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A Critique of the Circular Economy from the Perspective of Sufficiency: Decoupling and Inequality

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Summary: Current growth-oriented efforts to build economies are not on a sustainable and inclusive path: the well-being of the entire population of the planet remains unattainable while planetary boundaries are exceeded. Thus, instead of focusing on economic growth, a more holistic approach to building economies needs to be taken. Here, the concept of sufficiency as an organizing principle that recognizes enoughness and excess is challenging the growth paradigm. This article begins by discussing the circular economy as part of the green growth approach but outside the post-growth agenda. Next, two key criticisms of the circular economy raised by the sufficiency-focused degrowth approach are reviewed: the limits to decoupling and inequality. This article ends with an outlook on how the sufficiency-focused approach has been embedded into policy proposals and organizational activities, and how the circular economy could foster sufficiency-focused economies.

Keywords: sufficiency, circular economy, post-growth agenda

Eine Kritik an der Kreislaufwirtschaft aus der Suffizienzperspektive: Entkopplung und Ungleichheit

Zusammenfassung: Derzeitige wachstumsorientierte Bemühungen zum Aufbau von Volkswirtschaften befinden sich weder auf einem nachhaltigen noch inklusiven Pfad: Das Wohlergehen der gesamten Weltbevölkerung bleibt unerreichbar, während planetare Grenzen überschritten werden. Daher braucht es, anstelle eines Fokus auf Wirtschaftswachstum, einen ganzheitlicheren Ansatz für den Aufbau von Volkswirtschaften. In diesem Zusammenhang stellt das Konzept der Suffizienz als Ordnungsprinzip, welches ein „Genug" sowie Übermass anerkennt, das Wachstumsparadigma infrage. Dieser Artikel beginnt mit einer Diskussion über die Kreislaufwirtschaft als Teil des Green-Growth-Ansatzes, jedoch außerhalb der Postwachstumsagenda. Anschließend werden zwei zentrale Kritikpunkte an der Kreislaufwirtschaft beleuchtet, welche aus der suffizienzorientierten Degrowth-Bewegung hervorgehen: die Grenzen der Entkopplung und die Ungleichheit. Der Artikel schließt mit einem Ausblick darauf, wie der suffizienzorientierte Ansatz in politische Vorschläge und organisatorische Aktivitäten eingebettet wurde und wie die Kreislaufwirtschaft suffizienzorientierte Wirtschaftssysteme fördern könnte.

Stichwörter: Suffizienz, Kreislaufwirtschaft, Postwachstumsagenda

1. Introduction

Currently, not all of humanity's social goals are being achieved and the well-being of the entire population of the planet remains unattainable (Raworth, 2017). At the same time, planetary boundaries are being exceeded (Richardson et al., 2023). Thus, socio-economic systems are not on a sustainable and inclusive path. Instead, the systems are more focused on achieving economic growth – and wealth for the privileged – while a large part of the world's population is still unable to meet their basic needs (Parrique, 2019). In sum, "GDP growth (monetary value creation) somewhere occurs at the expense of exploitation elsewhere in the global economy" (Parrique, 2019, p. 374).

Since the concept of economic growth is ambiguous, we define it here as the inflation-adjusted increase in GDP resulting from an increase in production and consumption (Cassiers & Maréchal, 2018; see also Stoknes & Rockström, 2018; Vadén et al., 2020b). According to some literature, such economic growth is, among other things, a necessity and a primary goal of policymaking (Ekins, 2000; Vadén et al., 2020b), as it is believed that economic growth can be used to reduce social inequalities, such as poverty, and combat climate change (Vadén et al., 2019) through, for instance, technological innovations (Ekins, 2000; Lehmann et al., 2022). However, excessive focus on economic growth causes problems, as it forgets that our economies are embedded in holistic Earth systems: by some measures, for example, inequality increases while community cohesion decreases, environmental impacts accumulate, and climate change progresses as a result (Wright et al., 2018; Laurent, 2024; Costanza, 2025). As for policymaking, it has even been argued that maintaining and improving economic growth provides the boundary conditions for solutions proposed to combat environmental crises rather than trying to avoid the negative ecological and social impacts of economic growth (Banerjee, 2012). This is the case even though "globally, climate change has led to a population-weighted GDP loss of 6.3 % in 2022" (Rising, 2023, p. 4). Thus, to prevent the transgression of planetary boundaries and realign economic activities with the Earth's ecological limits, it is necessary to move beyond a narrow focus on economic growth and adopt a more holistic approach.

In this article, the concept of sufficiency challenges the focus on economic growth and is seen as an organizing principle that recognizes enoughness and excess, and, thus, leads to more sustainable and inclusive economies (Jungell-Michelsson & Heikkurinen, 2022; Heikkurinen, 2024) guided by the principles of justice, safety, and diversity (see, e.g., Raworth, 2017; Scheidel & Schaffartzik, 2019). This article proceeds as follows: First, it discusses the circular economy as part of the green growth approach but outside the post-growth agenda. Then, two key criticisms of the circular economy raised by the sufficiency-focused degrowth approach are reviewed: the limits to decoupling and inequality.

2. The circular economy as part of the green growth approach

Some different ways of approaching growth are evident in the post-growth agenda and its periphery. Here, the word "approach" has been chosen to refer to a combination of scholarly literature, political stances, and social activism. At one end of the spectrum is the *green growth* approach, whose proponents argue that through efficiency and absolute decoupling, it is possible to achieve a sustainable and inclusive path while maintaining continuous economic growth (Stoknes & Rockström, 2018; Lehmann et al., 2022). On the

opposite end is the *degrowth* approach, meaning "an equitable downscaling of production and consumption that increases human well-being and enhances ecological conditions" (Schneider et al., 2010, p. 511). Degrowth literature states that to achieve sustainability and inclusivity, the goal of economic growth should be abandoned (Lehmann et al., 2022). Furthermore, degrowth proponents argue that economies might even need to shrink in rich countries of the Global North (Hickel, 2021) and bring further attention to inequality by asking who benefits from the current growth-focused system.

In all, green growth and degrowth approaches represent the extremes of the efficiency-sufficiency spectrum. The green growth approach relies on efficiency, that is, reducing resource consumption in relative terms, or in other words, doing more with less (Princen, 2003; Young & Tilley, 2006). Conversely, to align economic activity within ecological and social limits, degrowth calls for sufficiency – meaning producing and consuming less in absolute terms (Jungell-Michelsson & Heikkurinen, 2022; Laurent, 2024). According to some researchers, the link between degrowth and sufficiency is so obvious that, for example, degrowth is dependent on embracing sufficiency (Nesterova, 2020; Jungell-Michelsson & Heikkurinen, 2022). Between the efficiency desires of green growth and the sufficiency idea of degrowth lies the *growth agnostic* approach, which argues that economic growth should not be an issue that needs to be considered at all, that is, economic growth is indifferent (van den Bergh, 2011; van den Bergh & Kallis, 2012; Lehmann et al., 2022). Haapanen and Tapio (2016) view degrowth and growth agnostic approaches as a continuum: achieving the growth agnostic approach initially requires an intentional degrowth approach.

Despite the fact that scholarly circular economy literature examines the sufficiency aspects of the circular economy, such as refusing and reducing consumption and the use of natural resources, these aspects often receive less attention in mainstream discussions (Kirchherr et al., 2017; Murray et al., 2017; Bocken et al., 2022). Instead, the circular economy is rooted in the assumption of (resource) efficiency rather than sufficiency (Schneider et al., 2010; see, e.g., Finnish Government, 2021; European Commission, 2023) and the goal of economic growth (Bocken et al., 2022; Leinonen & Lappalainen, 2023). Thus, the majority of the scholarly circular economy discourses and mainstream discussions currently align with the technology-, efficiency-, and growth-oriented green growth approach (Lehmann et al., 2022; Kongshøj, 2023). Moreover, although some scholars consider the green growth approach to be part of the post-growth agenda – albeit on its margins (Laurent, 2024) – here, post-growth is defined as "an era in which the societal project is refined beyond the pursuit of economic growth" (Cassiers & Maréchal, 2018, p. 2) and thus, only growth agnostic and degrowth approaches can be grouped under the growth-critical and sufficiency-focused post-growth agenda (Lehmann et al., 2022), leaving the green growth approach out of the agenda.

3. Criticism of the circular economy from the perspective of sufficiency

"Achieving sustainability within planetary boundaries requires radical changes to production and consumption beyond technology- and efficiency-oriented solutions" (Kongshøj, 2023, p. 1). Therefore, a comprehensive approach to sufficiency is needed to complement and challenge current green growth – thus, circular economy – efforts to build (sustainable) economies (Bocken et al., 2022).

Since green growth and degrowth are extremes of the efficiency-sufficiency spectrum, and the connection between degrowth and sufficiency is obvious, next, the circular economy is examined through the critical lenses of degrowth. In the socio-economic sphere, two criticisms are central: the limits to decoupling and inequality.

3.1. The limits to decoupling

The first suspicion from the degrowth approach towards the circular economy is based on the notion of decoupling. Essentially, decoupling refers to the idea that it is possible to separate "environmental bads" from the "economic goods" with the help of, for example, new technologies, innovations, industrial development, and market-based solutions (Wright et al., 2018). Decoupling can be global or local, and relative ("GDP grows faster than domestic material consumption" (Hickel & Kallis, 2020, p. 471)) or absolute (GDP grows or remains the same while environmental load, resource use, and/or emissions decrease (Stoknes & Rockström, 2018; Vadén et al., 2019)). It can happen over a short or long period, and for one environmental indicator (e.g., carbon emissions) or multiple (e.g., all planetary boundaries) (Parrique et al., 2019). Thus, when decoupling is discussed within degrowth and green growth approaches, it is important to clarify what kind of decoupling is needed. Degrowth scholars argue that to halt environmental crises, decoupling needs to be global, absolute, occur over a long period, and happen for all environmental indicators. This can be characterized as "sufficient enough decoupling". (Vadén et al., 2020a.) The green growth approach is on the same page but vaguer when setting the target level for decoupling. For instance, the Circular Economy Action Plan, which is one of the main building blocks of the European Green Deal – the new growth strategy for Europe – states:

> *Indicators on resource use, including consumption and material footprints to account for material consumption and environmental impacts associated to our production and consumption patterns will also be further developed and will be linked to monitoring and assessing the progress towards decoupling economic growth from resource use and its impacts in the EU and beyond (European Commission, 2020, p. 19).*

However, sufficient enough decoupling is notably difficult or impossible to achieve (Hickel & Kallis, 2020). Indeed, decoupling environmental load, resource use, and/or emissions from economic growth has proven to be unrealistic (Hagens, 2020; Hickel & Kallis, 2020), and the empirical evidence for a decoupling that takes into account all ecological boundary conditions is lacking (Parrique et al., 2019; Vadén et al., 2020b). While some (absolute) decoupling between CO_2 emissions and economic growth (Stoknes & Rockström, 2018) and resource use and GDP has been observed or theoretically estimated within some rich countries, no credible empirical model of sufficiently broad and long-term decoupling that works in all policy settings exists (Hickel & Kallis, 2020). Furthermore, global resource use is projected to grow 60 percent from 2020 levels by 2060, which means an increase in material resource extraction from 100 to 160 billion tons. For instance, energy transition is driving a high increase in metal demand, while the build-up of infrastructure drives the growth of non-metallic mineral extraction. (International Resource Panel, 2024.) In sum, there is a lack of empirical support for the decoupling on which the green growth approach relies (Hickel & Kallis, 2020).

3.2. Inequality

The second main criticism of the degrowth approach to the circular economy's focus on growth is based on inequality. Although the degrowth approach also highlights other forms of inequality that the circular economy does not sufficiently address, like gender issues (see, e.g., Pla-Julián & Guevara, 2019; Dengler & Lang, 2022; Houtbeckers, 2022) and inter- and intra-generational equity (Murray et al., 2017), here inequality refers to economic inequality, which, according to Buch-Hansen and Koch (2019, p. 264), has serious consequences: "extreme and growing economic inequality threaten[s] human civilization as we know it".

Economic inequality can be examined at the global and national levels. First, the current growth-oriented efforts to build economies have benefited the rich countries of the global North, often at the expense of the countries of the global South (Hickel, 2021). Second, income disparities within countries have increased, and wealth has accumulated in the hands of an increasingly smaller number of people, who seek to isolate their own interests from the collective well-being (Piketty, 2014; Heikkurinen et al., 2019). At the same time, as noted earlier, a part of humanity is unable to satisfy their basic needs (Parrique, 2019). In response to inequality challenges at these two levels, sufficiency-focused degrowth argues for redistribution between and within countries: "There is a level of human well-being compatible with the Biosphere's viability, but it entails that some have too little while others have too much" (Laurent, 2024, p. 13).

Overall, the circular economy aims to provide conflict-free win-win solutions mainly related to economic and environmental sustainability. At the same time, it overlooks the social problems of the current growth-oriented efforts to build economies and fails to consider who benefits from economic growth and who does not. (Corvellec et al., 2022.)

To conclude, a wide range of policy proposals that include the sufficiency-focused approach already exist: work time reduction, universal basic income, universal basic services, and a maximum income cap, to name a few (Kallis et al., 2025). Moreover, studies have proposed how a sufficiency-focused approach can be included in organizational activities by adding democratic governance (Khmara & Kronenberg, 2018), being local and community-based (Hankammer et al., 2021), and considering non-human life (Nesterova, 2020). Some sufficiency-focused proposals (e.g., making products that last (Khmara & Kronenberg, 2018)) fit the growth-oriented green growth approach and the circular economy in it. As an illustration, sufficiency-focused policy proposals have recently been examined specifically from the perspective of advancing the circular economy (see, e.g., Leinonen & Lappalainen, 2023). However, some sufficiency-focused proposals (e.g., deviation from profit maximization (Nesterova, 2020)) challenge the circular economy.

In all, while a wide range of proposals exists, less focus has been placed on transformative enough proposals that would enable sustainable and inclusive sufficiency-focused economies to come to fruition (Kallis et al., 2025). To foster the change, the hegemony of economic growth needs to be further questioned. The circular economy can start the questioning and the flourishing of sufficiency-focused economies by letting the already existing sufficiency aspects of the circular economy concept bloom (Bocken et al., 2022) and by challenging decoupling and inequality.

References

Banerjee, S. B. (2012). A climate for change? Critical reflections on the Durban United Nations Climate Change Conference. *Organization Studies, 33*(12), 1761–1786. https://doi.org/10.1177/0170840612464609

Bocken, N. M. P., Niessen, L., & Short, S. W. (2022). The sufficiency-based circular economy—An analysis of 150 companies. *Frontiers in Sustainability, 3*. https://doi.org/10.3389/frsus.2022.899289

Buch-Hansen, H., & Koch, M. (2019). Degrowth through income and wealth caps? *Ecological Economics, 160*, 264–271. https://doi.org/10.1016/j.ecolecon.2019.03.001

Cassiers, I., & Maréchal, K. (2018). The economy in a post-growth era: What project and what philosophy? In I. Cassiers, K. Maréchal, & D. Méda (Eds.), *Post-growth economics and society: Exploring the paths of a social and ecological transition* (pp. 1–12). Routledge. https://doi.org/10.4324/9781315145334

Corvellec, H., Stowell, A. F., & Johansson, N. (2022). Critiques of the circular economy. *Journal of Industrial Ecology, 26*(2), 421–432. https://doi.org/10.1111/jiec.13187

Costanza, R. (2025, February 3). *Towards an integrated system and consolidation* [Conference presentation]. MERGE kick-off event: Measuring what matters – Economy that would improve wellbeing for all now and in the future, online.

Dengler, C., & Lang, M. (2022). Commoning care: Feminist degrowth visions for a socio-ecological transformation. *Feminist Economics, 28*(1), 1–28. https://doi.org/10.1080/13545701.2021.1942511

Ekins, P. (2000). *Economic growth and environmental sustainability: The prospects for green growth*. Routledge.

European Commission. (2020). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the regions: A new Circular Economy Action Plan for a cleaner and more competitive Europe* (Document 52020DC0098). https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0098

European Commission. (2023). *Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the regions: A Green Deal Industrial Plan for the net-zero age* (Document 52023DC0062). https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52023DC0062

Finnish Government. (2021). *New directions: The strategic programme to promote a circular economy* (Publications of the Finnish Government 2021:1). http://urn.fi/URN:ISBN:978-952-383-658-7

Haapanen, L., & Tapio P. (2016). Economic growth as phenomenon, institution and ideology: A qualitative content analysis of the 21st century growth critique. *Journal of Cleaner Production, 112*, 3492–3503. https://doi.org/10.1016/j.jclepro.2015.10.024

Hagens, N. J. (2020). Economics for the future – Beyond the superorganism. *Ecological Economics, 169*, 106520. https://doi.org/10.1016/j.ecolecon.2019.106520

Hankammer, S., Kleer, R., Mühl, L., & Euler, J. (2021). Principles for organizations striving for sustainable degrowth: Framework development and application to four B Corps. *Journal of Cleaner Production, 300*, 126818. https://doi.org/10.1016/j.jclepro.2021.126818

Heikkurinen, P. (2024). *Degrowth: An experience on being finite* (1st ed.). Mayfly Books. https://mayflybooks.org/wp-content/uploads/2024/05/Degrowth_An_Experience_of_Being_Finite_ONLINE45-1.pdf

Heikkurinen, P., Ruuska, T., Wilén, K., & Ulvila, M. (2019). The Anthropocene exit: Reconciling discursive tensions on the new geological epoch. *Ecological Economics, 164*, 106369. https://doi.org/10.1016/j.ecolecon.2019.106369

Hickel, J. (2021). The anti-colonial politics of degrowth. *Political Geography, 88*, 102404. https://doi.org/10.1016/j.polgeo.2021.102404

Hickel, J., & Kallis, G. (2020). Is green growth possible? *New Political Economy, 25*(4), 469–486. https://doi.org/10.1080/13563467.2019.1598964

Houtbeckers, E. (2022). Ekofeministinen kohtuutalous ja ekososiaaliset kriisit [Ecofeminist degrowth and ecosocial crises]. *Poliittinen talous, 10*(2), 66–88. https://doi.org/10.51810/pt.111959

International Resource Panel. (2024). *Global resources outlook 2024: Bend the trend – Pathways to a liveable planet as resource use spikes*. United Nations Environment Programme. https://wedocs.unep.org/20.500.11822/44901

Jungell-Michelsson, J., & Heikkurinen, P. (2022). Sufficiency: A systematic literature review. *Ecological Economics, 195*, 107380. https://doi.org/10.1016/j.ecolecon.2022.107380

Kallis, g., Hickel, J., O'Neill, D. W., Jackson, T., Victor, P. A., Raworth, K., Schor, J. B., Steinberger, J. K., & Ürge-Vorsatz, D. (2025). Post-growth: The science of wellbeing within planetary boundaries. *The Lancet Planetary Health, 9*(1), e62–e78.

Khmara, Y., & Kronenberg, J. (2018). Degrowth in business: An oxymoron or a viable business model for sustainability? *Journal of Cleaner Production*, *177*, 721–731. https://doi.org/10.1016/j.jclepro.2017.12.182

Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. *Resources, Conservation & Recycling, 127*, 221–32. https://doi.org/10.1016/j.resconrec.2017.09.005

Kongshøj, K. (2023). Social policy in a future of degrowth? Challenges for decommodification, commoning and public support. *Humanities & Social Sciences Communications, 10*(1), 1–11. https://doi.org/10.1057/s41599-023-02255-z

Laurent, É. (2024). *Sufficiency as a confluence for post-growth streams – Report on the integrated analysis of the different schools of thought*. Zenodo. https://doi.org/10.5281/zenodo.13682536

Lehmann, C., Delbard, O., & Lange, S. (2022). Green growth, a-growth or degrowth? Investigating the attitudes of environmental protection specialists at the German Environment Agency. *Journal of Cleaner Production, 336*, 130306. https://doi.org/10.1016/j.jclepro.2021.130306

Leinonen, H., & Lappalainen, R. (2023). Kiertotalous ponnahduslautana kohtuutalouteen: Suosituksia kestävään organisoitumiseen [A circular economy as a springboard to degrowth: Recommendations for sustainable organizing]. *Wisdom Letters, 2023*(2). https://doi.org/10.17011/wl/9

Murray, A., Skene, K., & Haynes, K. (2017). The circular economy: An interdisciplinary exploration of the concept and application in a global context. *Journal of Business Ethics, 140*(3), 369–380. https://doi.org/10.1007/s10551-015-2693-2

Nesterova, I. (2020). Degrowth business framework: Implications for sustainable development. *Journal of Cleaner Production, 262*, 121382. https://doi.org/10.1016/j.jclepro.2020.121382

Parrique, T. (2019). *The political economy of degrowth* [Doctoral dissertation, Université Clermont Auvergne, Stockholm University]. Centre d'Études et de Recherches sur le Développement International. https://theses.hal.science/tel-02499463

Parrique, T., Barth, J., Briens, F., Kerschner, C., Kraus-Polk, A., Kuokkanen, A., & Spangenberg, J. H. (2019). *Decoupling debunked – Evidence and arguments against green growth as a sole strategy for sustainability*. The European Environmental Bureau. eeb.org/decoupling-debunked

Piketty, T. (2014). *Capital in the twenty-first century.* The Belknap Press of Harvard University Press.

Pla-Julián, I., & Guevara, S. (2019). Is circular economy the key to transitioning towards sustainable development? Challenges from the perspective of care ethics. *Futures, 105*, 67–77. https://doi.org/10.1016/j.futures.2018.09.001

Princen, T. (2003). Principles for sustainability: From cooperation and efficiency to sufficiency. *Global Environmental Politics, 3*(1), 33–50. https://doi.org/10.1162/152638003763336374

Raworth, K. (2017). A doughnut for the anthropocene: Humanity's compass in the 21st century. *The Lancet Planetary Health, 1*(2), e48–e49. https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196%2817%2930028-1/fulltext

Richardson, K., Steffen, W., Lucht, W., Bendtsen, J., Cornell, S. E., Donges, J. F., Drüke, M., Fetzer, I., Bala, G., von Bloh, W., Feulner, G., Fiedler, S., Gerten, D., Gleeson, T., Hofmann, M., Huiskamp, W., Kummu, M., Mohan, C., Nogués-Bravo, D., Petri, S., Porkka, M., Rahmstorf, S., Schaphoff, S., Thonicke, K., Tobian, A., Virkki, V., Wang-Erlandsson, L., Weber, L., & Rockström, J. (2023). Earth beyond six of nine planetary boundaries. *Science Advances, 9*(37), eadh2458. https://doi.org/10.1126/sciadv.adh2458

Rising, J. (2023). *Loss and damage today: How climate change is impacting output and capital.* Gerard J. Mangone Climate Change Science and Policy Hub Report. https://bpb-us-w2.wpmucdn.com/sites.udel.edu/dist/5/11885/files/2023/11/Report-Loss_and_Damage_Today.pdf

Scheidel, A., & Schaffartzik, A. (2019). A socio-metabolic perspective on environmental justice and degrowth movements. *Ecological Economics, 161*, 330–333. https://doi.org/10.1016/j.ecolecon.2019.02.023

Schneider, F., Kallis, G., & Martinez-Alier, J. (2010). Crisis or opportunity? Economic degrowth for social equity and ecological sustainability. Introduction to this special issue. *Journal of Cleaner Production, 18*(6), 511–518. https://doi.org/10.1016/j.jclepro.2010.01.014

Stoknes, P. E., & Rockström, J. (2018). Redefining green growth within planetary boundaries. *Energy Research & Social Science, 44*, 41–49. https://doi.org/10.1016/j.erss.2018.04.030

Vadén, T., Lähde, V., Majava, A., Järvensivu, P., Toivanen, T., & Eronen, J. T. (2020a). Raising the bar: On the type, size and timeline of a 'successful' decoupling. *Environmental Politics, 30*(3), 462–476. https://doi.org/10.1080/09644016.2020.1783951

Vadén, T., Lähde, V., Majava, A., Järvensivu, P., Toivanen, T., Hakala, E., & Eronen, J. T. (2020b). Decoupling for ecological sustainability: A categorisation and review of research literature. *Environmental Science & Policy, 112*, 236–244. https://doi.org/10.1016/j.envsci.2020.06.016

Vadén, T., Lähde, V., Majava, A., Toivanen, T., Eronen, J. T., & Järvensivu, P. (2019). Onnistunut irtikytkentä Suomessa? [Successful decoupling in Finland?]. *Alue ja Ympäristö, 48*(1), 3–13. https://doi.org/10.30663/ay.76338

van den Bergh, J. C. J. M. (2011). Environment versus growth – A criticism of "degrowth" and a plea for "a-growth". *Ecological Economics, 70*(5), 881–890. https://doi.org/10.1016/j.ecolecon.2010.09.035

van den Bergh, J. C. J. M., & Kallis, G. (2012). Growth, a-growth or degrowth to stay within planetary boundaries? *Journal of Economic Issues*, *46*(4), 909–920. https://doi.org/10.2753/JEI0021-3624460404

Wright, C., Nyberg, D., Rickards, L., & Freund, J. (2018). Organizing in the Anthropocene. *Organization, 25*(4), 455–471. https://doi.org/10.1177/1350508418779649

Young, W., & Tilley, F. (2006). Can businesses move beyond efficiency? The shift toward effectiveness and equity in the corporate sustainability debate. *Business Strategy and the Environment, 15*(6), 402–415. https://doi.org/10.1002/bse.510

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