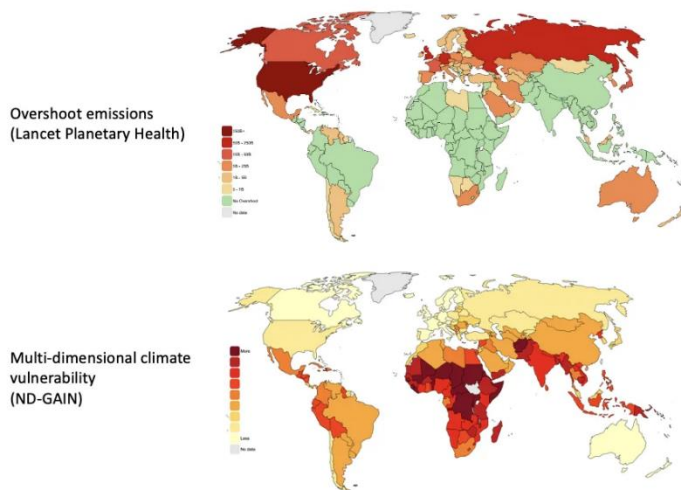


How could colonialism and eurocentrism undermine the response to the planetary emergency?

Knowledge for Sustainability Talks

Date: **13 October 2023, 14-16 CET, Online via Webex**



Picture credit [1](https://t.co/iahYsjV705) Jason Hickel on X: *"The top map shows which nations are most responsible for excess emissions. The bottom map shows which nations are most impacted by it. If we are not attentive to the colonial dimensions of climate breakdown, we are missing the point."* <https://t.co/iahYsjV705> / X (twitter.com)

The South is at the forefront of suffering the consequences of climate change and environmental destruction while only having a very limited historic contribution to its causes and continuing to contribute very little to the unfolding disaster today. The EU often presents itself as a global sustainability leader. Some uncomfortable issues not sufficiently on Northern radar screens may deserve a conversation as they could be undermining the global response to the planetary emergency. Our economic practices, our climate policies, and - more widely - our framings and narratives are impacted by multiple colonialities. Do our Euro-centric perspectives prevent us from seeing a bigger picture of the planetary emergency?

Minority and majority world are two new concepts increasingly used. The minority world stands for the smaller and wealthy part of humanity, in what has been called the developed world, the majority world stands for the biggest part of humanity around the globe, previously often called the 'Third' World. There are pockets of the minority world in the Global South, and pockets of the majority world in the Global North. Decolonization is important to avoid that perspectives, worldviews, research agendas of the minority world are imposed on the majority world, and to avoid that the green transition of the minority world comes at the expense of and with "neo-colonial plunder" (Hickel) of the majority world.

In this Knowledge for Sustainability talk organised by DG RTD and [EUStaff4Climate](#), with the help of Active Seniors in the research area, **Vidya Shah** presents how learning and leadership can unpack systems of oppression, including coloniality and cognitive imperialism. **Yamina Saheb** looks at sufficiency from a global perspective. **Andrew Fanning** shares key insights on national responsibility for ecological breakdown and present compensation models for atmospheric appropriation. The live talks are complemented by video contributions of **Vanessa Nakate**, **Farhana Sultana** and **Jason Hickel** on a Global South perspective towards COP 28, on climate coloniality and economic aspects of post-colonialism. This topic is relevant and timely to several ongoing multi-lateral discussions on debt relief, loss and damages, the revision of the global financial framework, or the wider conversation about climate justice.

The Knowledge for Sustainability talks invite colleagues from EU Institutions, bodies and agencies to take a broader, long-term perspective, beyond the immediate policy-making calendar. They aim to offer disruptive and uncomfortable wisdom to make EU narratives and policies more robust.

How could staff of the EU Institutions become aware of filters and biases, resulting from our embeddedness in post-colonial practices and Eurocentric worldviews with the aim to develop relevant responses to the planetary emergency? Participants will have the opportunity to ask questions to the speakers and engage in participatory reflection.

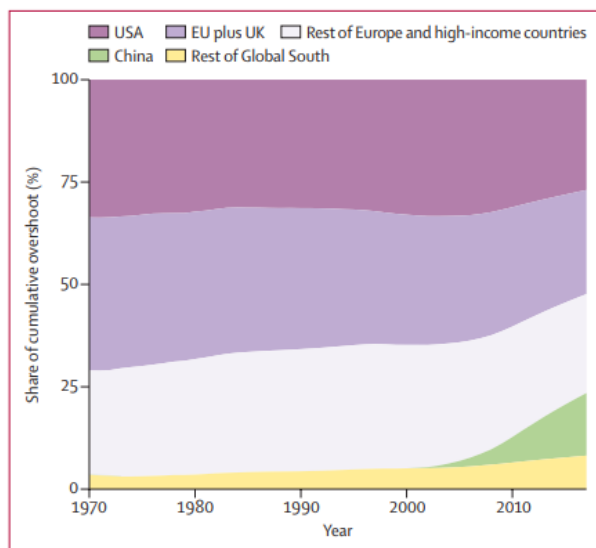
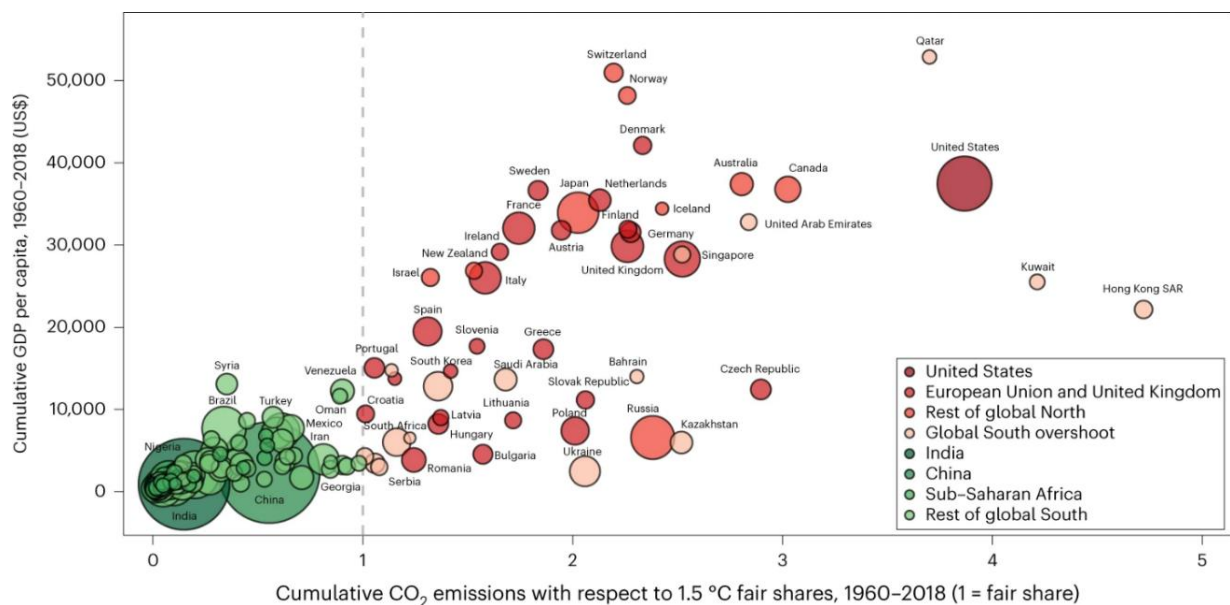


Figure 2: Share of responsibility for excess resource use by region, 1970–2017

Picture credit: [National responsibility for ecological breakdown: a fair-shares assessment of resource use, 1970–2017 - The Lancet Planetary Health](#)



Picture credit [Fig. 3: Cumulative CO₂ emissions with respect to 1.5 °C fair shares versus cumulative GDP per capita, 1960–2018. | Nature Sustainability](#)

- **Recording (public link)**

[How are colonialism and eurocentrism undermining the response to the planetary emergency ? - Streaming Service of the European Commission \(europa.eu\)](#)

- **Presentations (internal link)**

[DG R&I Knowledge Talks \(europa.eu\)](#)

- **EU Learn (internal link):**

[EU Learn - How could post-colonialism and euro-centrism undermine the response to the planetary emergency How could post-colonialism and euro-centrism undermine the response to the planetary emergency \(europa.eu\)](#)

Agenda

Introduction:

- **Thomas ARNOLD**, Active Senior Green Transition, EUStaff4Climate

Speakers:

- **Vidya SHAH**, Assistant Professor at the Faculty of Education, York University, Ontario: **Unpacking systems of oppression through learning and leadership: colonialism, coloniality, cognitive imperialism**, [Welcome to The UnLeading Project - UnLeading \(yorku.ca\)](#), [Systems of Oppression - UnLeading \(yorku.ca\)](#), [Colonialism, Coloniality and Settler Colonialism - UnLeading \(yorku.ca\)](#)
- Video contribution by **Vanessa NAKATE**, UNICEF Good Will Ambassador, Climate Activist: **Global South perspective towards COP28** [Vanessa Nakate | UNICEF](#), [UNICEF appoints climate activist Vanessa Nakate as Goodwill Ambassador](#), [A Bigger Picture: My Fight to Bring a New African Voice to the Climate Crisis by Vanessa Nakate | Goodreads](#), [\(79\) Towards COP28 with Vanessa Nakate and Wopke Hoekstra - YouTube](#)
- **Yamina SAHEB**, Senior Energy Policy Analyst at OpenExp, Researcher and Lecturer at Institut d'Etudes Politiques Paris, Lead Author IPCC AR6: **Sufficiency for whom? A global perspective**, [Summary for Policymakers \(SPM\) - Climate Change 2022 - Mitigation of Climate Change \(cambridge.org\)](#), [Demand-side solutions to climate change mitigation consistent with high levels of well-being | Nature Climate Change](#), [Beyond Efficiency and Renewable: Sufficiency Matters to Limit Global Warming by the End of the Century to 1.5°C | OpenEXP](#)
- Video contribution **Farhana SULTANA**, Professor at Geography and the Environment Department of Syracuse University NY, Research Director Environmental Conflict and Collaboration: **Decolonizing climate coloniality: a majority world perspective on biophysical limits to growth**, [The unbearable heaviness of climate coloniality - ScienceDirect](#), [Water Politics: Governance, Justice and the Right to Water – Dr. Farhana Sultana](#), [Critical climate justice \(farhanasultana.com\)](#), [Lecture: Plenary 4 – Understanding the biophysical limits to growth to build an economy that respects planetary boundaries - Beyond Growth 2023 Conference \(beyond-growth-2023.eu\)](#)
- Video contribution **Jason HICKEL**, 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; ERC Synergy Grant Post-Growth Deal: **The Economics of post-colonialism in the planetary emergency**, [Quantifying national responsibility for climate breakdown: an equality-based attribution approach for carbon dioxide emissions in excess of the planetary boundary - The Lancet Planetary Health](#), [National responsibility for ecological breakdown: a fair-shares assessment of resource use, 1970–2017 - ScienceDirect](#), [Existing climate mitigation scenarios perpetuate colonial inequalities - ScienceDirect](#), [Imperialist appropriation in the world economy: Drain from the global South through unequal exchange, 1990–2015 - ScienceDirect](#), [Is green growth happening? An empirical analysis of achieved versus Paris-compliant CO2–GDP decoupling in high-income countries - The Lancet Planetary Health](#), [Lecture: Opening plenary – Limits to Growth: where do we stand and where do we go from here? - Beyond Growth 2023 Conference \(beyond-growth-2023.eu\)](#)
- **Andrew FANNING**, Research & Data Analysis Lead at Doughnut Economics Action Lab Oxford; Visiting Research Fellow at Sustainability Research Institute, School of Earth and Environment, University of Leeds, **National responsibility for ecological breakdown and compensation for atmospheric appropriation**, [National responsibility for ecological breakdown: a fair-shares assessment of resource use, 1970–2017 - The Lancet Planetary Health](#), [Compensation for atmospheric appropriation | Nature Sustainability](#), [The social shortfall and ecological overshoot of nations | Nature Sustainability](#)

Q&A, Participants sharing their feelings, participatory discussion

- **Moderation:** **Obhi CHATTERJEE**, DG HR; **Anna SMEDEBY**, EPSO, EUStaff4Climate; **Alexandre VACHER**, REA, EUStaff4Climate

Closure:

- **Laurent BONTOUX**, Senior Foresight Expert, JRC

Technical lead:

- **Jerome SPAANS**, DG RTD

Background

- **Unpacking systems of oppression: colonialism, coloniality and cognitive imperialism**

[Welcome to The UnLeading Project - UnLeading \(yorku.ca\)](#)

This is UnLeading.

UnLeading requires a commitment to holding multiple truths, troubling common-sense assumptions, living the inquiries and sitting in the ambiguities of complex ideas such as leadership, schooling, and society. UnLeading asks us to engage in the praxis of leadership, a continual interplay of action towards systemic change and deep, inner reflection. In this way, it is a process of becoming, with no predetermined destination or finite goal.

[Systems of Oppression - UnLeading \(yorku.ca\)](#)

While we aim to articulate the specificities of each system of oppression, we recognize that all systems of oppression are interconnected in their goals and the violence that they perpetuate against historically oppressed populations. Common threads of dehumanization, domination, exploitation and erasure connect each form of oppression as they act to maintain the status quo in our conceptions of leaders, leadership, and community.

As we shift our focus toward transformative approaches to leadership, we hope to make clear the ways in which these dominant ideologies impact leaders - their development, their influence, and their humanity. It stands that if we recognize the possibilities for leadership to cultivate change, then we must clearly identify what it is we are trying to change and then turn our attention to imagining possible futures.

[Colonialism, Coloniality and Settler Colonialism - UnLeading \(yorku.ca\)](#)

Colonialism has been defined as systems and practices that “seek to impose the will of one people on another and to use the resources of the imposed people for the benefit of the imposer” (Assante, 2006). Colonialism can operate within political, sociological, cultural values and systems of a place even after occupation by colonizers has ended. Colonization is defined as the act of political, physical and intellectual occupation of space by the (often forceful) displacement of Indigenous populations, and gives rise to settler-colonialism, colonial and neo-colonial relations, and coloniality.

Colonization did not only occur through physical seizing and displacement of peoples from land, but also through the colonization of minds (Assante 2006). Coloniality refers to the control and management of knowledge by “universals” of Western modernity, Eurocentrism and global capitalism (Mignolo & Walsh, 2018). As such, Eurocentric knowledge and practices are deemed neutral, universal, and apolitical, and have led to the erasure of entire knowledge systems. Imperial and colonial practices have created “truths” of the colonizers’ stories, gazes and accounts of the Other, that are reinscribed in ideologies, discourses, institutions, scholarship, and imagination (Smith, 1999).

- **Global South perspective**

Towards COP28 with Vanessa Nakate and Wopke Hoekstra

[\(79\) Towards COP28 with Vanessa Nakate and Wopke Hoekstra - YouTube](#)

Climate justice, global fossil interests, the legacy of COP27 and the ambitions for the COP28: Where are we standing and where are we heading? Join us for a discussion with guest of honour Vanessa Nakate, climate activist and nominee for the Sakharov Prize this year, and newly appointed European Commissioner for Climate Action Wopke Hoekstra. Together with them, a cross-party panel and IPCC scientist Friederike Otto, we want to probe into the challenges for this year's climate conference.

A bigger picture – Vanessa Nakate

[A Bigger Picture: My Fight to Bring a New African Voice to the Climate Crisis by Vanessa Nakate | Goodreads](#)

A manifesto and memoir about climate justice and how we can—and must—build a livable future for all, inclusive to all, by a rising star of the global climate movement

Leading climate justice activist Vanessa Nakate brings her fierce, fearless spirit, new perspective, and superstar bona fides to the biggest issue of our time. In *A Bigger Picture*, her first book, she shares her story as a young Ugandan woman who sees that her community bears disproportionate consequences to the climate crisis. At the same time, she sees that activists from African nations and the global south are not being heard in the same way as activists from white nations are heard. Inspired by Sweden's Greta Thunberg, in 2019 Nakate became Uganda's first Fridays for Future protestor, awakening to her personal power and summoning within herself a commanding political voice.

Nakate's mere presence has revealed rampant inequalities within the climate justice movement. In January 2020, while attending the World Economic Forum in Davos, Switzerland, as one of five international delegates, including Thunberg, Nakate's image was cropped out of a photo by the Associated Press. The photo featured the four other activists, who were all white. It highlighted the call Nakate has been making all for both environmental and social justice on behalf of those who have been omitted from the climate discussion and who are now demanding to be heard.

From a shy little girl in Kampala to a leader on the world stage, *A Bigger Picture* is part rousing manifesto and part poignant memoir, and it presents a new vision for the climate movement based on resilience, sustainability, and genuine equity.

[‘Africa is on the frontlines but not the front pages’: Vanessa Nakate on her climate fight | Climate crisis | The Guardian](#)
[Vanessa Nakate: Liberal West Doesn’t Consider Africa’s Eco-Activism Worthy Enough \(tfiglobalnews.com\)](#)



THE AFRICA CARBON MARKETS INITIATIVE A WOLF IN SHEEP'S CLOTHING SEPTEMBER 2023

[The Africa Carbon Markets Initiative Wolf in Sheep's Clothing_1693903765.pdf \(powershiftafrica.org\)](#)

Executive Summary The African Carbon Market Initiative (ACMI) is a dangerous distraction for Africa from its real interests and priorities for development, energy, climate, biodiversity and resilience. The African Climate Summit must reject it. African countries are rightly demanding climate funding from polluting countries and companies in the global north, who have caused the climate crisis that is devastating African people, economy and nature. But carbon markets benefit the polluters, the fossil fuel companies and the market brokers. It will drive pollution beyond climate limits and puts neo-colonial obstructions to the attainment of genuine African development pathways. It is a wolf in sheep's clothing that will bite back creating numerous new and serious problems while not providing any real benefits. Carbon markets assume that western companies will continue to emit huge quantities of greenhouse gases (GHG) in the coming decades, purchasing carbon credits to 'offset' these emissions. But there is no room for the illusion of offsets in a world that has vastly exceeded safe levels of climate pollution and where polluting companies ought to be aiming for real zero emissions, not net zero, as fast as possible. Climate science is clear there is no time for pretending there is an offsetting alternative if we are to keep within the 1.5o C target or even below the unimaginable disaster of 2o C of warming¹. Carbon credits are a financialisation of African nature and the climate crisis, dealing in an imaginary commodity of tonnes of carbon 'saved'. ACMI claims its purpose is to create a market for a 'high-value export commodity'. However, the two biggest winners from carbon markets are the fossil fuel companies, as it allows companies across the world to continue to burn their polluting product with impunity, and the financial brokers who buy and sell the credits with huge mark ups.

- **Sufficiency from a global perspective**

[Demand-side solutions to climate change mitigation consistent with high levels of well-being | Nature Climate Change](#)

Mitigation solutions are often evaluated in terms of costs and greenhouse gas reduction potentials, missing out on the consideration of direct effects on human well-being. Here, we systematically assess the mitigation potential of demand-side options categorized into avoid, shift and improve, and their human well-being links. We show that these options, bridging socio-behavioural, infrastructural and technological domains, can reduce counterfactual sectoral emissions by 40–80% in end-use sectors. Based on expert judgement and an extensive literature database, we evaluate 306 combinations of well-being outcomes and demand-side options, finding largely beneficial effects in improvement in well-being (79% positive, 18% neutral and 3% negative), even though we find low confidence on the social dimensions of well-being. Implementing such nuanced solutions is based axiomatically on an understanding of malleable rather than fixed preferences, and procedurally on changing infrastructures and choice architectures. Results demonstrate the high mitigation potential of demand-side mitigation options that are synergistic with well-being.

[Beyond Efficiency and Renewable: Sufficiency Matters to Limit Global Warming by the End of the Century to 1.5°C | OpenEXP](#)

Sufficiency: the overlooked climate mitigation strategy

Sufficiency is about living within planetary boundaries. It is defined as a set of policy measures and daily practices which avoid the demand for energy, materials, land, water and other natural resources, while delivering a decent living standard for all within planetary boundaries (Saheb 2021). Decent living standards entail a set of essential material preconditions for human wellbeing which includes housing, nutrition, basic amenities, health care, transportation, information, education and public space (Rao, Min, and Mastrucci 2019); (Rao and Baer 2012); (Rao and Min 2018).

Sufficiency was introduced to the sustainability policy debate by Sachs (1993b) and to academia by Princen (2003a). With the adoption of the Paris Agreement (United Nations 2015) and the collective failure in curbing global greenhouse gas emissions after three decades of climate mitigation policies (Stoddard, 2021) (Figure 1), sufficiency is emerging as a climate mitigation strategy to compensate for the unsuccessful efforts of efficiency and the supply with renewable energy sources in reducing greenhouse gas emissions (Saheb 2021).

Sufficiency is often conceptualised by contrast to efficiency. The latter is about the continuous short-term marginal technological improvements which allow doing more with less in relative terms without considering planetary boundaries, while the former is about long-term actions driven by non-technological solutions (i.e. land use management), which consume less in absolute-term and are determined by the biophysical processes (Princen 2003b). The focus of sufficiency is on human needs and the services required for human wellbeing (i.e., housing including thermal comfort, nutrition, mobility...) while the focus of efficiency is on human wants such as products and commodities (buildings, cars, appliances, energy). In that sense, efficiency is a supply-side strategy while sufficiency is a demand-side one.

Sufficiency questions the current approaches to climate change mitigation, such as the promise of technological breakthrough prioritised over lifestyle changes, behavioural change of individuals over systemic change of the economy and the organisation of the society, the cost-benefit analysis emphasised over the biophysical reality of the planet and the market-based instruments over redistributive ones. Moreover, sufficiency confronts the dominant individually-focused discourse which puts emphasis on trivial actions such as turning lights off when rooms are empty, and uses over-reliance on the technological improvements driven by efficiency, which ultimately just substitutes one technology with another. This substituting approach only increases the demand for materials and their related embodied energy and carbon. Unsurprisingly, sufficiency is considered controversial by the wealthiest in society because it challenges their carbon-intensive lifestyles. In fact, sufficiency requires large changes in the consumption patterns and puts an indisputable cap on the consumption levels based on the remaining carbon budget to avoid the overshoot of the 1.5°C temperature target.

The remaining carbon budget and its normative target for distributional equity is the upper limit of sufficiency, while requirements for a decent living standard define the minimum level of sufficiency. By limiting the over and under demand for energy, materials, land, water and other resources, sufficiency is likely to become, in the current decade, central to the global climate mitigation strategy (Saheb 2021). The untapped sufficiency potential, which may reach 30% emissions reduction in the wealthiest countries, will contribute to address the unprecedented and urgent transformation of the global economy and to limit the unequivocal role of human activities in global warming.

Sufficiency principles include the moderation of the speed to enjoy life, the reduction of distances between suppliers and consumers to avoid the ecological breakdown, the limitation of trade to focus more on commons as well as the limitation of goods' ownership (Sachs 1993a). Implementing sufficiency principles requires i) structural changes to moderate the demand for energy, materials, land, water and other resources as well as ii) flexibility to allow for developing usership of services and for adapting the size and the use of goods to the evolving human needs (Negawatt 2003) (Grubler et al. 2018).

- **A systemic approach to climate coloniality**

[The unbearable heaviness of climate coloniality - ScienceDirect](#)

Abstract

The extremely uneven and inequitable impacts of climate change mean that differently-located people experience, respond to, and cope with the climate crisis and related vulnerabilities in radically different ways. The coloniality of climate seeps through everyday life across space and time, weighing down and curtailing opportunities and possibilities through global racial capitalism, colonial dispossessions, and climate debts. Decolonizing climate needs to address the complexities of colonialism, imperialism, capitalism, international development, and geopolitics that contribute to the reproduction of ongoing colonialities through existing global governance structures, discursive framings, imagined solutions, and interventions. This requires addressing both epistemic violences and material outcomes. By weaving through such mediations, I offer an understanding of climate coloniality that is theorized and grounded in lived experiences.

- **National responsibility for ecological breakdown and compensation for atmospheric appropriation**

[Compensation for atmospheric appropriation | Nature Sustainability](#)

Abstract

Research on carbon inequalities shows that some countries are overshooting their fair share of the remaining carbon budget and hold disproportionate responsibility for climate breakdown. Scholars argue that overshooting countries owe compensation or reparations to undershooting countries for atmospheric appropriation and climate-related damages. Here we develop a procedure to quantify the level of compensation owed in a 'net zero' scenario where all countries decarbonize by 2050, using carbon prices from IPCC scenarios that limit global warming to 1.5 °C and tracking cumulative emissions from 1960 across 168 countries. We find that even in this ambitious scenario, the global North would overshoot its collective equality-based share of the 1.5 °C carbon budget by a factor of three, appropriating half of the global South's share in the process. We calculate that compensation of US\$192 trillion would be owed to the undershooting countries of the global South for the appropriation of their atmospheric fair shares by 2050, with an average disbursement to those countries of US\$940 per capita per year. We also examine countries' overshoot of equality-based shares of 350 ppm and 2 °C carbon budgets and quantify the level of compensation owed using earlier and later starting years (1850 and 1992) for comparison.

[National responsibility for ecological breakdown: a fair-shares assessment of resource use, 1970–2017 - ScienceDirect](#)

Findings

High-income nations are responsible for 74% of global excess material use, driven primarily by the USA (27%) and the EU-28 high-income countries (25%). China is responsible for 15% of global excess material use, and the rest of the Global South (ie, the low-income and middle-income countries of Latin America and the Caribbean, Africa, the Middle East, and Asia) is responsible for only 8%. Overshoot in higher-income nations is driven disproportionately by the use of abiotic materials, whereas in lower-income nations it is driven disproportionately by the use of biomass.

Interpretation

These results show that high-income nations are the primary drivers of global ecological breakdown and they need to urgently reduce their resource use to fair and sustainable levels. Achieving sufficient reductions will likely require high-income nations to adopt transformative post-growth and degrowth approaches.

- **The Economics of Post-colonialism in the planetary emergency**

[Quantifying national responsibility for climate breakdown: an equality-based attribution approach for carbon dioxide emissions in excess of the planetary boundary - The Lancet Planetary Health](#)

Findings

As of 2015, the USA was responsible for 40% of excess global CO₂ emissions. The European Union (EU-28) was responsible for 29%. The G8 nations (the USA, EU-28, Russia, Japan, and Canada) were together responsible for 85%. Countries

classified by the UN Framework Convention on Climate Change as Annex I nations (ie, most industrialised countries) were responsible for 90% of excess emissions. The Global North was responsible for 92%. By contrast, most countries in the Global South were within their boundary fair shares, including India and China (although China will overshoot soon).

[National responsibility for ecological breakdown: a fair-shares assessment of resource use, 1970–2017 - ScienceDirect](#)

Findings

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[Existing climate mitigation scenarios perpetuate colonial inequalities - ScienceDirect](#)

Summary

The challenge of climate mitigation is made more difficult by high rates of energy use in wealthy countries, mostly in the Global North, which far exceed what is required to meet human needs. In contrast, more than 3 billion people in poorer countries live in energy poverty. A just transition requires energy convergence—reducing energy use in wealthy countries to achieve rapid emissions reductions, and ensuring sufficient energy for development in the rest of the world. However, existing climate mitigation scenarios reviewed by The Intergovernmental Panel on Climate Change do not explore such a transition. On average, existing scenarios maintain the Global North's energy privilege at a per capita level 2.3 times higher than in the Global South. Even the more equitable scenarios perpetuate large energy inequalities for the rest of the century. To reconcile the Global North's high energy use with the Paris Agreement targets, most scenarios rely heavily on bioenergy-based negative emissions technologies. This approach is risky, but it is also unjust. These scenarios tend to appropriate land in the Global South to maintain, and further increase, the Global North's energy privilege. There is an urgent need to develop scenarios that represent convergence to levels of energy that are sufficient for human wellbeing and compatible with rapid decarbonisation.

[Imperialist appropriation in the world economy: Drain from the global South through unequal exchange, 1990–2015 - ScienceDirect](#)

Abstract

Unequal exchange theory posits that economic growth in the “advanced economies” of the global North relies on a large net appropriation of resources and labour from the global South, extracted through price differentials in international trade. Past attempts to estimate the scale and value of this drain have faced a number of conceptual and empirical limitations, and have been unable to capture the upstream resources and labour embodied in traded goods. Here we use environmental input-output data and footprint analysis to quantify the physical scale of net appropriation from the South in terms of embodied resources and labour over the period 1990 to 2015. We then represent the value of appropriated resources in terms of prevailing market prices. Our results show that in 2015 the North net appropriated from the South 12 billion tons of embodied raw material equivalents, 822 million hectares of embodied land, 21 exajoules of embodied energy, and 188 million person-years of embodied labour, worth \$10.8 trillion in Northern prices – enough to end extreme poverty 70 times over. Over the whole period, drain from the South totalled \$242 trillion (constant 2010 USD). This drain represents a significant windfall for the global North, equivalent to a quarter of Northern GDP. For comparison, we also report drain in global average prices. Using this method, we find that the South's losses due to unequal exchange outstrip their total aid receipts over the period by a factor of 30. Our analysis confirms that unequal exchange is a significant driver of global inequality, uneven development, and ecological breakdown.

Abstract

This paper quantifies drain from the global South through unequal exchange since 1960. According to our primary method, which relies on exchange-rate differentials, we find that in the most recent year of data the global North ('advanced economies') appropriated from the South commodities worth \$2.2 trillion in Northern prices — enough to end extreme poverty 15 times over. Over the whole period, drain from the South totalled \$62 trillion (constant 2011 dollars), or \$152 trillion when accounting for lost growth. Appropriation through unequal exchange represents up to 7% of Northern GDP and 9% of Southern GDP. We also test several alternative methods, for comparison: we quantify unequal exchange in terms of wage differentials instead of exchange-rate differentials, and report drain in global average prices as well as Northern prices. Regardless of the method, we find that the intensity of exploitation and the scale of unequal exchange increased significantly during the structural adjustment period of the 1980s and 1990s. This study affirms that drain from the South remains a significant feature of the world economy in the post-colonial era; rich countries continue to rely on imperial forms of appropriation to sustain their high levels of income and consumption.

[Climate change, health, and discrimination: action towards racial justice - The Lancet](#)

The health impacts of climate change will affect everyone. But the consequences are unevenly distributed, falling much harder on some communities than others. Although discourse on climate change and health acknowledges principles of equity, little attention is given to underlying structural discrimination and the need for racial justice. From vulnerable communities in Puerto Rico coping with the effects of hurricane Fiona, to excessive heat in racially segregated neighbourhoods in the USA, to the tens of millions of people who have been displaced by flooding in Pakistan during 2022, minoritised populations bear the brunt of the health impacts of climate change, despite being least responsible for it. Racism kills, and climate change kills. Together, racism and climate change interact and have disproportionate effects on the lives of minoritised people within countries and between the Global North and the Global South.

Structural discrimination and racism can be traced back to colonialism, which is seldom mentioned in climate discourse. Only in 2022 did the Intergovernmental Panel on Climate Change (IPCC) recognise “historical and ongoing patterns of inequity such as colonialism” as a factor in vulnerability to climate change.

As Farhana Sultana observed: “colonialism haunts the past, present, and future through climate”. Colonialism has caused the decimation of land and resources, the enslavement of people, and plundered the wealth of colonised regions through continuing mechanisms of extraction and appropriation. Histories of colonial and neocolonial extraction have left low-income regions more vulnerable to, and less able to adapt to, the impacts of climate change.

Just as the health impacts of climate change are unequally distributed, so too is responsibility for causing the climate crisis. Countries of the Global North represent 14% of the world's population but are responsible for 92% of historical carbon dioxide emissions in excess of the safe planetary boundary. These nations have colonised the atmospheric commons for their own enrichment through forms of industrialisation and growth that have relied on colonial patterns of appropriation. Even within rich countries, responsibility lies primarily with the affluent and ruling classes, due to their higher levels of emissions and disproportionate control over energy systems and national legislation.

[The material footprint of nations | PNAS](#)

Abstract

Metrics on resource productivity currently used by governments suggest that some developed countries have increased the use of natural resources at a slower rate than economic growth (relative decoupling) or have even managed to use fewer resources over time (absolute decoupling). Using the material footprint (MF), a consumption-based indicator of resource use, we find the contrary: Achievements in decoupling in advanced economies are smaller than reported or even nonexistent. We present a time series analysis of the MF of 186 countries and identify material flows associated with global production and consumption networks in unprecedented specificity. By calculating raw material equivalents of international trade, we demonstrate that countries' use of nondomestic resources is, on average, about threefold larger than the physical quantity of traded goods. As wealth grows, countries tend to reduce their domestic portion of materials extraction through international trade, whereas the overall mass of material consumption generally increases. With every 10% increase in gross domestic product, the average national MF increases by 6%. Our findings call into question the sole use of current resource productivity indicators in policy making and suggest the necessity of an additional focus on consumption-based accounting for natural resource use.

Abstract

The argument that human society can decouple economic growth—defined as growth in Gross Domestic Product (GDP)—from growth in environmental impacts is appealing. If such decoupling is possible, it means that GDP growth is a sustainable societal goal. Here we show that the decoupling concept can be interpreted using an easily understood model of economic growth and environmental impact. The simple model is compared to historical data and modelled projections to demonstrate that growth in GDP ultimately cannot be decoupled from growth in material and energy use. It is therefore misleading to develop growth-oriented policy around the expectation that decoupling is possible. We also note that GDP is increasingly seen as a poor proxy for societal wellbeing. GDP growth is therefore a questionable societal goal. Society can sustainably improve wellbeing, including the wellbeing of its natural assets, but only by discarding GDP growth as the goal in favor of more comprehensive measures of societal wellbeing.