

Editorial

Sustainability, democracy and knowledge: interdependence under attack

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The year 2025 marks the beginning of the second quarter of the 21st century and the final third of the 2030 Agenda implementation period. It also inaugurates a new phase of alarming global warming, following the World Meteorological Organization's confirmation that 2024 was the hottest year on record: the global average surface temperature, consolidated from six datasets, reached 1.55°C ($\pm 0.13^\circ\text{C}$ uncertainty margin) above the 1850-1900 average. This milestone is historically unique as the first recorded instance of global temperatures surpassing the 1.5°C Paris Agreement threshold above pre-industrial levels.

In this context, the newly elected U.S. President signed an executive order withdrawing the country from the Paris Agreement in January. This follows domestic actions like dismantling the Environmental Protection Agency, established in 1970 and long considered a global benchmark for environmental policy, alongside oil/gas sector deregulations accelerating drilling and pipeline deployment. The “drill, baby, drill” rhetoric in presidential speeches signals a dangerous shift from climate denialism to state-sponsored anti-environmental action.

It is important to remember that this behaviour reinforces and results from the regression in advancing the principle that future generations have the right to a healthy environment. This principle is sinking into oblivion, giving way to the reign of short-termism and the immediate enjoyment of profits gained from the abusive exploitation of nature.

While the outlook for achieving tangible environmental sustainability appears grim, it is equally important to recognise the range of current complementary actions that reinforce this trajectory. These include the strengthening of denialism through efforts to dismantle social media regulation, the promotion of scientific obscurantism via cuts to research funding, the persecution of scientists, and the imposition of barriers to the free flow of information and international academic collaboration. The United States' withdrawal from the World Health Organization is emblematic of this anti-science stance, undermining global preparedness for future pandemics—even though it was precisely the international exchange of data and the joint efforts of scientists across borders that proved vital in overcoming the COVID-19 pandemic, the severity of which was subject to denial both there and elsewhere.

However, science discreditation extends beyond the Trump-era United States. In Germany, the Alexander von Humboldt Institute for Internet and Society (HIIG) launched the Capacities and Competencies for Dealing with Hate Speech and Hostility Towards Science (KAPAZ) project in 2023, aiming to understand the prevalence and forms of hostility towards science in the country and to develop resources to support researchers. The Academic Freedom Index – Update 2025, recently published by the V-Dem Institute (Gothenburg, Sweden) in collaboration with the Institute of Political Science at Friedrich-Alexander-Universität Erlangen-Nürnberg (Erlangen, Germany), highlights statistically significant declines in academic freedom across several countries over the ten years from 2014 to 2024. These include Bolivia, the United States, Argentina, Mexico, Portugal, Georgia, the United Kingdom, Lithuania, Finland, Israel, Poland, Germany, and Austria¹.

These data show that if the weakening of knowledge threatens sustainability, a simultaneous attack on these two pillars of our society necessarily entails an assault on a third, equally vital pillar: democracy. Restricting scientific freedom controls the knowledge that will be available and legitimised in the future. Similarly, shaping a society to adopt more conservative worldviews often involves targeting the arts and cultural expression. In the March 2025 U.S. executive order “Restoring Truth and Sanity to American History”, the President of the United States targeted the Smithsonian Institution, the largest network of museums and cultural venues in the country. It aimed to guarantee the removal of artworks and exhibitions accused of propagating a “divisive race-centered ideology”.

According to The Washington Post of 28 March 2025, one example of what this new executive order considers as “inappropriate ideology” is the exhibition “The Shape of Power: Stories of Race and American Sculpture”, which examines the role of sculpture in shaping and reflecting the concept of race in the United States. The exhibition remains open to the public at the Smithsonian American Art Museum until 14 September.

This combination of attacks on knowledge and freedom/democracy, through the imposition of surveillance and control regimes adapted to the 21st century, led The New York Times Magazine to publish, on 29 January 2025, an essay by Matthew Purdy entitled *We Are All Living in George Orwell’s World Now*. What does this reference to a literary dystopia, transposed into the present day, suggest as a possible result on our future’s sustainability?

Research freedom requires robust, continuous funding supporting established and emerging research groups. Ensuring open-access journals remain viable without exorbitant author fees is equally vital for inclusive science. Sustainability in Debate persists in this mission - disseminating rigorous research advancing global sustainability and a new planetary ethic.

This issue of Sustainability in Debate brings together a rich mosaic of reflections on the tensions, innovations, and possibilities shaping environmental governance and sustainable development today. The contributions enter into conversation across diverse contexts and approaches, tracing how political shifts, socio-environmental pressures, participatory dynamics, and policy frameworks influence sustainability in practice. Andrade Júnior revisits the erosion of environmentalism in Brazil, revealing how public disengagement and anti-environmental rhetoric have contributed to weakening the country’s environmental movement. Fernandes *et al.* examine the externalities of mining in Ouro Preto (MG), showing how extractive activities devalue the urban housing market and demand more balanced territorial policies. In the Andean region, Jáuregui *et al.* analyse the socio-environmental consequences of lithium exploitation in Puno, Peru, highlighting institutional fragility and community apprehensions around resource governance.

These territorial and ecological tensions echo in discussions on inclusion and policy innovation. Tartaruga *et al.* explore how rural innovation niches in the Brazilian Northeast generate sociotechnical alternatives to dominant agri-food regimes, opening pathways to inclusive, low-carbon food systems. Floriani draws on the Social Interaction System (SIS) model to explore the coexistence of hegemonic and peripheral healthcare systems, reflecting on the limits and possibilities for dialogue between dominant and alternative health practices. Michelin *et al.* focus on pharmaceutical waste in Araçatuba (SP), uncovering dissonance between environmental awareness and everyday disposal practices.

With a focus on tools and frameworks to guide more sustainable urban and food-related decisions, Silva *et al.* apply the PSIR model to urban mobility in João Pessoa, proposing a set of indicators for improving local planning. Vale *et al.* evaluate the environmental footprints of adolescents’ diets in Brazil, revealing how ultra-processed food consumption patterns reflect broader social and environmental inequalities.

Closing the issue, Poee and Munyanyi turn to the role of digital technologies, examining how artificial intelligence can strengthen the resilience and sustainability of agri-food value chains in Africa. Their study shows how digitalisation and sustainability converge to transform food systems in the Global South, offering insight into the future of innovation-driven governance.

We hope you enjoy reading this issue!

NOTES

1 | https://academic-freedom-index.net/research/Academic_Freedom_Index_Update_2025.pdf