



Summary

Despite massive national and international efforts on different platforms, we are still far away from our targets in the fight with the climate change. Degrowth, reducing of energy and resource use in high-income economies to enable decarbonization and reverse other forms of ecological breakdown while reducing inequality and improving social outcomes, has emerged as an alternative method suggested by some scholars and international institutions. It is a powerful mitigation strategy that reduced the effects of climate change while focusing on sufficiency, democracy and human well-being.

Degrowth: strategies and challenges for a just transition

By Prof. Giorgos Kallis and Dr. Jason Hickel

Degrowth scholarship argues for a managed reduction of energy and resource use in high-income economies to enable rapid decarbonization and reverse other forms of ecological breakdown, while reducing inequality and improving social outcomes. It promotes feasible and appropriate technological change along with transformative policy focused on sufficiency, democracy and human well-being.

The concept has been explored at length in the scientific literature over the past several years,¹ and in reports by major international institutions, including the Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (IPBES), the Intergovernmental Panel on Climate Change (IPCC) and the European Environment Agency.

What is degrowth, why is it necessary and how can it be accomplished? Here we summarize the main principles that have emerged from degrowth research, and specify key policy tools toward a just transition.

Degrowth scholarship argues for a managed reduction of energy and resource use in high-income economies to enable rapid decarbonization and reverse other forms of ecological breakdown, while reducing inequality and improving social outcomes.

The crisis we face

The climate crisis is now widely understood as an emergency, and people are increasingly eager for governments to act. But despite decades of high-level summits, political leaders have failed to deliver meaningful progress. According to the IPCC, current policies have us on track for 3.2 degrees of temperature rise by the end of this century, which represents a future of serious instability and suffering. The global economy is also overshooting several other planetary boundaries, destabilizing key Earth-system processes. The rate of biodiversity loss is particularly alarming. The Executive Secretary of the IPBES summarized its latest report by saying: “We are currently, in a systematic manner, exterminating all non-human living beings.”





27 April 2022

These impacts are being driven in large part by economic growth: ever-increasing levels of extraction and production, measured in terms of Gross Domestic Product (GDP). Economic growth is a process of material transformation, and GDP is closely linked to energy and resource use. Rising energy use means rising emissions (as long as states and firms rely on fossil fuels), while rising resource use drives biodiversity loss and other forms of ecosystem damage.

High-income economies – and the corporations that dominate them – are overwhelmingly responsible for this crisis. Their energy and resource use is well in excess of sustainable levels and many times more than what is required for decent living.^{2,3} Lower-income countries, by contrast, remain well within sustainable levels, and may need to *increase* energy and resource use in order to achieve human development goals. The same dynamic holds at the level of class: affluent individuals are responsible – in terms of consumption, but more importantly because of their control over the production system – for the majority of the excess emissions that are driving climate breakdown.

Several wealthy nations have managed to reduce their emissions over the past couple of decades, but not even the “best” performers are in line with what is required to stay within 1.5 or 2 degrees.^{4,5} This failure is not for lack of trying – there have been major strides in renewable energy deployment. Rather, it is because governments and firms continue to prioritize growth as a primary objective. More growth means more energy demand than would otherwise be the case under any given energy regime, which erodes renewable gains and makes rapid decarbonization more difficult.⁶ Trying to decarbonize an economy that is growing at a compound rate is like trying to run down an escalator that is accelerating upwards against you. The same is true for resource use: growth makes ecological objectives more difficult to achieve.

Trying to decarbonize an economy that is growing at a compound rate is like trying to run down an escalator that is accelerating upwards against you. The same is true for resource use: growth makes ecological objectives more difficult to achieve.

Efficiency improvements can help loosen the link between GDP and resources – and indeed technology is vital for this purpose – but in a growth-oriented economy the gains from efficiency tend to be leveraged for additional production. The result is that while “relative decoupling” of GDP from material and energy use is quite common, there is little evidence of sustained or sufficient *absolute* decoupling, and modelled projections of future trends indicate it is unlikely to be achieved even in high-efficiency scenarios.⁷ This trend holds despite a dramatic shift to services over the past decades, and despite widespread digitization.

Our world also faces a crisis of inequality, where overproduction and extreme wealth exist alongside widespread poverty. This problem is often regarded as separate from the ecological crisis, but the two are related – symptoms of the same underlying system. Under capitalism, growth is not merely about *any* increase in production. For the owners of capital, the purpose of increasing production is to accumulate profit. Toward this end large firms, and the states that support them, often seek to “cheapen” inputs – labour and resources. Technology plays a role here, by improving labour productivity and resource availability. But the need for cheap labour and resources often also leads to attacks on workers’ rights, or the use of structural adjustment programmes to squeeze the wages and prices of suppliers in the global South. The costs of growth are often “externalized” onto weaker, more marginal communities and environments.



27 April 2022

Our world also faces a crisis of inequality, where overproduction and extreme wealth exist alongside widespread poverty. This problem is often regarded as separate from the ecological crisis, but the two are related – symptoms of the same underlying system.

These dynamics produce inequality and uneven development, both within countries and between them. Many struggle to make ends meet even in the richest regions in the world. At the same time, research shows that growth in high-income countries relies on a large net appropriation of goods from the global South through unequal exchange, which drains poorer countries of the resources needed for development.⁸ These dynamics leave us with a world economy that simultaneously overuses resources and fails to meet the basic needs of much of humanity.⁹

Strategies for degrowth

There is an alternative path. Degrowth scholarship calls for a strategy of contraction and convergence, both within countries and between them. Resource use in high-income countries – and among the rich – needs to decline to sustainable levels, while lower-income countries need to reclaim resources and build productive capacity to meet their citizens' needs. Throughput should converge toward a level that is compatible with planetary boundaries and sufficient to ensure strong social outcomes for all.

Efficiency improvements and technological change are necessary to achieve this, but will not be sufficient. It will also require transformative policy for better provisioning systems. And high-income countries will need

to abandon GDP growth as an objective and scale down less-necessary forms of production, to directly reduce their resource and energy use.

The good news is that high-income countries do not *need* more growth. Past a certain point, which these countries have long exceeded, more GDP is not necessary to improve social outcomes, and growth becomes “uneconomic”, with costs outweighing benefits.¹⁰ There is no deterministic relationship between aggregate production and human welfare. What matters is *what* we are producing, whether people have access to essential goods and services, and how income is distributed. It is possible to improve social outcomes with fewer resources and less energy than high-income nations presently use – and with much less commodity production – by organizing the economy around human needs and well-being rather than around growth and accumulation.²

It is possible to improve social outcomes with fewer resources and less energy than high-income nations presently use – and with much less commodity production – by organizing the economy around human needs and well-being rather than around growth and accumulation.

How can this be achieved? Researchers have identified five key strategies.

The first step is to shift economic policy away from the objectives of GDP growth and corporate profitability, to focus instead on social and ecological objectives, such as improving housing and healthcare access, expanding renewable energy, and protecting biodiversity.



27 April 2022

Progress should be measured with indicators of well-being (to be increased) and indicators of resource use (to be reduced).

Second, governments should introduce policies to scale down ecologically destructive and socially less-necessary forms of production. This might include cutting food waste, reducing industrial production of meat and dairy, shifting from private cars to public transit, taxing SUVs and luxury goods, rationing air travel, reducing house sizes, legislating extended product warranties and rights to repair, limiting advertising, and so on. Fossil fuels should be reduced on a binding schedule, and caps should be placed on resource use and pollution in line with scientific evidence.

Third, as societies require less labour, working time should be reduced and necessary work shared more evenly. Productivity improvements should be used to increase free time, rather than to increase total production. This policy is crucial to prevent unemployment, but it also improves human well-being, reduces carbon emissions, and frees people to focus on care and other welfare improving activities.^{11,12} For further security, a green job guarantee can be introduced to provide training for workers transitioning out of fossil fuels and other sunset sectors, and to empower people to participate in collective projects such as renewable energy and ecological regeneration.

Fourth, inequality should be reduced and purchasing power distributed more fairly, to ensure that everyone can access the goods they need to live well. A shorter working week and job guarantee will help, by improving the bargaining power of labour, but additional supports are needed. At their most basic, these should include stronger labour rights, a living wage and progressive taxation, but they might also include a minimum income floor and a maximum income ceiling. Reducing the purchasing power of the rich is also an effective way to reduce emissions and environmental pressures.¹³

Inequality should be reduced and purchasing power distributed more fairly, to ensure that everyone can access the goods they need to live well.

Fifth, a program of universal public services is necessary to ensure everyone has access to high-quality healthcare, education, housing, transit and other essentials. Research has shown that public services are key to delivering strong social outcomes with lower levels of energy use.¹⁴ This approach organizes productive capacity around human needs, and enables people to live good lives without requiring high income to do so, thereby de-linking human well-being from growth. All of these steps are critical to ensuring a just transition.

Our focus here is on what is required for high-income nations. For countries in the global South, such a scenario would create opportunities to end the drain through unequal exchange, and mobilize resources, labour and productive capacity instead around provisioning for domestic human needs – housing, healthcare, food, education. This transition will require progressive industrial policy, fiscal policy, and regional integration to reduce reliance on international finance and maximize food and energy sovereignty – objectives that Southern economists increasingly emphasize.¹⁵

Degrowth is a powerful climate mitigation strategy. Some say that 1.5 degrees is dead: there's no path to sufficiently rapid decarbonization. But this is only true if we assume continued growth in high-income countries. Recent modelling studies have demonstrated that degrowth enables much faster decarbonization, fast enough to stay under 1.5 degrees, without the need to gamble on large-scale negative emissions schemes or speculative assumptions about technological change.¹⁶ Degrowth would also reduce resource use in general, thus reducing environmental pressures and helping to reverse biodiversity loss. This is hopeful news.



27 April 2022

Endnotes

- 1 Kallis, G., Kostakis, V., Lange, S., Muraca, B., Paulson, S. and Schmelzer, M., (2018). Research on degrowth. *Annual Review of Environment and Resources*, 43:291-316.
- 2 Millward-Hopkins, J., Steinberger, J. K., Rao, N. D., & Oswald, Y. (2020). Providing decent living with minimum energy: A global scenario. *Global Environmental Change*, 65, 102168.
- 3 Hickel, J., O'Neill, D. W., Fanning, A. L., & Zoomkawala, H. (2022). National responsibility for ecological breakdown: a fair-shares assessment of resource use, 1970–2017. *The Lancet Planetary Health*, 6(4), e342-e349.
- 4 Tilsted, J. P., Bjørn, A., Majeau-Bettez, G., & Lund, J. F. (2021). Accounting matters: Revisiting claims of decoupling and genuine green growth in Nordic countries. *Ecological Economics*, 187, 107101.
- 5 Anderson, K., Broderick, J. F., & Stoddard, I. (2020). A factor of two: how the mitigation plans of 'climate progressive' nations fall far short of Paris-compliant pathways. *Climate Policy*, 20(10):1290-1304.
- 6 Haberl, H., Wiedenhofer, D., Virág, D., Kalt, G., Plank, B., Brockway, P., ... & Creutzig, F. (2020). A systematic review of the evidence on decoupling of GDP, resource use and GHG emissions, part II: synthesizing the insights. *Environmental Research Letters*, 15(6), 065003.
- 7 Hickel, J., & Kallis, G. (2020). Is green growth possible?. *New political economy*, 25(4):469-486.
- 8 Hickel, J., Dorninger, C., Wieland, H., & Suwandi, I. (2022). Imperialist appropriation in the world economy: drain from the global south through unequal exchange, 1990–2015. *Global Environmental Change*, 73, 102467.
- 9 Fanning, A. L., O'Neill, D. W., Hickel, J., & Roux, N. (2022). The social shortfall and ecological overshoot of nations. *Nature Sustainability*, 5(1), 26-36.
- 10 Daly, H. (2005). Economics in a full world. *Scientific American* 293(3): 100–107.
- 11 Knight, K. W., Rosa, E. A., & Schor, J. B. (2013). Could working less reduce pressures on the environment? A cross-national panel analysis of OECD countries, 1970–2007. *Global Environmental Change*, 23(4):691-700.
- 12 Fitzgerald, J., Schor, J.B. and Jorgenson, A.K. (2018). Working Time Reduction and Carbon Emissions: A State-Level Analysis, *Social Forces* 96(4):1851–1874.
- 13 Wiedmann, T., Lenzen, M., Keyßer, L.T. and Steinberger, J.K., (2020). Scientists' warning on affluence. *Nature communications*, 11(1):1-10.
- 14 Vogel, J., Steinberger, J. K., O'Neill, D. W., Lamb, W. F., & Krishnakumar, J. (2021). Socio-economic conditions for satisfying human needs at low energy use: An international analysis of social provisioning. *Global Environmental Change*, 69, 102287.
- 15 Kaboub, F. (2012). From neoliberalism to social justice: the feasibility of full employment in Tunisia. *Review of Radical Political Economics*, 44(3):305-312.
- 16 Keyßer, L. T., & Lenzen, M. (2021). 1.5 C degrowth scenarios suggest the need for new mitigation pathways. *Nature communications*, 12(1):1-16.

About the Authors

PROFESSOR GIORGOS KALLIS

Professor Giorgos Kallis is a ICREA Research Professor at the Institute of Environmental Science and Technology (ICTA), Universitat Autònoma de Barcelona (UAB). He has a bachelor's degree in chemistry and a Masters in environmental engineering from Imperial College, a PhD in environmental policy from the University of the Aegean, and a second Masters in economics from the Barcelona Graduate School of Economics. Previously, he was also Marie Curie International Fellow at the Energy and Resources group at the University of California-Berkeley. Prof. Kallis is an ecological economist and political ecologist working on environmental justice and limits to growth. He is the author, co-author or editor of many books including "Degrowth: A Vocabulary for a New Era" (2014, Routledge), "In Defense of Degrowth" (2017), "Degrowth" (2018, Agenda Publishing), "Limits Why Malthus Was Wrong and Why Environmentalists Should Care" (2019, Stanford University Press), and "The Case for Degrowth" (Wiley, 2020). The book "Degrowth: A Vocabulary for a New Era" was translated into Turkish under the title of "Küçülme: Yeni Bir Çağ İçin Kavram Dağarcığı" (Metis, 2020). Professor Kallis published numerous scientific articles in international academic journals and received several international awards.

DR. JASON HICKEL

Dr. Jason Hickel is an economic anthropologist, author, and a Fellow of the Royal Society of Arts. He is Professor at the Institute for Environmental Science and Technology at the Autonomous University of Barcelona, Visiting Senior Fellow at the International Inequalities Institute at the London School of Economics, and Arne Naess Chair Professor of Global Justice and the Environment at the University of Oslo. He is Associate Editor of the journal World Development, and serves on the Climate and Macroeconomics Roundtable of the National Academy of Sciences, the Statistical Advisory Panel for the UN Human Development Report, the advisory board of the Green New Deal for Europe, and the Harvard-Lancet Commission on Reparations and Redistributive Justice.

Jason's research focuses on global political economy, inequality, and ecological economics. He is the author, co-author or editor of many books including "The Divide: A Brief Guide to Global Inequality and its Solutions" (Penguin, 2017), "Less is More: How Degrowth Will Save the World" (Penguin, 2020) "Democracy as Death: The Moral Order of Anti-Liberal Politics in South Africa" (University of California Press, 2015), Ekhaya: The Politics of Home in KwaZulu-Natal (University of KwaZulu-Natal Press, 2014) and Hierarchy and Value: Comparative Perspectives on Moral Order (Berghahn, 2018). The book "The Divide: A Brief Guide to Global Inequality and its Solutions" was translated into Turkish under the title of "Çoğu Zarar Azı Kara: Dünyayı Küçülme Kurtaracak" (Metis, 2021). Dr. Hickel published numerous scientific articles in international academic journals and received several international awards.



27 April 2022

ABOUT THE PROJECT

Imagining A Common Horizon for Humanity and the Planet

The world is passing through an extremely troubled period in its history, with a seemingly new challenge encountered at every turn. Serious economic, social, cultural, environmental and political crises at a global level are exacerbated by those being felt in individual countries. The challenges we are facing take a variety of forms, from financial collapses to climate change, from international terrorism to regional conflicts, and from the refugee problem to xenophobia.

All of these crises are being aggravated by the impact of the pandemic, revealing the inability of humanity to tackle them collectively, and invalidating the romantic discourse of globalization. As history continues its march, we are reminded that the answer to the common problems of humanity cannot be found by becoming more introverted, polarized or prejudiced. No matter how severe our problems, our destiny should not be seen as unchangeable. The problems we experience are primarily a result of human activity, and can be overcome only through human effort, but we should remain aware that there are many different hurdles to be passed if we are to rid ourselves of the crises being experienced in many parts of the world.

Only through conscious, patient and collective effort can we overcome the problems of humanity. Now is the time for dignified people from the different cultures and geographies of the world to come together in solidarity. It is time to speak with full respect of human dignity, setting aside the importance we place in our individual identities. An alliance of people who see truth and justice as the major pillars of our kind, will be able to open the door to a new era of solidarity for humanity. A dignified future is possible. We believe that Turkey holds a special, if not privileged, position, based on its geographical, historical and cultural characteristics, and can serve as a host to this joint effort of humanity.

Our goal within the scope of this project is to bring together the leading thinkers of the world, to create an international intellectual platform that draws its strength from human dignity, and that aims to build for the future of humanity and the planet with a holistic synergy with a view to offering humanity a common horizon. As Cappadocia University, our vision in this regard is to provide an academic platform from where esteemed intellectuals from around the world can share their visions for a common future of humanity and our planet, and to comment on the challenges and opportunities they envisage.

You can find detailed information about the Project at <https://commonhorizon.kapadokya.edu.tr/en/>

Cappadocia University (<https://kapadokya.edu.tr/en/>) is a young foundation (private) university in central Turkey, Cappadocia. The main goal of the university is to raise generations of opinion leaders who can read the 21st century realistically, and whose views therefore carry weight and significance – go-to men and women who are highly knowledgeable in their fields, who are happy to share their knowledge, and who will thus be respected and trusted by others. Cappadocia University is home to a highly successful dual-pronged system of academic and vocational programs that act in support of each other.

ABOUT THE
CAPPADOCIA UNIVERSITY