

# **Academic Articles and Reports**

# **Description**

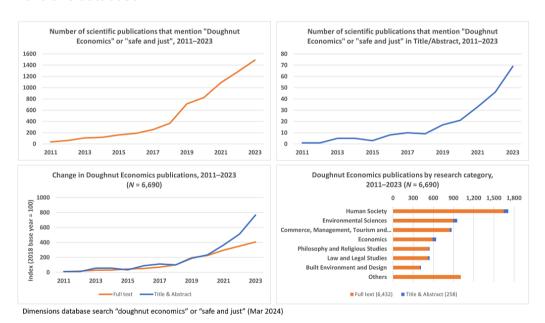
A living list of academic research and analysis that engages with the core concepts of Doughnut Economics

Version 1.6 (March 2024)

#### Overview

Welcome to the DEAL Team's curated list of academic articles and research reports that engage with the core concepts of Doughnut Economics.

Academic efforts to deepen the concepts and applications of Doughnut Economics are accelerating rapidly. Since Kate Raworth's discussion paper 'A safe and just space for humanity' was published by Oxfam in 2012, more than 6,500 academic articles have been published that mention the terms "Doughnut Economics" (or "safe and just"), according to the Dimensions database.



Nearly 1,500 of these studies were published in 2023 alone, which is a 4-fold increase since 2018. Drilling deeper, publications that mention Doughnut Economics in their titles and/or abstracts – which suggests core research engagement rather than a passing mention –have been increasing even more rapidly: nearly 70 publications in 2023, or an 8-fold increase since 2018.



The list below compiles a selection of these academic articles, organised by year of publication. It will be updated periodically but it is by no means exhaustive.

Please do let us know if you find an additional source that you think we should include by sending a message via the <u>contact page</u> and select 'Research & Data Analysis' from the category options.

- Bai, X et al. (2024). <u>Translating Earth System Boundaries for Cities and Businesses</u>. *Nature Sustainability* (in press): 1–12.
- Chancel, L et al. (2024). <u>The Potential of Wealth Taxation to Address the Triple Climate Inequality Crisis</u>. *Nature Climate Change* 14(1): 5–7.
- Demastus, J and Landrum, NE (2024). <u>Organizational Sustainability Schemes Align</u> with Weak Sustainability. Business Strategy and the Environment 33(2): 707–25.
- Durand, C et al. (2024). <u>Planning beyond Growth: The Case for Economic Democracy within Ecological Limits</u>. *Journal of Cleaner Production* 437: 140351.
- Galbraith, ED et al. (2024). <u>High Life Satisfaction Reported among Small-Scale Societies with Low Incomes</u>. *Proceedings of the National Academy of Sciences* 121(7): e2311703121.
- Maron, M et al. (2024). "Nature Positive" Must Incorporate, Not Undermine, the <u>Mitigation Hierarchy</u>. Nature Ecology & Evolution 8(1): 14–17.
- Nieuwland, S (2024). <u>Urban Tourism Transitions: Doughnut Economics Applied to Sustainable Tourism Development</u>. *Tourism Geographies* 26(2): 255–73.
- Ortega, M et al. (2024). <u>Can a "Doughnut" Economic Framework Be Useful to Monitor the Blue Economy Success? A Fisheries Example</u>. *Ecology and Society* 29(1).
- Rockström, J et al. (2024). <u>The Planetary Commons: A New Paradigm for Safeguarding Earth-Regulating Systems in the Anthropocene</u>. *Proceedings of the National Academy of Sciences* 121(5): e2301531121.
- Savini, F (2024). <u>Post-Growth, Degrowth, the Doughnut, and Circular Economy: A</u>
   Short Guide for Policymakers. Journal of City Climate Policy and Economy 2(2): 113–23.
- Schengel, L and Goehlich, V (2024). <u>Adaptation of the Doughnut Economics Model to a Rural Community in Germany</u>. In *Business for Sustainability, Volume II: Contextual Evolution and Elucidation* (Eds: Vrontis, D et al.) 261–84. Cham: Springer International Publishing.
- Schlesier, H et al. (2024). <u>Measuring the Doughnut: A Good Life for All Is Possible</u> within Planetary Boundaries. *Journal of Cleaner Production* 448: 141447.
- Shapiro, SJ (2024). <u>Towards a Sharper "Golden Anniversary" Focus for Macromarketing</u>? *Journal of Macromarketing* (in press).
- Slameršak, A et al. (2024). <u>Post-Growth: A Viable Path to Limiting Global Warming to</u> 1.5°C. One Earth 7(1): 44-58.
- Stewart-Koster, B et al. (2024) <u>Living within the Safe and Just Earth System</u>
  <u>Boundaries for Blue Water</u>. *Nature Sustainability* 7(1): 53–63.
- UNEP (2024). <u>Global Resources Outlook 2024: Bend the Trend: Pathways to a Liveable Planet as Resource Use Spikes</u>. Nairobi: UNEP International Resource Panel.



• Willberg, E et al. (2024). <u>Measuring Just Accessibility within Planetary Boundaries</u>. *Transport Reviews* 44(1): 140–66.

- Aleissa, YM and Bakshi, BR (2023). <u>Possible but Rare: Safe and Just Satisfaction of National Human Needs in Terms of Ecosystem Services</u>. *One Earth* 6(4): 409–18.
- Barca S et al. (2023). <u>Caring communities for radical change: What can feminist political ecology bring to degrowth?</u> In *Contours of Feminist Political Ecology* (Eds: Harcourt, W et al.) Springer International Publishing: 177-206.
- Bärnthaler, R and Gough, I (2023). <u>Provisioning for Sufficiency: Envisaging Production</u>
   <u>Corridors</u>. Sustainability: Science, Practice and Policy 19(1): 2218690.
- Bruckner, B et al. (2023). <u>Ecological unequal exchanges driven by EU consumption</u>.
   Nature Sustainability (in press).
- Büchs, M et al. (2023). <u>Emissions Savings from Equitable Energy Demand Reduction</u>.
   Nature Energy 8(7): 758-69.
- Cash-Gibson, L et al. (2023). <u>Towards a systemic understanding of sustainable</u> wellbeing for all in cities: A conceptual framework. *Cities* 133: 104143.
- Crisp, R et al. (2023). <u>"Beyond GDP" in Cities: Assessing Alternative Approaches to Urban Economic Development</u>. *Urban Studies*, 00420980231187884.
- Deivanayagam, TA and Osborne, RE (2023). <u>Breaking free from tunnel vision for climate change and health</u>. *PLOS Global Public Health* 3(3): e0001684.
- Desmoitier, N et al. (2023). <u>Methods for Assessing Social Impacts of Policies in</u>
   <u>Relation to Absolute Boundaries</u>. *Environmental Impact Assessment Review* 101:
   107098.
- Digitalization for Sustainability (2023). <u>Digital Reset: Redirecting technologies for the deep sustainability transformation</u>, Munich, oekom.
- Dillman, KJ et al. (2023). <u>Ecological Intensity of Social Provisioning in Mobility</u>
   <u>Systems: A Global Analysis</u>. Energy Research & Social Science 104: 103242.
- Domazet, M et al. (2023). <u>Doughnuts for Strategies: A Tool for an Emerging</u>
   <u>Sustainable Welfare Paradigm</u>. European Journal of Social Security 25(4): 367–87.
- Doran, P (2023). Zen and the Art of Doughnut Economics: When Limits Are Strangely Liberating. International Journal of Transpersonal Studies (in press).
- Drury, M et al. (2023). <u>Embedding Animals within a Definition of Sustainability</u>. Sustainability Science 18(4): 1925–38.
- Durand C et al. (2023). <u>Planning Beyond Growth: The case for economic democracy within limits</u>. *University of Geneva Political Economy Working Paper Series* 1/2023.
- Fanning, AL and Hickel, J (2023). <u>Compensation for Atmospheric Appropriation</u>.
   Nature Sustainability 6(9): 1077-1086.
- Ghauri, S (2023). <u>Swedish Multinationals and Sustainable Innovations for Transformation: The Doughnut Model\*</u>. *International Business and Management* 37:129-52.
- Gifford, L et al. (2023). <u>Governing for a Safe and Just Future with Science-Based Targets: Opportunities and Limitations</u>. *Climate and Development* (in press).



- Gough, I (2023). <u>Sufficiency as a Value Standard: From Preferences to Needs</u>. Ethics, Policy & Environment (in press).
- Gupta, J et al. (2023). <u>Earth system justice needed to identify and live within Earth system boundaries</u>. *Nature Sustainability* 6(6): 630–638.
- Haberl, H et al. (2023). <u>Built Structures Influence Patterns of Energy Demand and CO2 Emissions across Countries</u>. *Nature Communications* 14(1): 3898.
- Han, D et al. (2023). <u>Assessing Coupling Interactions in a Safe and Just Operating Space for Regional Sustainability</u>. *Nature Communications* 14(1): 1369.
- Hausdorf, M and Timm, JM (2023). <u>Business Research for Sustainable Development:</u>
   How Does Sustainable Business Model Research Reflect Doughnut Economics?
   Business Strategy and the Environment 32(6): 3398–3416.
- Heide, M et al. (2023). <u>Reflecting the Importance of Human Needs Fulfilment in Absolute Sustainability Assessments: Development of a Sharing Principle</u>. *Journal of Industrial Ecology* 27(4): 1151–64.
- Hjelmskog, A et al. (2023). <u>Using the Doughnut Economics Framework to Structure</u> <u>Whole-System Thinking in Socioecological Wellbeing with Multidisciplinary</u> <u>Stakeholders: An Applied Case Study in Glasgow, Scotland</u>. *The Lancet* 402: S15.
- Humphreys, S (2023). <u>How to Define Unjust Planetary Change</u>. *Nature* 619(7968): 35–36.
- Ivanova, D and Büchs, M (2023). <u>Barriers and Enablers around Radical Sharing</u>. *The Lancet Planetary Health* 7(9): e784–92.
- Khalfan, A et al. (2023). Climate Equality: A Planet for the 99%. Oxfam International.
- Khmara, Y and Kronenberg, J (2023). On the Road to Urban Degrowth Economics?
   Learning from the Experience of C40 Cities, Doughnut Cities, Transition Towns, and Shrinking Cities. Cities 136: 104259.
- King, L et al. (2023). <u>Shades of Green Growth Scepticism among Climate Policy</u> <u>Researchers</u>. *Nature Sustainability* 6(11): 1316–20.
- Koskimäki, T (2023). <u>Targeting Socioeconomic Transformations to Achieve Global</u> <u>Sustainability</u>. *Ecological Economics* 211: 107871.
- Lage, J et al. (2023). <u>Citizens Call for Sufficiency and Regulation A Comparison of European Citizen Assemblies and National Energy and Climate Plans</u>. <u>Energy Research & Social Science</u> 104: 103254.
- Lenton, T et al. (2023). <u>The Global Tipping Points Report 2023</u>. Exeter: University of Exeter.
- McCartney, G et al. (2023). <u>Culture as an Objective for and a Means of Achieving a</u>
   <u>Wellbeing Economy</u>. *Humanities and Social Sciences Communications* 10(1): 1-5.
- Obura, DO et al. (2023). <u>Achieving a nature- and people-positive future</u>. *One Earth* 6(2):105-117.
- Olk, C et al. (2023). How to Pay for Saving the World: Modern Monetary Theory for a <u>Degrowth Transition</u>. Ecological Economics 214: 107968.
- O'Neill, DW (2023) <u>Obituary: Herman E. Daly (1938-2022)</u>. *Nature Sustainability* 6(2): 118-119.
- Pascual, U et al. (2023). <u>Diverse Values of Nature for Sustainability</u>. Nature 620(7975): 813-23.



- Rammelt, CF et al. (2023). <u>Impacts of meeting minimum access on critical earth systems amidst the Great Inequality</u>. *Nature Sustainability* 6(2): 212-221.
- Rockström, J et al. (2023). <u>Safe and Just Earth System Boundaries</u>. *Nature* 619(7968): 102–11.
- Richardson, K et al. (2023). <u>Earth beyond Six of Nine Planetary Boundaries</u>. *Science Advances* 9(37): eadh2458.
- Sandström, V et al. (2023). <u>Disparate history of transgressing planetary boundaries</u> for nutrients. *Global Environmental Change* 78: 102628.
- Schlosser, P et al. (2023). <u>Accelerating Transformations for a Just, Sustainable</u> Future: 10 "Must Haves". *Global Sustainability* 6: e17.
- Starr, J et al. (2023). <u>Assessing U.S. consumers' carbon footprints reveals outsized impact of the top 1%</u>. *Ecological Economics* 205: 107698.
- Su, Y et al. (2023). Optimizing safe and just operating spaces at sub-watershed scales to guide local environmental management. Journal of Cleaner Production 398: 136530.
- Sultana, F (2023). Whose Growth in Whose Planetary Boundaries? Decolonising Planetary Justice in the Anthropocene. Geo: Geography and Environment 10(2): e00128.
- Tilsted, JP and Bjørn, A (2023). <u>Green Frontrunner or Indebted Culprit? Assessing Denmark's Climate Targets in Light of Fair Contributions under the Paris Agreement</u>. Climatic Change 176(8): 103.
- Tilsted, JP et al. (2023). <u>Corporate Climate Futures in the Making: Why We Need</u>
   <u>Research on the Politics of Science-Based Targets</u>. *Energy Research & Social Science* 103: 103229.
- Tønnessen, M (2023). <u>Wasted GDP in the USA</u>. Humanities and Social Sciences Communications 10(1): 1–14.
- Urai, AE and Kelly, C (2023). <u>Rethinking Academia in a Time of Climate Crisis</u>. *eLife* 12: e84991.
- Vázquez, D et al. (2023). <u>Level of Decoupling between Economic Growth and Environmental Pressure on Earth-System Processes</u>. Sustainable Production and Consumption 43: 217–29.
- Vélez-Henao, JA and Pauliuk, S (2023). <u>Material Requirements of Decent Living Standards</u>. *Environmental Science & Technology* 57(38): 14206–17.
- Vogel, J and Hickel, J (2023). <u>Is Green Growth Happening? An Empirical Analysis of Achieved versus Paris-Compliant CO2-GDP Decoupling in High-Income Countries</u>. The Lancet Planetary Health 7(9): e759-69.
- Warnecke, T (2023). <u>Operationalizing the Doughnut Economy: An Institutional Perspective</u>. *Journal of Economic Issues* 57(2): 643-53.
- WHO Council on the Economics of Health for All (2023). <u>Health For All: Transforming Economies to Deliver What Matters</u>. Final Report of the WHO Council on the Economics of Health For All. Geneva: World Health Organisation.



- Al Shawa, B (2022). <u>An equitable energy allowance for all: Pathways for a below 2 °C-compliant global buildings sector</u>. *Energy Reports* 8: 15377-15398.
- Almroth, BC et al. (2022). <u>Understanding and Addressing the Planetary Crisis of Chemicals and Plastics</u>. *One Earth* 5(10): 1070-74.
- Armstrong McKay, D et al. (2022). 'Exceeding 1.5°C global warming could trigger multiple climate tipping points'. Science 377(6611): eabn7950.
- Benyus, J et al. (2022). <u>Ecological Performance Standards for Regenerative Urban</u>
   <u>Design</u>. Sustainability Science 17(6): 2631-41.
- Berrill, P et al. (2022). <u>Decarbonization pathways for the residential sector in the United States</u>. *Nature Climate Change* 12(8): 712-718.
- Bodirsky, BJ et al. (2022). 'Integrating degrowth and efficiency perspectives enables an emission-neutral food system by 2100'. Nature Food 3(5): 341-348.
- Breyer, C et al. (2022). 'On the History and Future of 100% Renewable Energy Systems Research'. *IEEE Access* 10: 78176-78218.
- Bruckner, B et al. (2022). 'Impacts of poverty alleviation on national and global carbon emissions'. Nature Sustainability 5(4): 311-320.
- Chancel, L (2022). <u>Global carbon inequality over 1990-2019</u>. *Nature Sustainability* 5(11): 931-938.
- Custodio, HM et al. (2022). '<u>A review of socioeconomic indicators of sustainability</u>
   and wellbeing building on the social foundations framework'. Ecological Economics
   (in press).
- Dooley, K et al. (2022). 'Carbon removals from nature restoration are no substitute for steep emission reductions'. One Earth 5(7): 812-824.
- Fanning, AL et al. (2022). '<u>The social shortfall and ecological overshoot of nations</u>'. *Nature Sustainability* 5(1): 26-36.
- Feretto, A et al. (2022). 'Planetary Boundaries and the Doughnut frameworks: A review of their local operability'. Anthropocene 39: 100347.
- Gomez-Baggethun, E (2022). 'Rethinking work for a just and sustainable future'.
   Ecological Economics 200: 107506.
- Hartman, S and Hessel Heslinga, J (2022). '<u>The Doughnut Destination: applying Kate Raworth's Doughnut Economy perspective to rethink tourism destination management</u>'. *Journal of Tourism Futures* (in press): 1-6.
- Hickel, J et al. (2022). 'National responsibility for ecological breakdown: a fair-shares
   assessment of resource use, 1970–2017'. The Lancet Planetary Health 6(4): e342 e349.
- Hickel, J and Slamersak, A (2022). 'Existing climate mitigation scenarios perpetuate colonial inequalities'. The Lancet Planetary Health 6(7): e628-e631.
- Jungell-Michelsson, J and Heikkurinen, P (2022). 'Sufficiency: A systematic literature review'. Ecological Economics 195:107380.
- Khan, J et al. (2022). <u>Ecological ceiling and social floor: public support for eco-social policies in Sweden</u>. SustainabiKvangraven, IH and Kesar, S (2022). <u>Standing in the way of rigor? Economics' meeting with the decolonization agenda</u>. Review of International Political Economy: 1-26.



- Krauss, J et al. (2022). 'Mapping Sustainable Development Goals 8, 9,
   12, 13 and 15 through a decolonial lens: falling short of 'transforming our world'.
   Sustainability Science 17: 1855-1872.
- Masaki, K (2022). 'Exploring the 'Partial Connections' between Growth and Degrowth Debates: Bhutan's Policy of Gross National Happiness'. Journal of Interdisciplinary Economics 34(1): 86-103.
- McGreevy, SR et al. (2022). 'Sustainable agrifood systems for a post-growth world'.
   Nature Sustainability (in press): 1-7
- Melles, G (2022). <u>A Sustainable Circular Economy for Australia: Bringing the Circular Economy into the Doughnut</u>. In *Handbook of Sustainability Science in the Future: Policies, Technologies and Education by 2050* (Eds: Leal Filho, W et al.) 1–23. Cham: Springer International Publishing.
- Millward-Hopkins, J (2022). 'Inequality can double the energy required to secure universal decent living'. Nature Communications 13:5028.
- Oliver, TH et al. (2022). <u>A Safe and Just Operating Space for Human Identity: A Systems Perspective</u>. The Lancet Planetary Health 6(11): e919-27.
- Papanikitas, A (2022). <u>Does British General Practice Need a Helping of Doughnut Economics?</u> The British Journal of General Practice 72(723): 482.
- Paulson, L and Büchs, M (2022). 'Public acceptance of post-growth: Factors and implications for post-growth strategy'. Futures 143: 103020.
- Preluca, A et al. (2022). 'Sustainability of Worker Co-Operatives'. Sustainability 14(18): 11542.
- Santarius, T et al. (2022). '<u>Digital sufficiency: conceptual considerations for ICTs on a finite planet</u>'. *Annals of Telecommunications* (in press): 1-19.
- Schulte-Uebbing, LF et al. (2022). <u>From planetary to regional boundaries for agricultural nitrogen pollution</u>. *Nature* 610(7932): 507-512.
- Sullivan, D and Hickel, J (2022). '<u>Capitalism and extreme poverty: A global analysis of real wages, human height, and mortality since the long 16th century</u>'. World Development 161:106026.
- Turner, R and Wills, J (2022). '<u>Downscaling doughnut economics for sustainability governance</u>'. Current Opinion in Environmental Sustainability 56: 101180.
- van Vuuren, DP et al. (2022). '<u>Defining a sustainable development target space for 2030 and 2050</u>'. *One Earth* 5(2): 142-156.
- Virág, D et al. (2022). 'How much infrastructure is required to support decent mobility for all? An exploratory assessment'. Ecological Economics 200: 107511.
- Wahlund, M and Hansen, T (2022). 'Exploring alternative economic pathways: a
   comparison of foundational economy and Doughnut economics'. Sustainability:
   Science, Practice and Policy 18(1): 171-186.
- Wang-Erlandsson, L et al. (2022). 'A planetary boundary for green water'. Nature Reviews Earth & Environment 3(6): 380-392.
- zu Ermgassen, SOSE et al. (2022). 'A home for all within planetary boundaries:
   Pathways for meeting England's housing needs without transgressing national climate and biodiversity goals'. Ecological Economics 201: 107562.



- Allen, C et al. (2021). 'Modelling national transformations to achieve the SDGs within planetary boundaries in small island developing states'. Global Sustainability 4, E15.
- Asquith, M and Speck, S (2021). '<u>Reflecting on green growth: Creating a resilient economy within environmental limits</u>'. European Environment Agency.
- Barth, J et al. (2021). 'A compass towards 2030: navigating the EU's economy beyond GDP by applying the Doughnut Economics framework'. ZOE Institute for Future-fit Economies.
- Benites, HS and Osmond, P (2021). 'Bioconnections as Enablers of Regenerative Circularity for the Built Environment'. Urban Planning 6(4): 25-39.
- Bertin, E et al. (2021). '<u>Les limites planétaires, un socle pour repenser nos modèles</u> de société'. Centre Ressource du Développement Durable.
- Bjørn, A et al. (2021). 'From the Paris Agreement to corporate climate commitments:
   evaluation of seven methods for setting `science-based' emission targets'.

   Environmental Research Letters 16(5): 054019.
- Büchs, M (2021). 'Sustainable welfare: How do universal basic income and universal basic services compare?'. Ecological Economics 189: 107152.
- Community for Understanding Scale Up (2021). <u>Enhancing social norms programs: An invitation to rethink "scaling up" from a feminist perspective</u>. Community for Understanding Scale Up.
- Chen, X et al. (2021). 'Revisiting the application and methodological extensions of the planetary boundaries for sustainability assessment'. Science of the Total Environment 788: 147886.
- Corlet Walker, C et al. (2021). 'Welfare systems without economic growth: A review of the challenges and next steps for the field'. Ecological Economics 186: 107066.
- Dengler, C and Lang, M (2021). '<u>Commoning Care: Feminist Degrowth Visions for a Socio-Ecological Transformation</u>'. Feminist Economics 28(1): 1-28.
- Dillman, KJ et al. (2021). 'A safe and just space for urban mobility: a framework for sector-based sustainable consumption corridor development'. Global Sustainability 4: E28.
- Drees, L et al. (2021). 'Necessary or oversimplification? On the strengths and limitations of current assessments to integrate social dimensions in planetary boundaries'. Ecological Indicators 129: 108009.
- El Wali, M et al. (2021). 'Circular economy for phosphorus supply chain and its impact on social sustainable development goals'. Science of the Total Environment 777: 146060.
- Fang, X et al. (2021). 'Assessing human-environment system sustainability based on Regional Safe and Just Operating Space: The case of the Inner Mongolia Grassland'. Environmental Science and Policy 116: 276–286.
- Folke, C et al. (2021). 'Our future in the Anthropocene biosphere'. Ambio 50, no.4: 834–869.
- Gadd, E (2021). <u>Mis-Measuring Our Universities: Why Global University Rankings</u>
   <u>Don't Add Up</u>. Frontiers in Research Metrics and Analytics 6.
- Goodwin, K et al. (2021). 'Benchmarking urban performance against absolute measures of sustainability A review'. Journal of Cleaner Production 314: 128020.



- Hickel, J et al. (2021). '<u>Urgent need for post-growth climate mitigation scenarios</u>'. *Nature Energy* 6(8): 766-768.
- Hjalsted, AW et al. (2021). 'Sharing the safe operating space: Exploring ethical
   allocation principles to operationalize the planetary boundaries and assess absolute
   sustainability at individual and industrial sector levels'. Journal of Industrial Ecology
   25(1): 6-19.
- Kikstra, JS et al. (2021). '<u>Decent living gaps and energy needs around the world</u>'. Environmental Research Letters 16(9): 095006.
- Li, M et al. (2021). '<u>The role of planetary boundaries in assessing absolute</u> environmental sustainability across scales'. Environment International 152: 106475.
- Lotfi, M et al. (2021). 'Supply Chains' Failure in Workers' Rights with Regards to the SDG Compass: A Doughnut Theory Perspective'. Sustainability 13(22): 12526.
- Rajamani, L et al. (2021). <u>National "Fair Shares" in Reducing Greenhouse Gas</u>
   <u>Emissions within the Principled Framework of International Environmental Law</u>.

   Climate Policy 21(8): 983-1004.
- Rockström, J et al. (2021). 'Identifying a safe and just corridor for people and the planet'. Earth's Future 9, no.4: e2020EF001866.
- Sennholz-Weinhardt, B et al. (2021). '<u>Towards a wellbeing economy that serves</u>
   <u>people and nature</u>' Oxfam Germany and European Environmental Bureau (also
   available in <u>German</u>).
- Shilling, HJ et al. (2021). 'Modern slavery footprints in global supply chains'. Journal of Industrial Ecology 25(6): 1518-1528.
- Ssemugabo, C et al. (2021). '<u>Health risks in our environment: urban slum youth'</u> perspectives using photovoice in Kampala, Uganda'. Sustainability 13, no. 1: 248.
- Stoddard, I et al. (2021). '<u>Three decades of climate mitigation: Why haven't we bent the global emissions curve?</u>' Annual Review of Environment and Resources 46(1): 653-689.
- Sultana, F (2021). '<u>Critical climate justice</u>'. The Geographical Journal 188(1): 118–124.
- Turner, R et al. (2021). 'Sustainable Development in Cornwall: Local Perspectives on Challenges and Opportunities'. Environment and Sustainability Institute, University of Exeter.
- Vogel, J et al. (2021). 'Socio-economic conditions for satisfying human needs at low energy use: An international analysis of social provisioning'. Global Environmental Change 69: 102287.
- Wackernagel, M et al. (2021). '<u>The importance of resource security for poverty eradication</u>'. Nature Sustainability 4(8): 731-738.
- Wiedmann, T and Allen, C (2021). 'City footprints and SDGs provide untapped potential for assessing city sustainability'. Nature Communications 12(1): 3758

#### 2020

Bell, SE et al. (2020). <u>Towards feminist energy systems: Why adding women and solar panels is not enough</u>. *Energy Research & Social Science* 68: 101557.



- Bjørn, A et al. (2020). 'Review of life-cycle based methods for absolute environmental sustainability assessment and their applications'. Environmental Research Letters 15(8): 083001.
- Brand-Correa, L et al. (2020). '<u>Understanding (and tackling) need satisfier escalation</u>'.
   Sustainability: Science, Practice and Policy 16, no. 1: 309–325.
- Büchs, M et al. (2020). 'Wellbeing Economics for the COVID-19 Recovery'. Wellbeing Economies Alliance (WEAII) Briefing Papers.
- D'Alessandro S et al. (2020). '<u>Feasible alternatives to green growth</u>'. *Nature Sustainability* 3, no. 4: 329–335.
- De Neve, J and Sachs, J (2020). <u>The SDGs and human well-being: A global analysis of synergies, trade-offs, and regional differences</u>. *Scientific Reports* 10(1): 15113.
- Downing, A et al. (2020). '<u>Learning from generations of sustainability concepts</u>' Environmental Research Letters 15: 083002.
- Ensor, J and Hoddy, E (2020). 'Securing the social foundation: A rights-based approach to planetary boundaries'. Earth System Governance (in press).
- Fanning, AL et al. (2020). 'Provisioning Systems for a Good Life within Planetary Boundaries'. Global Environmental Change 64: 102135.
- Gough, I (2020). '<u>Defining floors and ceilings: the contribution of human needs theory</u>'. Sustainability: Science, Practice and Policy 16, no. 1: 208–219.
- Hickel, J (2020). 'Quantifying national responsibility for climate breakdown: an equality-based attribution approach for carbon dioxide emissions in excess of the planetary boundary'. Lancet Planetary Health 4, no. 9: e399–e404.
- Hickel, J, and Kallis, G (2020). '<u>Is Green Growth Possible?</u>' New Political Economy 25, no. 4: 469–86.
- Lieberknecht, L (2020). '<u>Ecosystem-Based Integrated Ocean Management: A</u>
  <u>Framework for Sustainable Ocean Economy Development</u>'. UNEP-GRID Arendal.
- Linnanen, L et al. (2020). '<u>The sufficiency perspective in climate policy: how to recompose consumption</u>'. Finnish Climate Change Panel.
- Mair, S (2020). 'Neoliberal economics, planetary health, and the COVID-19 pandemic: a Marxist ecofeminist analysis'. The Lancet Planetary Health 4, no. 12: e588–596.
- Millward-Hopkins, J et al. (2020). <u>Providing decent living with minimum energy: A global scenario</u>. Global Environmental Change 65: 102168.
- Olsson, D (2020). '<u>The Transformative Potential of Resilience Thinking: How It Could Transform Unsustainable Economic Rationalities</u>'. *Alternatives* 45(2): 102-120.
- Roberts, JT et al. (2020). 'Four Agendas for Research and Policy on Emissions Mitigation and Well-Being'. Global Sustainability 3: e3.
- Roy, A, and Pramanick, K (2020). 'Safe and Just Operating Space for India'. In
   Handbook of Environmental Materials Management, 1–32. Springer International
   Publishing.
- Stratford, B and O'Neill, DW (2020). '<u>The UK's Path to a Doughnut-Shaped Recovery</u>'.
   University of Leeds.
- Turner, R et al. (2020). '<u>Towards a Sustainable Cornwall: State of the Doughnut</u>'.
   University of Exeter.
- Wiedmann, T et al. (2020). 'Scientists' Warning on Affluence'. Nature Communications 11(1): 3107.



 Wugt Larsen, F and Lung, T (2020). 'Is Europe Living within the Limits of Our Planet?' European Environment Agency.

#### 2019

- Bourges, B et al. (2019). '<u>La société française face aux limites de la planète</u>'. In
  L'environnement en France 2019, 155-193. Ministère de la Transition Écologique et
  Solidaire, Gouvernement de la République française.
- Capmourteres, V et al. (2019). 'A Complex Systems Framework for the Sustainability Doughnut'. People and Nature 1, no. 4: 497–506.
- Downing, AS et al. (2019). 'Matching Scope, Purpose and Uses of Planetary Boundaries Science'. Environmental Research Letters 14, no. 7: 073005.
- Hickel, J (2019). '<u>Is It Possible to Achieve a Good Life for All within Planetary Boundaries?</u>' Third World Quarterly 40, no. 1: 18–35.
- Jackson, T and Victor, P (2019). '<u>Unraveling the Claims for (and against) Green</u> Growth'. Science 366, no. 6468: 950-51.

#### 2018

- Beaudoin, Y (2018). '<u>Hacking Economics for People and Planet</u>'. Early Warning, Emerging Issues and Futures Foresight Brief 6. United Nations Environment Programme
- Boehnert, J (2018). '<u>Anthropocene Economics and Design: Heterodox Economics for Design Transitions</u>'. She Ji: The Journal of Design, Economics, and Innovation 4, no. 4: 355–74.
- Häyhä, T et al. (2018). 'Operationalizing the Concept of a Safe Operating Space at the
   <u>EU Level First Steps and Explorations</u>'. SRC Technical Report. Stockholm Resilience
   Centre.
- O'Neill, DW et al. (2018). 'A Good Life for All within Planetary Boundaries'. Nature Sustainability 1, no. 2: 88–95.
- Roy, A, and Pramanick, K (2018). 'A comparative study of 'safe and just operating space' for the south and south-east Asian countries'. bioRxiv.
- Steffen, W et al. (2018). '<u>Trajectories of the Earth System in the Anthropocene</u>'. Proceedings of the National Academy of Sciences 115, no. 33: 8252–59.
- Wiedmann, T and Lenzen, M (2018). 'Environmental and Social Footprints of International Trade'. Nature Geoscience 11, no. 5: 314–21.

- Cole, MJ et al. (2017). 'Spatial Variability in Sustainable Development Trajectories in South Africa: Provincial Level Safe and Just Operating Spaces'. Sustainability Science 12, no. 5: 829-48.
- Lamb, WF and Steinberger JK, (2017). 'Human Well-Being and Climate Change Mitigation'. WIREs Climate Change 8, no. 6: e485.
- Raworth, K (2017). 'A Doughnut for the Anthropocene: Humanity's Compass in the 21st Century'. The Lancet Planetary Health 1, no. 2: e48–49.



• Raworth, K (2017). 'Why It's Time for Doughnut Economics'. IPPR Progressive Review 24, no. 3: 216–22.

#### 2016

- Häyhä, T et al. (2016). 'From Planetary Boundaries to National Fair Shares of the Global Safe Operating Space — How Can the Scales Be Bridged?' Global Environmental Change 40: 60-72.
- Hoornweg, D et al. (2016). 'An Urban Approach to Planetary Boundaries'. Ambio 45, no. 5: 567–80.
- Verburg, P et al. (2016). 'Methods and Approaches to Modelling the Anthropocene'.
   Global Environmental Change 39: 328-40.

#### 2015

- Daly, H (2015). 'Economics for a Full World'. Great Transition Initiative.
- Hajer, M et al. (2015). 'Beyond Cockpit-Ism: Four Insights to Enhance the
   <u>Transformative Potential of the Sustainable Development Goals</u>'. Sustainability 7, no.

   2: 1651–60.
- Sayers, M and Trebeck, K (2015). '<u>The UK Doughnut: A Framework for Environmental Sustainability and Social Justice</u>'. Oxfam Policy and Practice, Oxfam.
- Steffen, W et al. (2015). 'Planetary Boundaries: Guiding Human Development on a Changing Planet'. Science 347, no. 6223.
- Steffen, W et al. (2015). '<u>The Trajectory of the Anthropocene: The Great Acceleration</u>'. The Anthropocene Review 2, no. 1: 81–98.
- Turnheim, B et al. (2015). 'Evaluating Sustainability Transitions Pathways: Bridging Analytical Approaches to Address Governance Challenges'. Global Environmental Change 35: 239-53.

## 2014

- Cole, M et al. (2014). 'Tracking Sustainable Development with a National Barometer for South Africa Using a Downscaled "Safe and Just Space" Framework'. Proceedings of the National Academy of Sciences 111, no. 42: E4399-4408.
- Dearing, JA et al. (2014). 'Safe and Just Operating Spaces for Regional Social-Ecological Systems'. Global Environmental Change 28: 227–38.
- Hoekstra, AY and Wiedmann, T (2014). '<u>Humanity's Unsustainable Environmental</u> Footprint'. Science 344, no. 6188: 1114–17.

- Griggs, D et al. (2013). 'Sustainable Development Goals for People and Planet'.
   Nature 495, no. 7441: 305-7.
- Leach, M et al. (2013). 'Between Social and Planetary Boundaries: Navigating
   Pathways in the Safe and Just Space for Humanity'. In World Social Science Report
   2013: Changing Global Environments, 84–89. Paris: UNESCO.



- Nykvist, B et al. (2013). <u>National Environmental Performance on</u>
   <u>Planetary Boundaries: A Study for the Swedish Environmental Protection Agency</u>.
   Stockholm: Swedish Environmental Protection Agency.
- Steffen, W and Stafford Smith, M (2013). 'Planetary Boundaries, Equity and Global Sustainability: Why Wealthy Countries Could Benefit from More Equity'. Current Opinion in Environmental Sustainability 5, no. 3: 403–8.

## 2012 and earlier

- Costanza, R et al. (2012). 'Building a Sustainable and Desirable Economy-in-Society-in-Nature'. New York: United Nations Division for Sustainable Development.
- Meadows, D (1999). '<u>Leverage Points: Places to Intervene in a System</u>'. The Sustainability Institute.
- Raworth, K (2012). '<u>A Safe and Just Space for Humanity</u>'. Oxfam Discussion Papers.
   Oxfam International.
- Rockström, J et al. (2009). '<u>A Safe Operating Space for Humanity</u>'. Nature 461, no. 7263: 472–75.
- Scheffer, M et al. (2012). 'Anticipating Critical Transitions'. Science 338, no. 6105: 344–48.
- Vince, G (2012). 'Living in the Doughnut'. Nature Climate Change 2, no. 4: 225–26.

# **Acknowledgements**

This tool was created by Andrew Fanning, with contributions from Kate Raworth and Kapil Yadav, from DEAL. Photo credit to Jaredd Craig on <u>Unsplash</u>.