Global Sustainability* 6 (September):e19.
<https://doi.org/10.1017/sus.2023.16>.

Gupta, Joyeeta, Diana Liverman, Klaudia Prodani, Paulina Aldunce, Xuemei Bai, Wendy Broadgate, Daniel Ciobanu, et al. 2023. **'Earth System Justice Needed to Identify and Live within Earth System Boundaries'**. *Nature Sustainability*, March, 1–9. <https://doi.org/10.1038/s41893-023-01064-1>.

Obura, David O., Fabrice DeClerck, Peter H. Verburg, Joyeeta Gupta, Jesse F. Abrams, Xuemei Bai, Stuart Bunn, et al. 2023. **'Achieving a Nature- and People-Positive Future'**. *One Earth* 6 (2): 105–17. <https://doi.org/10.1016/j.oneear.2022.11.013>.

Piercy, Ellen, Willy Verstraete, Peter R. Ellis, Mason Banks, Johan Rockström, Pete Smith, Oliver C. Witard, et al. 2023. **'A Sustainable Waste-to-Protein System to Maximise Waste Resource Utilisation for Developing Food- and Feed-Grade Protein Solutions'**. *Green Chemistry* 25 (3): 808–32. <https://doi.org/10.1039/D2GC03095K>.

Rammelt, Crelis F., Joyeeta Gupta, Diana Liverman, Joeri Scholtens, Daniel Ciobanu, Jesse F. Abrams, Xuemei Bai, et al. 2023. **'Impacts of Meeting Minimum Access on Critical Earth Systems amidst**

- the Great Inequality**'. *Nature Sustainability* 6 (2): 212–21. <https://doi.org/10.1038/s41893-022-00995-5>.
- Richardson, Katherine, Will Steffen, Wolfgang Lucht, Jørgen Bendtsen, Sarah E. Cornell, Jonathan F. Donges, Markus Drüke, et al. 2023. **'Earth beyond Six of Nine Planetary Boundaries'**. *Science Advances* 9 (37): eadh2458. <https://doi.org/10.1126/sciadv.adh2458>.
- Ripple, William J, Christopher Wolf, Jillian W Gregg, Johan Rockström, Thomas M Newsome, Beverly E Law, Luiz Marques, et al. 2023. **'The 2023 State of the Climate Report: Entering Uncharted Territory'**. *BioScience* 73 (12): 841–50. <https://doi.org/10.1093/biosci/biad080>.
- Ripple, William J., Christopher Wolf, Timothy M. Lenton, Jillian W. Gregg, Susan M. Natali, Philip B. Duffy, Johan Rockström, and Hans Joachim Schellnhuber. 2023. **'Many Risky Feedback Loops Amplify the Need for Climate Action'**. *One Earth* 6 (2): 86–91. <https://doi.org/10.1016/j.oneear.2023.01.004>.
- Rockström, Johan, Joyeeta Gupta, Dahe Qin, Steven J. Lade, Jesse F. Abrams, Lauren S. Andersen, David I. Armstrong McKay, et al. 2023. **'Safe and Just Earth System Boundaries'**. *Nature* 619 (7968): 102–11. <https://doi.org/10.1038/s41586-023-06083-8>.
- Rockström, Johan, Mariana Mazzucato, Lauren Seaby Andersen, Simon Felix Fahrländer, and Dieter Gerten. 2023. **'Why We Need a New Economics of Water as a Common Good'**. *Nature* 615 (7954): 794–97. <https://doi.org/10.1038/d41586-023-00800-z>.
- Rockström, Johan, Albert V. Norström, Nathaniel Matthews, Reinette Biggs, Carl Folke, Ameil Harikishun, Saleemul Huq, Nisha Krishnan, Lila Warszawski, and Deon Nel. 2023. **'Shaping a Resilient Future in Response to COVID-19'**. *Nature Sustainability* 6 (8): 897–907. <https://doi.org/10.1038/s41893-023-01105-9>.
- Rockström, Johan, and Katherine Richardson. 2023. **'William Steffen (1947–2023)'**. *Science* 380 (6642): 245–245. <https://doi.org/10.1126/science.adh9882>.
- Schlösser, Peter, Johan Rockström, Clea Edwards, Paula Mirazo, Adrian Heilemann, Niklas H. Kitzmann, and Siri L. Krobjinski. 2023. **'Accelerating Transformations for a Just, Sustainable Future: 10 "Must Haves"'**. *Global Sustainability* 6 (September):e17. <https://doi.org/10.1017/sus.2023.14>.
- Stewart-Koster, Ben, Stuart E. Bunn, Pamela Green, Christopher Ndehedehe, Lauren S. Andersen, David I. Armstrong McKay, Xuemei Bai, et al. 2023. **'Living within the Safe and Just Earth System Boundaries for Blue Water'**. *Nature Sustainability*, November, 1–11. <https://doi.org/10.1038/s41893-023-01247-w>.
- Sureth, Michael, Matthias Kalkuhl, Ottmar Edenhofer, and Johan Rockström. 2023. **'A Welfare Economic Approach to Planetary Boundaries'**: *Jahrbücher Für Nationalökonomie Und Statistik*, March. <https://doi.org/10.1515/jbnst-2022-0022>.
- The EAT–Lancet 2.0 Commissioners and contributing authors. 2023. **'EAT–Lancet Commission 2.0: Securing a Just Transition to Healthy, Environmentally Sustainable Diets for All'**. *The Lancet* 402 (10399): 352–54. [https://doi.org/10.1016/S0140-6736\(23\)01290-4](https://doi.org/10.1016/S0140-6736(23)01290-4).
- Wunderling, Nico, Ricarda Winkelmann, Johan Rockström, Sina Loriani, David I. Armstrong McKay, Paul D. L. Ritchie, Boris Sakschewski, and Jonathan F. Donges. 2023. **'Global Warming**

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Future Earth, The Earth League, and WCRP. 2023. **'10 New Insights in Climate Science 2023/2024'**. Stockholm: Future Earth, The Earth League, World Climate Research Programme. <https://doi.org/10.5281/ZENODO.10034364>.

2022

Peer-reviewed journals

Armstrong McKay, David I., Arie Staal, Jesse F. Abrams, Ricarda Winkelmann, Boris Sakschewski, Sina Loriani, Ingo Fetzer, Sarah E. Cornell, Johan Rockström, and Timothy M. Lenton. 2022. **'Exceeding 1.5°C Global Warming Could Trigger Multiple Climate Tipping Points'**. *Science* 377 (6611). <https://doi.org/10.1126/science.abn7950>.

Bai, Xuemei, Anders Bjørn, Şiir Kılıç, Oscar Sabag Muñoz, Gail Whiteman, Holger Hoff, Lauren Seaby Andersen, and Johan Rockström. 2022. **'How to Stop Cities and Companies Causing Planetary Harm'**. *Nature* 609 (7927): 463–66. <https://doi.org/10.1038/d41586-022-02894-3>.

Kemp, Luke, Chi Xu, Joanna Depledge, Kristie L. Ebi, Goodwin Gibbins, Timothy A. Kohler, Johan Rockström, et al. 2022. **'Climate Endgame: Exploring Catastrophic Climate Change Scenarios'**. *Proceedings of the National Academy of Sciences* 119 (34): e2108146119. <https://doi.org/10.1073/pnas.2108146119>.

Martin, Maria A., Emmanuel A. Boakye, Emily Boyd, Wendy Broadgate, Mercedes Bustamante, Josep G. Canadell, Edward R. Carr, et al. 2022. **'Ten New Insights in Climate Science 2022'**. *Global Sustainability* 5 (November):e20. <https://doi.org/10.1017/sus.2022.17>.

Noon, Monica L., Allie Goldstein, Juan Carlos Ledezma, Patrick R. Roehrdanz, Susan C. Cook-Patton, Seth A. Spawn-Lee, Timothy Maxwell Wright, et al. 2022. **'Mapping the Irrecoverable Carbon in Earth's Ecosystems'**. *Nature Sustainability* 5 (1): 37–46. <https://doi.org/10.1038/s41893-021-00803-6>.

Österblom, Henrik, Carl Folke, Juan Rocha, Jan Bebbington, Robert Blasiak, Jean-Baptiste Jouffray, Elizabeth R. Selig, et al. 2022. **'Scientific Mobilization of Keystone Actors for Biosphere Stewardship'**. *Scientific Reports* 12 (1): 3802. <https://doi.org/10.1038/s41598-022-07023-8>.

Rockström, Johan. 2022. **'Speeding up State-of-the-Art Assessments on Global Sustainability: Introducing the Cambridge Sustainability Commissions'**. *Global Sustainability* 5 (March):e2. <https://doi.org/10.1017/sus.2022.1>.

Van Vuuren, Detlef P., Caroline Zimm, Sebastian Busch, Elmar Kriegler, Julia Leininger, Dirk Messner, Nebojsa Nakicenovic, et al. 2022. **'Defining a Sustainable Development Target Space for 2030 and 2050'**. *One Earth* 5 (2): 142–56. <https://doi.org/10.1016/j.oneear.2022.01.003>.

Wang-Erlandsson, Lan, Arne Tobian, Ruud J. van der Ent, Ingo Fetzer, Sofie te Wierik, Miina Porkka, Arie Staal, et al. 2022. 'A Planetary Boundary for Green Water'. *Nature Reviews Earth & Environment* 3 (6): 380–92. <https://doi.org/10.1038/s43017-022-00287-8>.

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Dixon-Decleve, Sandrine. 2022. *Earth for All: A Survival Guide for Humanity*. 1st ed. Gabriola Island: New Society Publishers, Limited.

Future Earth, The Earth League, and WCRP. 2022. '10 New Insights in Climate Science 2022'. Stockholm: Future Earth, The Earth League, World Climate Research Programme. <https://doi.org/10.5281/ZENODO.7228925>.

Homer-Dixon, Thomas, Ortwin Renn, Johan Rockström, Jonathan F. Donges, and Scott Janzwood. 2022. 'A Call for An International Research Program on the Risk of a Global Polycrisis'. *Cascade Institute*, July. <https://doi.org/10.2139/ssrn.4058592>.

Rockström, Johan. 2022. 'Tipping Points and Feedback Loops'. In *The Climate Book*, by Greta Thunberg, 32–40. Allen Lane.

2021

Peer-reviewed journals

Collste, D., Cornell, S., Randers, J., Rockström, J., & Stoknes, P. (2021). **Human well-being in the Anthropocene: Limits to growth**. *Global Sustainability*, 4, E30. doi:10.1017/sus.2021.26

Martin, M.A., Sendra, O.A., Bastos, A., Bauer, N., Bertram, C., Blenckner, T., Bowen, K., Brando, P.M., Rudolph, T.B., Büchs, M., Bustamante, M., Chen, D., Cleugh, H., Dasgupta, P., Denton, F., Donges, J. F., Donkor, F.K., Duan, H., Duarte, C. M., Ebi, K.L., Edwards, C.M., Engel, A., Fisher, E., Fuss, S., Gaertner, J., Gettelman, A., Girardin, C.A.J., Golledge, N.R., Green, J.F., Grose, M.R., Hashizume, M., Hebden, S., Hepach, H., Hirota, M., Hsu, H.-H., Kojima, S., Lele, S., Lorek, S., Lotzke, H.K., Matthews, H.D., McCauley, D., Mebratu, D., Mengis, N., Nolan, R.H., Phil, E., Rahmstorf, S., Redman, A., Reid, C.E., Rockström, J., Rogelj, J., Saunios, M., Sayer, L., Schlosser, P., Sioen, G.B., Spangenberg, J.H., Stammer, D., Sterner, T.N.S., Stevens, N., Thonicke, K., Tian, H., Winkelmann, R., Woodcock, J. (2021). **Ten new insights in climate science 2021 – a horizon scan**. *Global Sustainability*, 1–39. | DOI: <https://doi.org/10.1017/sus.2021.25>

Rockström, Johan ; Beringer, Tim; Hole, David ; Griscom, Bronson ; Mascia, Michael B. ; Folke, Carl; Creutzig; Felix; (2021). **Opinion: We need biosphere stewardship that protects carbon sinks and builds resilience**. PNAS. DOI: <https://doi.org/10.1073/pnas.2115218118>

Warszawski, L., Kriegler, E., Lenton, T.M., Gaffney, O., Jacob, D., Klingensfeld, D., Koide, R., Manez Costa, M., Messner, D., Nakicenovic, N., Schellnhuber, H.J., Schlosser, P., Takeuchi, K., van der Leeuw, S., Whiteman, G., Rockström J. (2021) **All options, not silver bullets, needed to limit global warming to 1.5°C: a scenario appraisal.** Environmental Research Letters | DOI: 10.1088/1748-9326/abfeec

Rockström, J., Gupta, J., Lenton, T. M., Qin, D., Lade, S. J., Abrams, J. F., Jacobson, L., Rocha, J.C., Zimm, C., Bai, X., Bala, G., Bringezu, S., Broadgate, W., Bunn, S.E., DeClerck, F., Ebi, K.L., Gong, P., Gordon, C., Kanie, N., Liverman, D., Nakicenovic, N., Obura, D., Ramanathan, V., Verburg, P.H., van Vuuren, D.P., Winkelmann, R.. (2021) **Identifying a safe and just corridor for people and the planet.** Earth's Future, 9. | 10.1029/2020EF001866

Porkka, M., Wang-Erlandsson, L., Destouni, G., Ekman, A.M.L., Rockström, J., Gordon, L.J. (2021) Is wetter better? **Exploring agriculturally-relevant rainfall characteristics over four decades in the Sahel.** Environ. Res. Lett. 16 035002 | DOI: 10.1088/1748-9326/abdd57

Herrero, M., Thornton, P.K., Mason-D'Croz, D., Palmer, J., Bodirsky, B.L., Pradhan, P., Barrett, C.B., Benton, T.G., Hall, A., Pikaar, I., Bogard, J.R., Bonnett, G.D., Bryan, B.A., Campbell, B.M., Christensen, S., Clark, M., Fanzo, J., Godde, C.M., Jarvis, A., Loboguerrero, A.M., Mathys, A., McIntyre, C.L., Naylor, R.L., Nelson, R., Obersteiner, M., Parodi, A., Popp, A., Ricketts, K., Smith, P., Valin, H., Vermeulen, S.J., Vervoort, J., van Wijk, M., van Zanten, H.H.E, West, P.C., Wood, S.A., Rockström, J. (2021) **Articulating the effect of food systems innovation on the Sustainable Development Goals,** The Lancet Planetary Health, Volume 5, Issue 1 | DOI: 10.1016/S2542-5196(20)30277-1.

Armstrong McKay, D. I., Cornell, S. E., Richardson, K., Rockström, J. (2021). **Resolving ecological feedbacks on the ocean carbon sink in Earth system models.** Earth System Dynamics, 12, 3, 797-818. <https://doi.org/10.5194/esd-12-797-2021>

Wang-erlandsson, L., van der Ent, R., Staal, A., Porkka, M., Tobian, A., te Wierik, S., Fetzer, I., Singh, C., Jaramillo, F., Greve, P., Gerten, D., Keys, P., Dahlmann, H., Gleeson, T., Steffen, W., Cornell, S., Rockström, J. (2021) **Towards a green water planetary boundary.** EGU21-13583

Folke, C., Polasky, S., Rockström, J. Galaz, V., Westley, F., Lamont, M., Scheffer, M., Österblom, H., Carpenter, S.R., Chapin, F.S., Seto, K.C., Weber, E.U., Crona, B.I., Daily, G.C., Dasgupta, P., Gaffney, O., Gordon, L.J., Hoff, H., Levin, S.A., Lubchenco, J., Steffen, W., Walker, B.H. (2021) **Our future in the Anthropocene biosphere.** Ambio 50, 834–869. | DOI: 10.1007/s13280-021-01544-8

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