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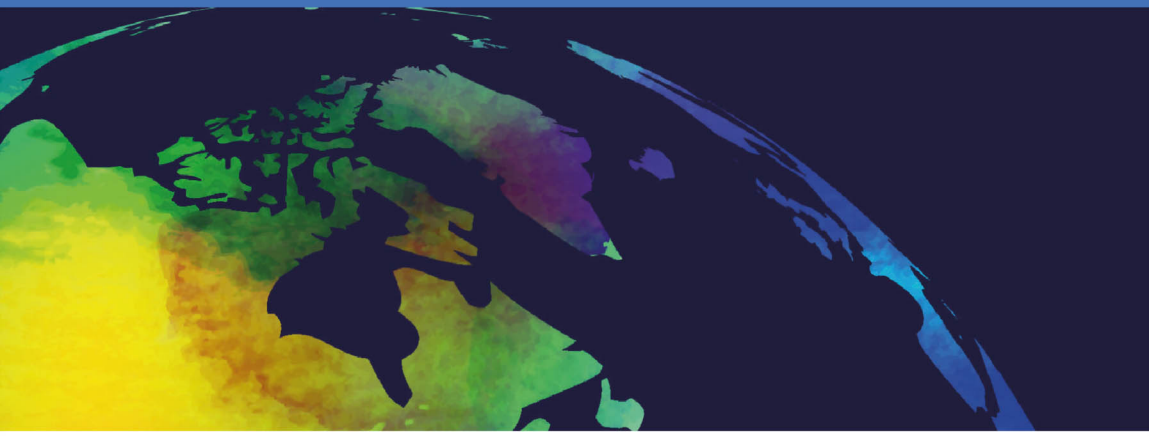

Challenges in Environmental Communication

A Global Perspective

EDITED BY
BARTŁOMIEJ ŁÓDZKI
AND JUSTYNA ARENDARSKA

Challenges in Environmental Communication

This book offers a comprehensive examination of the multifaceted roles of communication in addressing global environmental challenges.

The overarching framework connecting all chapters is the belief that environmental communication is at a decisive moment, as effective communication interventions are critical for the success of global efforts to address the ecological crisis. The book emphasises the need for a global perspective in environmental communication, highlighting that dominant narratives must begin incorporating diverse voices, including minorities and marginalised communities. Chapters explore case studies such as the communication strategies of minority communities, the use of branding campaigns as an element of environmental communication and environmental communication during war. Ultimately, the contributors argue that environmental communication can be a powerful tool to raise awareness, foster public engagement and drive meaningful change in pursuit of environmental sustainability and social justice. Environmental justice and environmental communication as a care discipline are central themes, outlining the need for equal access to a healthy environment.

Bridging various academic fields to provide a holistic overview of communication as a key element of current environmental issues, this book will be of interest to researchers in the field of media and communication, environmental studies, political science and public diplomacy.

Bartłomiej Łódzki is an Assistant Professor at the University of Wroclaw, Poland. He is also the co-editor of *The Covid-19 Pandemic as a Challenge for Media and Communication Studies* (Routledge, 2022).

Justyna Arendarska is an Assistant Professor at the University of Wroclaw, Poland.

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Contents

Contributors

Justyna Arendarska is a political scientist and media scholar at the University of Wrocław. Her research focuses on public diplomacy, strategic communication and the role of media and digital technologies in shaping public discourse. She currently researches feminist foreign policy, focusing on its communicative dimension.

Maja Chacińska is a Scandinavian Studies scholar with a post-doctoral degree in media and communication studies. Also, she is an Associate professor at the University of Gdańsk. Her research includes media history, media systems, the educational role of public service media in Scandinavian countries and Sámi media and cinema.

Alberto Lanzavecchia holds an MSc. in Financial Management and a PhD in Banking and Financial Markets. Also, he is an Associate Professor at the University of Padova, and his research explores sustainable finance and business and human rights. He coordinates the PhD programme in "Human Rights, Society and Multi-level Governance" and conducts sustainability research initiatives.

Bartłomiej Łódzki is an Assistant Professor at the Institute of Journalism and Social Communication (University of Wroclaw). His primary research interests include political communication, climate and environmental communication, as well as the influence of mass media and new technologies. He is a Member of the International Environmental Communication Association, the Polish Communication Association, and ECREA.

Natalia Pietruszka is a PhD candidate in Political and Administrative Sciences at the University of Wrocław. Her research explores criminal policy, including penal populism and state responses to human rights defenders. She gained experience at the universities in Wrocław, Padua, and Cagliari. Her research background includes legal practice and public sector work.

Michal Plšek holds a PhD in Law from the University of Milan-Bicocca, where his research focused on the integration and compatibility of sustainable development principles into international investment law. He is currently affiliated with a research-driven NGO specialising in systems thinking and facilitating stakeholder engagement in global sustainability governance.

Magdalena Ratajczak is a political scientist and an Associate Professor at the Institute of International and Security Studies, University of Wrocław, Poland. The main areas of her scientific interests include diaspora media, diaspora diplomacy, migration and intercultural communication. She is a member of the Polish Communication Association (head of Intercultural and International Section).

Marta Ryniejska-Kiełdanowicz is a political scientist and an Associate Professor at the Institute of International and Security Studies, University of Wrocław, Poland. The main areas of her scientific interests include public diplomacy and the role of cities in diplomacy. Her interests focus on international public relations and branding.

Marcelina Zuber is a Sociologist and an Associate Professor at the Institute of Sociology, University of Wroclaw, Poland. Her research fields include sociology of science, science communication, environmental communication and sociology of culture and interculturalism. She is also a Member of the Science of Science Committee of the Polish Academy of Sciences (PAN) and of the National Communication Association (USA).

Introduction

Bartłomiej Łódzki and Justyna Arendarska

Environmental and climate issues have become more significant on the global political and social agenda in recent years, although armed conflicts have partially overshadowed them. Nevertheless, these issues have a substantial impact on legislative processes and the rhetoric and strategies of political campaigns as well as the programme initiatives undertaken by both government bodies and non-profit organisations. Environmental communication has become an indispensable dimension of global socio-ecological transformation in an era of rapidly accelerating climate change. It's closely related to science communication and uses scientific research to support arguments about environmental concerns, and for supporters and opponents both, the voice of science is a central point of public debates (Comfort & Park, 2018; Cox, 2013; Schäfer & Painter, 2021).

In this book, we discuss environmental communication in several realms, such as international business, government policies, international agreements, branding, the criminalisation of climate activists' activities and feminist approaches to communication strategies for environmental justice. The articles feature critical perspectives that probe the limitations of actions by political actors, international corporations and societies. By exploring these often-overlooked areas, the book reveals how effective communication can significantly enhance understanding of local and global environmental actions.

The overarching framework connecting all the chapters is the belief that environmental communication is at a decisive moment, given that effective communication interventions are critical for the success of global efforts to address the ecological crisis. Second, the book emphasises the need for a global perspective in environmental communication, highlighting that dominant narratives must begin incorporating diverse voices, including minorities and marginalised communities.

Environmental justice and focusing on environmental communication as a care discipline (Pezzullo, 2024) are central themes that provide a common framework for all contributions, encompassing equal access to a

healthy environment, regardless of race, class, gender or origin. It focuses on the social inequalities stemming from the disproportionate burden of environmental degradation on poor and marginalised communities. The authors explore how law and policy can address these injustices, aiming to ensure equal participation in decisions about natural resources. In conclusion, the authors highlight the potential of environmental communication to engage the public in raising awareness of global issues.

Alberto Lanzavecchia delves into the global challenges of climate change, biodiversity loss and economic justice. He brings to light the intricate web of political, economic, social and environmental crises, attributing a significant portion of the world's conflict and insecurity to resource scarcity in the face of burgeoning populations and industrial demands. Lanzavecchia's argument against the prevailing notion of sustainable economic growth, a concept endorsed by many global and regional policies, is not just a critique but a call to action. He supports his stance with evidence that decoupling economic growth from environmental impact is a myth, further underlining the global implications of this issue. The article underscores the pressing need to shift our focus from climate change mitigation to biodiversity conservation and global justice. Despite many scientific reports and international agreements, current efforts to mitigate climate change are falling short. Instead, the priority should be on preserving biodiversity and the natural environment. This approach is crucial for achieving true sustainability and ensuring long-term human welfare. The author emphasises that a multifaceted approach to environmental communication and public diplomacy is necessary to achieve the profound socio-cultural changes required for sustainable development.

Marcelina Zuber's article explores the roles of scientists and media in shaping public discourse on climate change. Zuber contrasts the scientific discourse with shifting media narratives and underscores the importance of scientists and science communicators in informing the public about climate issues. The article delves into scientists' differing motivations and obligations based on their institutional affiliations – academic, corporate or a blend of both. It highlights the challenges of maintaining objectivity and neutrality, which are significant when corporate interests influence scientists. The article also addresses the role of the media, noting a trend towards presenting opposing viewpoints on climate change, which can dilute the perception of scientific consensus. Additionally, Zuber suggests that weaker support networks among scientists might contribute to less effective climate science communication. The text calls for examining intercultural communication principles to better understand and improve the dialogue between scientists and the broader public. Ultimately, the article argues for greater transparency and a deeper understanding of the institutional contexts in which scientists operate. Addressing these dynamics contributes to ongoing

efforts to enhance trust and objectivity in environmental communication amidst growing global environmental challenges.

Michal Plšek posits that international treaties safeguarding foreign investments are crucial for attaining sustainable development. The article's primary objective is to delve into the correlation between bilateral investment treaties (BITs) and sustainable development, underscoring the necessity for a shift in formulating these treaties to encompass sustainability considerations. The author analyses the role of BITs in communicating policy priorities to foreign and domestic stakeholders. He underscores how model BITs convey a nation's dedication to sustainable development. For instance, Morocco's model BIT functions as a tool for environmental communication, signalling a move towards investment policies focused on sustainability. Bilateral and multilateral negotiations revolving around BITs serve as arenas for public diplomacy, enabling countries to showcase their commitment to sustainable development. Including sustainability clauses in BITs reflects a broader diplomatic endeavour to align investment policies with global sustainability objectives, demonstrating leadership and promoting international cooperation. The article also stresses the significance of forums such as the UNCITRAL Working Group III meetings, where state representatives can deliberate and advocate for sustainable investment practices.

The article by Natalia Pietruszka delves into the global trend of criminalising environmental human rights defenders (EHRDs). It aims to assess whether these actions by authorities are justified or represent an abuse of the criminal justice system to suppress advocacy for policy changes. The study examines various forms of criminalisation, such as the enactment of new anti-protest laws, the misuse of preventive measures, defamation campaigns and other damaging communication strategies. The research employs empirical methods to analyse the effects on EHRDs and their communities, legal regulations and the proportionality of state actions. Pietruszka discusses how the criminalisation of environmental activists often involves defamatory language and smear campaigns, which can intimidate activists, diminish their societal influence and pose a threat to democracy. The author highlights the utilisation of delegitimising communication, including labelling activists as 'eco-terrorists' or 'criminals', which erodes public trust and perpetuates the stigmatisation of these defenders. She suggests that garnering public support for environmental defenders and acknowledging their work, in addition to combating hate speech and eliminating stigmatising language, are crucial measures in preventing the misuse of the criminal justice system to suppress environmental activism.

The article by Justyna Arendarska highlights that feminist foreign policy, by addressing structural inequalities and promoting global justice, aligns with the goals of environmental communication. This alignment offers an

opportunity to explore how feminist narratives and frameworks can reshape public diplomacy in climate-related contexts, making communication more equitable, participatory and effective. The focus shifts to analysing how feminist principles enhance the communication strategies of climate diplomacy, fostering dialogue, collaboration and equitable responses to the climate crisis. The article explores how communication around climate adaptation has evolved into a core element of national strategies, influenced by major international agreements such as the Kyoto Protocol and the Paris Agreement. These agreements have catalysed shifts in global political narratives, integrating climate concerns into public diplomacy and communication campaigns. This evolution underscores the growing role of environmental communication in shaping perceptions, mobilising public engagement and promoting global solidarity in climate action.

Maja Chacińska's article discusses the communication strategies of the Sámi community about climate change and human rights violations, using two specific case studies: the proposed iron ore mine in Gállok, Sweden, and Norway's Fosen wind power plant. The Sámi, Europe's only Indigenous people, reside in the Northern regions of Norway, Finland, and Sweden, as well as the Kola Peninsula in Russia. The author analyses the Sámi's use of diverse media channels, including social media platforms such as Instagram, to present their arguments and garner support, fostering a sense of connection with their cause. The study compares environmental, cultural and human rights frameworks, observing that while the Gállok case emphasises environmental concerns, the Fosen case highlights human rights violations, as was acknowledged in a ruling by Norway's Supreme Court.

The article by Magdalena Ratajczak and Marta Ryniejska-Kiełdanowicz aims to highlight the potential of branding in environmental communication as a tool that enables states and international organisations to shape their image in the context of global action. Branding, as an element of environmental and climate diplomacy, can be situated within the framework of global studies which explore multidimensional and transnational processes such as globalisation and political, economic, social and cultural interdependencies. In this context, branding transcends its traditional marketing function, becoming a means of communication, identity-building and mobilising global communities to address shared challenges. Within global studies, branding in environmental and climate diplomacy can be viewed as a transnational phenomenon that not only influences international politics but also shapes global awareness, norms and values. As such, branding emerges as a critical component of contemporary global studies, linking aspects of communication, culture and politics in the face of 21st-century challenges. The article uses Switzerland as a case study, illustrating how the country strategically employs environmental communication rooted

in its traditional values, such as neutrality, innovation and environmental stewardship. Swiss environmental communication often incorporates regional specificities, emphasising the importance of water resources and glaciers – integral elements of its national identity as an Alpine country. Initiatives such as 'Blue Peace' underscore the role of water in global stability and sustainable development. Switzerland's strategy integrates citizen engagement and innovation through international collaboration, positioning the country as a responsible and credible partner in combating climate change. By leveraging branding as a diplomatic tool, Switzerland facilitates international cooperation, attracts funding and garners support for climate projects from both governments and private investors. The Swiss example demonstrates that branding can serve as an effective diplomatic instrument, fostering collaboration among states and organisations while shaping a narrative of collective responsibility and action. As such, branding proves to be a vital element of environmental communication, bridging gaps between global, national and regional levels in addressing the challenges of the 21st century.

The study by Bartłomiej Łódzki delves into the environmental communication strategies implemented by Ukraine's Ministry of Environmental Protection and Natural Resources in the context of the Russia-Ukraine war conflict. The Ministry plays a pivotal role in observing, disseminating and communicating information about environmental damage to the public and the international community, strongly emphasising platforms such as the COP27 conference. The research employs quantitative and qualitative content analysis, examining materials from the Ministry's website and international media articles during the COP27 period. The findings underscore the Ministry's focus on environmental hazards, economic repercussions and the impacts of Russian aggression while highlighting proactive initiatives such as the smartphone application EcoZagroza.

The publication is the culmination of research carried out by the interdisciplinary research team 'Environmental Communication in Times of Global Threats', under the guidance of Dr. Bartłomiej Łódzki from the University of Wrocław. Partnering with scientists from prominent academic institutions in Poland and Italy, the team actively contributed to the 3rd International Conference, Communication in the Network Society, themed 'Global Threats and Challenges in Environmental Communication and Climate Diplomacy: Developing Innovative Solutions'. This collaborative event, held in Wroclaw (Poland), was co-organised with the International Environmental Communication Association (IECA), the Polish Communication Association (the Section of Intercultural and International Communication) and the Human Rights Centre at the University of Padua.

The book is supported by the University of Wroclaw as part of The Excellence Initiative – Research University programme (IDUB).

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1 Facing the Climate Change Mitigation Challenge

A Shift to Biodiversity and Global Justice Imperative[1]

Alberto Lanzavecchia[2]

Setting the Background

We live in an era of widespread global conflict and rapid socio-economic transformation, which threatens the stability of the global economic order. Political, economic, social and environmental crises are deeply interconnected.

At the social level, one key driver of instability is the growing polarisation in living conditions: widening internal inequalities, limited social mobility and an increasing gap between so-called 'advanced' and 'developing' countries. Personal insecurity is rising, alongside escalating internal and international conflicts. Land conversion for productive activities, land grabbing from Indigenous or customary tenure holders and the erosion of Indigenous rights are accelerating across multiple regions. Furthermore, freedom of expression and political rights are being curtailed, including within several European Union member states, while violence against journalists and human rights defenders is on the rise, contributing to escalating migratory flows.

The underlying explanation for this polarisation, manifesting in conflicts, may be resource-based, or more precisely, driven by power over those resources. The world is witnessing a growing demand for economic development and technological progress, despite a sharp decline in natural resources *per capita*. While natural resources remain finite, consumption patterns are expanding exponentially, concentrating power in the hands of those who control these (increasingly scarce) strategic resources. Even peace is now being traded for strategic raw materials (by the United States) or natural gas (by the European Union) in the ongoing war in Ukraine.

A stark example of this dynamic is food consumption: over the past 60 years, global per capita meat consumption has doubled, rising from 22 to 43 kg per year. This surge has driven massive deforestation, increased greenhouse gas emissions, intensified chemical use in agriculture and placed growing pressure on freshwater resources.

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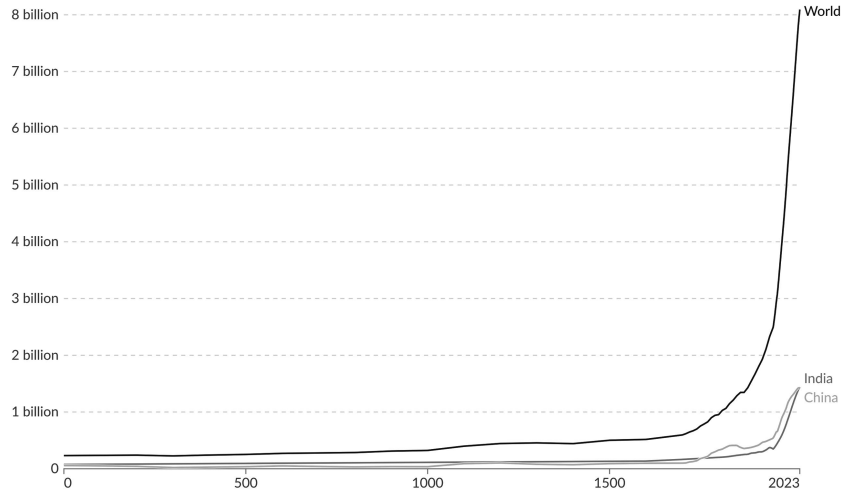

Figure 1.1 Population, 0–2023.

The growth in population by over three billion in the past three decades surpassed the total human population expansion observed in preceding millennia (Figure 1.1).

Trends matter; the scale of a trend even more so: *Anyone who believes that the fairy-tale of exponential economic growth can continue indefinitely in a finite world is either a fool or an economist*.

Alongside population growth, energy consumption is even more relevant: it is surpassing the rate of population growth. Energy production is not only part of GDP, but it also fuels it – without energy, GDP would be insignificant. Yet, energy production generates costs which are not accounted for in GDP: the destruction of biodiversity and climate change.

Kaya Identity shows the determinants of CO_2 emissions: number of consumers, GDP per capita, energy used to power every single GDP unit (energy intensity) and the CO_2 emissions for every single energy unit (carbon intensity). Kaya Identity makes it unmistakeably clear that CO_2 emissions are growing steadily, with no sign of even stabilising around current levels (Figure 1.2).

The good news is that technological progress (energy efficiency in transportation, buildings and manufacturing) will continue to reduce the amount of energy we use per dollar of GDP: according to Jorgen Randers (2012), the world's future energy consumption will peak around 2030 – very soon.

However, the bad news is that a strong expansion of coal and gas energy sources is expected during the next 20 years (which are more convenient in terms of price and political lobbing in many industrialised countries), thwarting the projected halving of 1990 emissions by 2050. Many higher-income countries have managed to achieve economic growth while

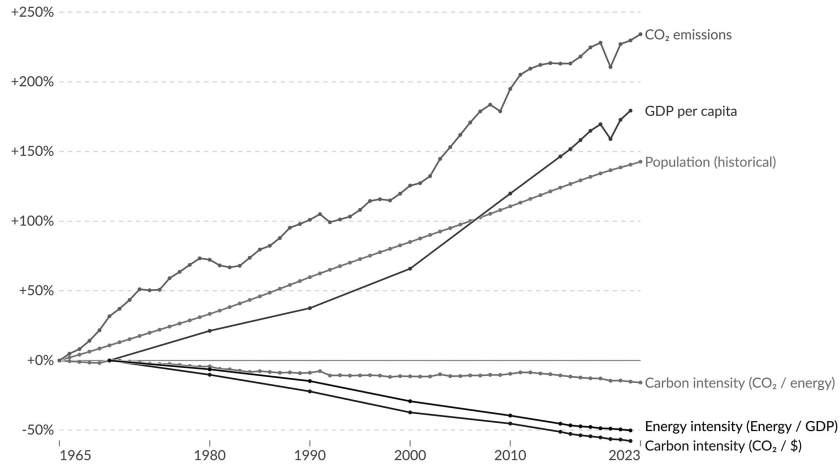

Figure 1.2 Kaya identity: drivers of CO_2 emissions, World.

reducing emissions; however, decoupling the two is not real in manufacturing economies such as China and India, which together account for nearly 3 billion people (Figure 1.1 and Figure 1.3).

Since the 1980s, climate change has been recognised as one of the crucial areas for the global community. The establishment of the Intergovernmental Panel on Climate Change (IPCC) in 1988 and its periodic assessment reports provided a robust scientific foundation, effectively communicating the urgency for a call to action. The scientific consensus on anthropogenic-driven climate change played a pivotal role in raising awareness in business sustainability, garnering consumers and political attention. Climate science has been mainstreamed, and together with the politically prioritised and communicated key environmental issue and threat of climate change, it has been firmly established in public consciousness.

However, the same level of political attention and urgency has not been extended to the issue of biodiversity loss. Biodiversity, short for biological diversity, refers to the variety of life on Earth and the complex relationships between organisms and their habitats. Beyond its intrinsic value, biodiversity is essential for human well-being, providing direct and indirect goods and services – known as ecosystem services – that underpin both prosperity and survival.

Since 1500, documented extinctions have reached 765 species, including 79 mammals, 145 birds and 36 amphibians. Today, species are disappearing at an alarming rate, with estimates ranging from 10 to 690 extinctions per week. The primary drivers of this crisis include excessive exploitation of species (e.g., hunting, fishing and illegal wildlife trade), agricultural expansion, pollution and the introduction of invasive alien species. Climate change is expected to further exacerbate biodiversity loss.

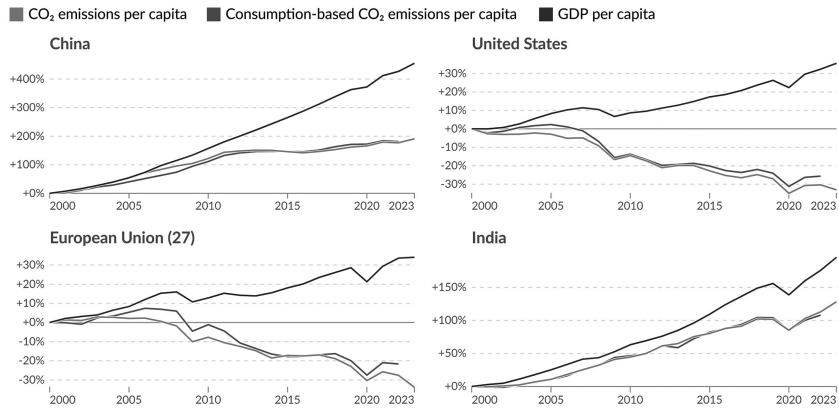

Figure 1.3 Change in CO_2 emissions and GDP.

Extinction represents a stark but narrow indicator of biodiversity decline, as it marks the disappearance of the last individual of a species – by definition, a rare event. However, broader analyses reveal a dramatic overall decline in wildlife populations. The Living Planet Report 2024, published by the World Wildlife Fund (WWF) and the Zoological Society of London, found that populations of 5,495 vertebrate species (mammals, birds, fish, reptiles and amphibians) declined by 73% between 1970 and 2020.

According to the IUCN Red List, more than 46,300 species are threatened with extinction, including 44% of reef-building corals, 1,199 mammal species (26% of described species), 1,957 amphibian species (41%), 38% of trees, 37% of sharks and rays, 34% of conifers, 26% of mammals, 26% of freshwater fishes, 1,373 bird species (12%) and 993 insect species (0.5%).

The major pressures on biodiversity are well-documented. Habitat destruction – driven by land-use change and land consumption – remains the most significant current threat. Other key factors include overexploitation of natural resources, pollution, invasive species and climate change. While habitat loss is the dominant pressure today, climate change is likely to become the most critical threat in the coming decades.

Despite the well-established scientific evidence of the ongoing biodiversity crisis, the political response has been comparatively muted. Is it due to the inherent complexity of biodiversity as a concept, or the lack of a single, unifying metric akin to atmospheric CO_2 levels for climate change, or the absence of a centralised scientific body equivalent to the IPCC to synthesise and communicate biodiversity research effectively to policymakers and the public?

Given the above premises, is it possible to enjoy both economic growth and environmental sustainability?

Do sustainability strategies for economic activities, when defined in terms of overall environmental impact (including relevant policies and communication initiatives) versus a focus solely on climate change (with corresponding 'net zero' policies and communication efforts), represent the same concept? Moreover, do policies and communication strategies aimed at reducing environmental impacts yield outcomes equivalent to those targeting reductions in greenhouse gas emissions?

Over the past decade, 'green' growth clearly dominated policy agendas at the United Nations, European Union and in other countries. Those policy and agendas are built on the assumption that decoupling *environmental* pressures from gross domestic product (GDP) is possible, leading eventually societies to a shared prosperity (the 'no one and no place left behind' claim).

Yet, Parrique et al. (2019) reviewed empirical and theoretical literature to assess the decoupling hypothesis. Their conclusion is both overwhelmingly clear and sobering:

> Not only is there no empirical evidence supporting the existence of a decoupling of economic growth from environmental pressures on anywhere near the scale needed to deal with environmental breakdown, but also, and perhaps more importantly, such decoupling appears unlikely to happen in the future.
>
> (Parrique et al., 2019: 3)

Decoupling is a myth, and its tentative implementation is even negatively impacting the environment and local communities: mining of critical raw materials or large dams for hydropower production to power our green economies are the most tangible evidence.

The hidden truth in 'green' growth strategies is that *whenever carbon neutrality is achieved, it will be at the cost of irreversible destruction of biodiversity and conversion of land to economic activities*. The pattern of degradation of unutilised biocapacity (biologically productive areas of the world not utilised for human purposes), coupled with the projections on global population, serves as an indicator of the extent of wilderness available to each individual in the future (Figure 1.4).

By 2050, most of untouched nature is anticipated to exist solely within protected areas; the remainder outside these regions will likely have been either cleared for agriculture or developed for urban areas.

In 2009, the planetary boundaries concept, proposed by Johan Rockström and a group of 28 internationally renowned scientists (Rockström et al., 2009), set nine environmental thresholds within which humanity can in a safe way continue to develop and thrive for future generations. Crossing borders increases the risk of triggering abrupt or irreversible environmental shocks on a large scale. Now, the latest update by Richardson

et al. in 2023 concludes that six of the nine boundaries have been transgressed (Figure 1.5). Boundaries are interrelated processes within the complex biophysical Earth system. This means that a global focus on climate

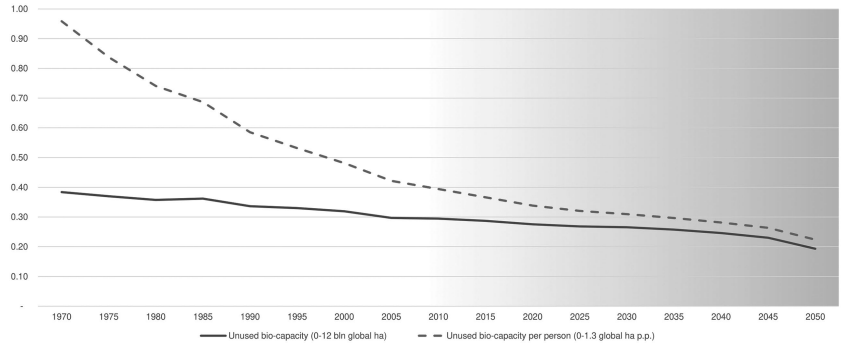

Figure 1.4 World biological capacity, 1970–2050.

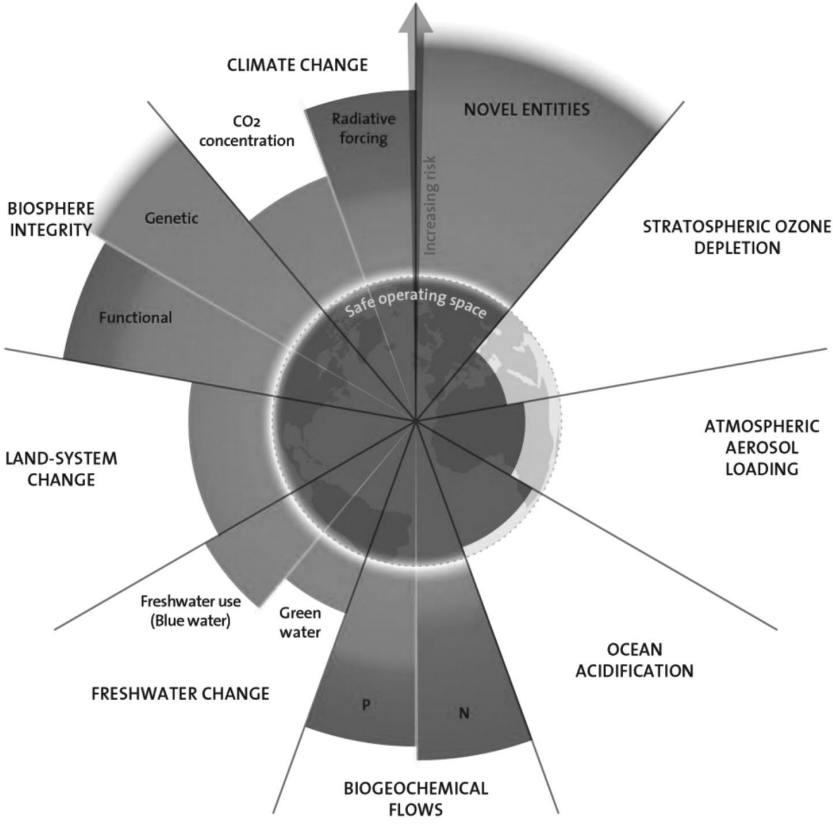

Figure 1.5 The 2023 update to the planetary boundaries.

change alone (like it is the global policy action) is misleading in the quest for sustainability or Earth resilience. Instead, understanding the interplay of boundaries, especially climate and loss of biodiversity, is crucial.

The clash between economic development and environmental sustainability is at the root of all today's instabilities: social, economic and environmental crises are intertwined. Despite the importance of this fact, it is sad to see that, in the ongoing discussions over sustainability and its governance, due attention is not paid to the biophysical basis of the economic process. We must shift public attention, implementation efforts and financial capital from climate change mitigation policy to biodiversity and land conservation. To this end, we need to unleash work ('thought and action') from the climate change agenda and refocus on this last challenge that we cannot lose.

Climate Change Mitigation Challenge Lost

The scientific community, including the Intergovernmental Panel on Climate Change (IPCC), along with international organisations such as the United Nations Environment Programme (UNEP) and the International Energy Agency, have consistently emphasised that climate change (Figure 1.6) represents the most critical threat humanity has ever confronted. The sheer volume of reports from these authoritative bodies underscores the gravity of this global challenge. The only strategy on the table is mitigation – greenhouse gas emissions must be reduced quickly and drastically.

To meet the target of 2°C global warming compared to the pre-industrial era, according to the Synthesis reports by the UN Framework Convention on Climate Change Synthesis (UNFCC, 2023), anthropogenic emissions must be reduced by 27% before 2030 – or by 43% to stay below the more

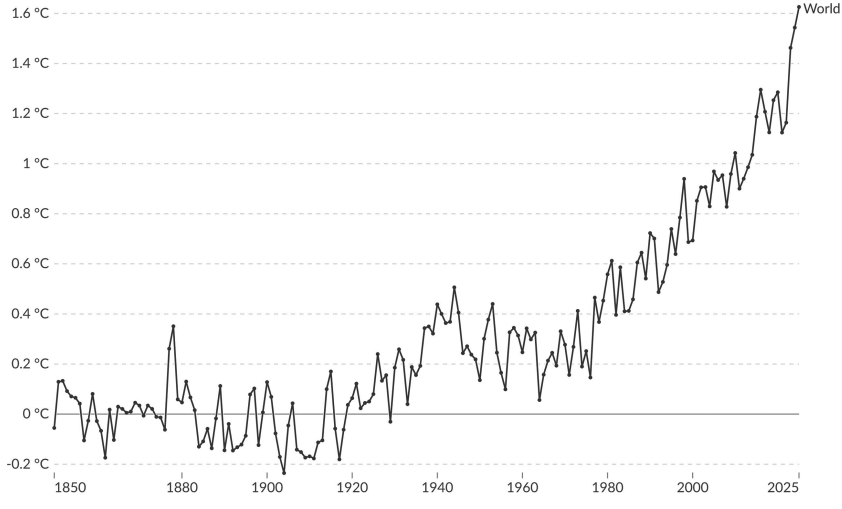

Figure 1.6 Global warming: Annual temperature anomaly.

ambitious 1.5°C target. If we convert the incremental temperature targets into how much CO_2 we can still permit to be released into the atmosphere before exceeding the critical temperature thresholds (carbon budget), we realise that the likelihood of achieving the targets is very limited.

In fact, the UNFCC report (2023) notes that current national plans (Nationally Determined Contributions) would use 87% of the carbon budget needed to stay below 1.5°C by 2030 (leaving an availability of only 70 Gt of CO_2 for those coming after 2030), while spending 38% of the budget associated with a 2°C increase. In 2030, emissions would fall only 2% from current levels, still remaining around 50 Gt annually. According to the UNEP's Emissions Gap Report (2023), the commitments and climate targets contained in the National Plans, albeit with considerable heterogeneity between countries, lead to a global temperature increase of between 2.5°C and 2.9°C.

What then is the likelihood of success of the climate change mitigation strategy? This is where we are hit with a cold shower of reality.

To have a 50% chance of staying below 1.5°C in the 2020–2030 decade, we would have to produce no more than 500 Gt of CO_2. This means that, at current emission levels, at the end of the decade we will probably have already breached the 1.5°C target set by the Paris Agreement. The UNEP Emissions Gap Report (2023) warns: even in the most optimistic scenario of current climate plans, the likelihood of limiting warming to 1.5°C is only 14%. These data have been known for a long time, but no breakthrough has been made in the decision-making bodies of companies and governments.

Let me recall what previously stated: energy powers GDP, and decoupling GDP from environment is a myth (Parrique et al., 2019). Three-quarters

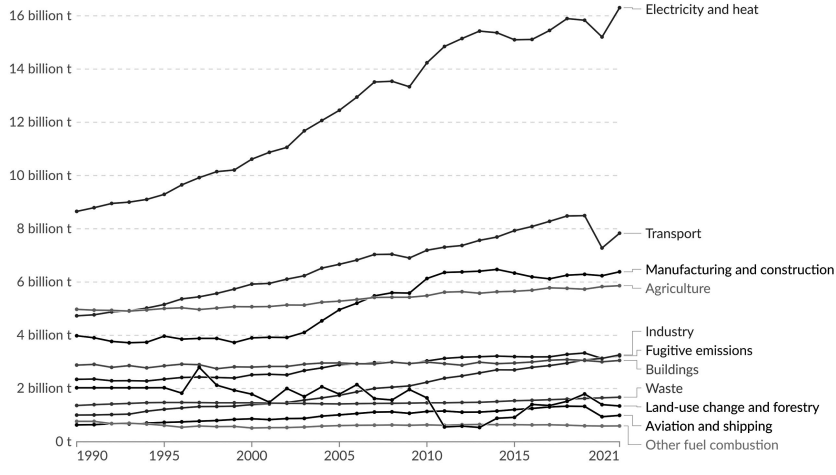

Figure 1.7 Greenhouse gas emissions by sector, World.

of the emissions that human activities put into the atmosphere each year (around 55 Gt CO_2 equivalent) come from the energy sector (Figure 1.7).

It is clear that the temporal and probabilistic window for action is increasingly narrow, and it is equally clear that the fossil energy we burn must be replaced with low-emission energy sources. According to many analysts (IEA, 2024), the goal of tripling the amount of energy produced from renewable sources is a realistic achievement. Nonetheless, it will serve to cover inaction on the front of reducing oil, gas and coal consumption. The growth of renewables should not stand alongside fossil fuels: it should replace them. But no government has the strength to impose the shutdown of an economic activity for reasons of the harm it does to the environment – a shutdown was imposed during the last pandemic, but the rationale was the preservation of public health, not the environment.

On the contrary, UNEP's Production Gap Report 2023 reveals that global fossil fuel production plans in 2030 forecast twice as much production as would be needed to keep emissions and temperature rise below critical levels, in line with the Paris Agreement. UNEP data show that current policies and national emission reduction plans fall far short of the pathways consistent with limiting global warming to 1.5°C or 2°C. By 2030, projected fossil fuel production is expected to be roughly twice the level compatible with the Paris Agreement targets, widening the so-called "production gap" between governments' pledges and their actual actions (SEI, Climate Analytics, E3 G, IISD, and UNEP 2023). This means that even with rapid renewable energy expansion, the continued burning of oil, gas and coal will keep the world on track for a temperature rise of 2.5°C–2.9°C.

The challenge at hand is to acknowledge our failure to address climate change stemming from human activities, and we must now inevitably adapt to the evolving environmental conditions. However, amidst this reality, one crucial environmental frontier demands our unwavering attention and concerted efforts, both in terms of resources and capital: the protection of biodiversity and land, which constitute two of the nine planetary boundaries (Rockström et al., 2009).

Last Call for Biodiversity Protection

The WEF's Global Risks Report 2023 explores some of the most severe risks humanity faces over the next decade. According to the 2023 edition, which concurred with the assessment that there had been a failure to implement strategies to combat climate change, and identified the loss of biodiversity and the collapse of ecosystems as the next most-severe source of risk. This ecological crisis has profound economic implications and requires an urgent commitment from all sectors of society.

Yet, biodiversity has an economic importance on global extractive economies: the total economic value of ecosystem services is more than one and a

half times the size of the global GDP (Costanza et al., 2014). Indeed, biodiversity is crucial for our ecosystems, and there is consistent literature emphasising the fact that nature and biodiversity play a crucial role in the provision of ecosystem goods and services for human activities (Naeem et al., 2009). Indeed, biodiversity ensures the provision of ecosystem services essential for human life such as food, materials, clean water, climate regulation and many others.

According to the European Commission's Impact Assessment Study (2023), investments in biodiversity conservation and restoration projects could bring significant economic benefits, estimated at EUR 70 billion by 2050. Benefits arise from ecosystem services such as carbon storage and sequestration, water quality regulation, pollination and production of renewable raw materials. The benefit-cost ratio related to such interventions would be 14.7, equivalent to saying that every euro invested in biodiversity can generate a return of €14.7 in the form of community benefits.

However, our linear economy is responsible for more than 90% of biodiversity loss and water stress (Van Oorschot et al., 2020). According to IPBES (2023), the main drivers of biodiversity loss can be found in five main causes: changes in (i) land and sea use (human action has significantly altered 77% of land and 87% of the ocean), (ii) overexploitation of species and natural resources (in 2022, humanity was using nature and its resources at a rate 1.75 times faster than the planet's ecosystems can regenerate), (iii) climate change (it does indeed harm lives), (iv) pollution (approximately 11 million tonnes of plastic are dumped into the world's oceans each year, affecting more than 250 animal species) and (v) invasion of alien species (since 1980, cumulative records of alien species have increased by 40%, negatively affecting native species).

Given these facts, it is necessary to implement transformative changes in the way we produce and consume: the circular economy (Webster, 2017) can be an alternative to the 'take-make-dispose' linear economy model, aiming to tackle the previously mentioned five main drivers of biodiversity loss. The circular economy could be the trigger for environmental sustainability by creating awareness of how commodities can be processed and by developing an effective relationship between environmental protection/biodiversity conservation and economic development (Jia et aal., 2020; Daly, 2012).

The European Union Critical Raw Materials Act serves as an illustration: the priority is given to supplying the materials essential for industry in European Union member states over emphasising social and environmental sustainability. Notably absent from this proposal is any consideration of revising an economic model that remains rooted in consumption-driven growth and is inherently reliant on energy at every stage of the process (Daly, 2023). It is crucial to recognise that sustainability is jeopardised not only by the manner in which goods are manufactured but, more significantly, by the consumption of unnecessary products, representing a genuine threat to biodiversity.

There Can Be No Social Justice without Environmental Justice: Moving Away from Useless Consumption

- The ultimate determinant of climate change and biodiversity loss is thus economic activity. However, the most recent trend on the part of finance and business actors is against environmental and social sustainability. Three facts, in my opinion, describe a global trend: Since 2023, farmers across all EU member states, initially mobilised in the Netherlands and Belgium, have been protesting against what they perceive as a squeeze on their earnings. They attribute this squeeze, in part, to green policies such as pesticide bans and nitrogen emissions curbs. Rather than safeguarding domestic farmers and promoting a shift towards agroecology, for instance, through measures like establishing minimum support prices, the EU has opted to accede to the demands of large-scale farmers and agribusiness organisations. This has entailed a reversal of key provisions of the Green Deal, including a commitment to halve pesticide usage by 2030 and the removal of a target to reduce farming emissions from its 2040 climate roadmap. It is important to note that the crux of the issue lies not in environmental regulations but in challenging the neoliberal framework, particularly the free trade agreements that currently govern the agricultural sector.
- Since February 2024, political pressure and anti-ESG initiatives have put the Net-Zero Banking Alliance (NZBA) – a group of leading global banks committed to aligning their lending, investment and capital markets activities with net-zero greenhouse gas emissions by 2050 – under strain. In recent months, 14 major US banks, including JPMorgan Chase and Bank of America, have left the alliance. NZBA, now with 134 members, has launched a consultation to revise its guidelines in an effort to prevent collapse, as seen with the Net Zero Asset Managers and Net-Zero Insurance Alliance. European banks are also considering withdrawal unless rules are softened to support the financial sector's role in the energy transition.
- In March 2025, Republican senators introduced a legislative proposal ('Protect USA Act') aimed at shielding American companies from the European Union's Corporate Sustainability Due Diligence Directive (CSDDD). The CSDDD, adopted in May 2024, mandates that companies identify, prevent and mitigate adverse impacts on people and the environment throughout their supply chains, addressing issues such as child labour, pollution and deforestation. Additionally, the directive is aimed to align business models with the goal of limiting global warming to 1.5°C. Notably, it intended to empower trade unions and non-governmental organisations to pursue legal claims in case of breaches.

In the context of mainstream economics, the question arises: to what extent should the economy continue to expand, referring to the physical expansion

of the economic subsystem into the finite biosphere? Drawing on Daly's perspective, we inquire about the optimal size of the economy. Specifically, are the escalating environmental and social costs outpacing the benefits of production, transforming growth into uneconomic growth and ultimately diminishing our well-being?

Several developing nations are currently experiencing genuine economic growth, where the additional advantages of growth outweigh the associated costs. However, it's crucial to recognise that the global resources are limited. Consequently, the responsibility of constraining growth and implementing relevant policies primarily falls upon wealthier nations. In these affluent countries, economic growth has paradoxically produced economic unsustainability. It is imperative for affluent nations to create ecological room for less prosperous nations to develop. This process aims to foster convergence towards a shared standard of resource utilisation that ensures a satisfactory, albeit not extravagant, quality of life. Furthermore, this approach is geared towards sustainability over a lengthy, though not infinite, timeframe.

While landing after sunset in most cities outside Europe, I noticed a striking darkness. Even within city boundaries, the illumination level is significantly lower compared to many cities in other so-called 'developed countries'. But is more lighting necessary? Would I visit this city again? These two questions illustrate sustainability in practice, addressing two distinct stakeholders: the public sector, representing taxpayers and individuals, considering the financial impact on their own wallets.

As far public policies are concerned, we are stuck at the conclusions wrote in 1972 on the Limits to Growth Report for the Club of Rome:

> As soon as a society recognises that it cannot maximise everything for everyone, it must begin to make choices. Should there be more people or more wealth, more wilderness or more automobiles, more food for the poor or more services for the rich? Establishing the societal answers to questions like these and translating those answers into policy is the essence of the political process. The equilibrium society will have to weigh the trade-offs engendered by a finite earth not only with consideration of present human values but also with consideration of future generations.
>
> (Meadows et al., 1972: 181–182)

Policymakers must recognise that effectively addressing environmental degradation may require a direct reduction in economic production and consumption, particularly in the most affluent nations. Scholars advocating post-growth perspectives suggest complementing efficiency-driven policies with sufficiency measures, shifting the focus from the former to the latter. In this context, there is an urgent need for policymakers to explore and support viable alternatives to economic growth.

A key concern is that slowing growth in wealthy nations could negatively impact poorer countries by reducing export opportunities. In response, Herman Daly argues that developing economies should transition away from export dependence and instead strengthen domestic markets through an import-substitution model.

Many contend that mainstream economic policies and government strategies prioritise growth because of its perceived effectiveness in addressing three key issues: income generation, employment and pensions. Additionally, a fourth challenge – national debt – further entrenches reliance on economic expansion. Without a clearly defined alternative, societies remain locked into traditional growth models.

One possible solution is stabilising GDP while excluding environmentally or socially harmful production and ensuring the fair distribution of this limited output. However, the crucial question remains: who will champion and implement such an alternative? Critics argue that short-term interests dominate decision-making, preventing both capitalist economies and democratic societies from sacrificing immediate benefits for the well-being of future generations.

Ultimately, the choices made today will shape the future. If an alternative path exists, it is likely to emerge from the grassroots – the billions of individuals forming the foundation of society.

The shift required is not merely economic; it is social and cultural. It challenges the prevailing mindset of 'I consume, therefore I am' and rejects the notion that personal identity is tied to material possessions. This is not about saving today to consume more tomorrow, as that would merely prolong the same consumerist cycle. Rather, it calls for constructive austerity, a lifestyle choice that is both acceptable and desirable, enabling a structural reduction in production and consumption (Langer, 1992).

At this stage, some readers may be sceptical about this argument. However, let us at least acknowledge a shared premise: in the developed world, excessive production and consumption contribute to pollution, unsustainable energy use, inadequate waste management, over-construction and landscape degradation. Economic disparities persist, both within nations and between generations. Importantly, the negative consequences of this system disproportionately affect the less affluent, while wealthier individuals engage in the most excessive consumption. Yet, despite limited means, lower-income groups are also influenced by consumer culture, aspiring to the same material symbols of success – cars, luxury holidays and the latest iPhones – often equating happiness with accumulation.

Recognising the need to curtail excessive consumption is fundamental to addressing today's ecological and social crises. However, embracing constructive austerity should not be seen as a sacrifice but rather as an opportunity to enhance well-being and self-determination.

Choosing to consume less should not be viewed merely as a privilege or an avoidance of material excess but as a form of liberation from a system that equates wealth with success. This shift requires a profound cultural transformation and a renewed focus on community and social connections.

Reducing dependence on material and financial resources means valuing non-monetary aspects of life – interpersonal relationships, shared knowledge and meaningful experiences beyond material possessions. This transformation challenges prevailing economic models by fostering greater interdependence and community support.

Such an alternative cannot simply be framed as an improved, eco-friendly version of the current economy. Otherwise, it risks perpetuating the same extractive and wasteful patterns. Instead, it represents a fundamental rethinking of economic priorities and social values. Whether billions of individuals will willingly choose this path over a consumerist model based on capital accumulation remains an open question. Yet, it may be the only viable opportunity for a truly sustainable future.

Implications and the Way Forward

In addressing the pressing issues raised in the article, effective communication plays a pivotal role in driving change. Given the multifaceted nature of the challenges discussed – encompassing economic, environmental and social dimensions – a collaborative and multi-stakeholder approach is necessary.

First and foremost, governments and policymakers must take the lead in communicating and addressing these challenges. The article highlights the interconnection of economic growth, environmental sustainability and social justice, emphasising the need for a paradigm shift in policy priorities. It is crucial for policymakers to engage in transparent communication with the public, clearly articulating the trade-offs and choices involved in decision-making. This involves acknowledging the necessity of downscaling economic production and consumption in wealthier countries while promoting a shift in developing nations towards domestically driven economic growth that avoids reliance on the consumption of hedonistic and unnecessary goods or services, thus addressing environmental breakdown.

Establishing the significance of biodiversity to economic ministers, the business community and the financial sector necessitates a robust scientific and economic evidence base. To this end, it is imperative to have a solid scientific foundation capable of demonstrating that biodiversity-based solutions can achieve sustainable development priorities and pave the way for 'transformative change'.

The crux of the matter lies in the ability to convincingly illustrate how preserving and restoring biodiversity can unlock tangible economic benefits, catalyse sustainable growth and mitigate risks associated with ecosystem degradation. This requires a multidisciplinary approach that integrates

ecological knowledge with economic analysis, quantifying the value of ecosystem services and the costs of biodiversity loss.

By presenting a compelling economic rationale grounded in rigorous scientific data, policymakers and industry leaders may be more inclined to prioritise biodiversity conservation and incorporate it into decision-making processes. Ultimately, bridging the gap between scientific understanding and economic imperatives could facilitate a paradigm shift, where biodiversity is recognised not merely as an environmental concern but as a critical asset for long-term prosperity and resilience.

International organisations (likewise the IPCC) can leverage their platforms to facilitate global discussions on the interconnected challenges of climate change, biodiversity loss and economic sustainability.

In addition to governments, businesses play a crucial role in shaping the economic landscape. The article highlights instances where major asset managers and proposed sustainability directives faced resistance. Here, clear communication channels between businesses and stakeholders are imperative. Companies should engage in transparent reporting on their environmental and social impact, providing consumers and investors with the information needed to make informed decisions.

Scientists must develop more effective communication strategies. Too often, scientific studies, research and assessments remain confined within a narrow circle of experts, limiting their broader impact. Additionally, language barriers hinder the dissemination of nationally produced scientific knowledge on a global scale. To address these challenges, all sources of knowledge should be leveraged, including traditional wisdom and the expertise of Indigenous communities, ensuring a more inclusive and comprehensive understanding of environmental and sustainability issues. Educational institutions also have a role in fostering awareness and understanding of the challenges discussed in the article. Integrating sustainability and environmental studies into academic curricula can equip future generations with the knowledge needed to address these complex issues. Researchers and academics should actively contribute to public discourse through accessible communication of their findings.

Civil society, including non-governmental organisations and advocacy groups, serves as a critical force in holding governments and businesses accountable. Communicating their findings and concerns to the public can mobilise collective action and pressure decision-makers for positive change.

Finally, individuals play a pivotal role in driving cultural and social change. Encouragingly, the alternative proposition presented in the chapter aligns with the idea of constructive austerity and a shift towards a more sustainable and community-centric lifestyle. Communicating this alternative to the wider public through various channels, including social media, can contribute to changing societal norms and values.

In summary, a comprehensive communication strategy involves coordinated efforts from governments, international organisations, businesses,

educational institutions, civil society and individuals. This strategy should prioritise transparency, inclusivity and accessibility to foster a shared understanding of the challenges and the collective responsibility in addressing them. As demonstrated during the recent pandemic, effective communication strategies can orient public and business activities towards the common good, in this case, public health. Similarly, a well-executed communication plan can raise awareness, influence behaviours and mobilise collective action towards preserving biodiversity and addressing environmental challenges. However, failure to communicate the urgency and significance of these issues effectively may result in inaction, further exacerbating the crisis. Ultimately, human life will persist, but the world will be vastly different from what we know today, and it will be almost unrecognisable.

Notes

1 This article represents the revised version of the keynote speech titled 'Climate Change Mitigation Challenge: Lost. Biodiversity and Global Justice Are the Only Ones Left,' presented at the international conference 'Global Threats and Challenges in Environmental Communication and Climate Diplomacy: Developing Innovative Solutions'. The conference took place at the University of Wrocław, Poland, on November 30–December 1, 2023.
2 The doctoral programme I coordinate intersects the fields of business and human rights, using legal, political, economic and social geography analyses. Additionally, my involvement with the Jean Monnet Excellence Centre on Climate Justice explores issues surrounding climate change and the social conflicts caused by the exploitative use of nature as just an input for economic processes. Furthermore, through my association with the National Biodiversity Future Centre, I focus on promoting biodiversity protection within economic activities, both centres being generously funded by the EU. Therefore, the insights I provide in this paper stem from these observatories, along with my sensitivities and intuitions, but do not extend beyond that.

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2 Conflicting Discourses About Climate Crises

Scientists and the Media as Discourse Shapers

Marcelina Zuber

The role of scientists and specialists in environmental communication in informing the society about the newest findings and recommendations in the area of climate protections is crucial. This text aims at analysing the role of scientists, more specifically specialists in the area of climate and representatives of science communication, in shaping the public discourse of the climate crisis. The discourse of science is contrasted with the changing media discourses on this matter.

Scientists as Trustworthy Shapers of the Climate Crisis Discourse?

Before addressing the specificity of scientific discourse and its reflection in the media, we should ask the question whether in the contemporary world one can always trust the unquestionable authority of scientists.

Science is performing a crucial role in contemporary society (Latour, 2004). On the individual scale, we can observe this in our consumer choices; globally, we experience the results of decisions taken by governments, based on scientific reports. Decisions of this kind pertaining to climate and climate change can be beneficial for the planet while having negative social and economic consequences for specific societies and social groups. Thus, the role of scientists and specialists in science communication in informing society about the newest findings and recommendations in the area of climate protection is crucial.

It is very important, though, to take into account the fact that scientists are functioning within the roles shaped by their institutions, conducting research and publishing its results according to organisational models that can be classified as academic, professional/corporate and post-academic (Krimsky, 2003; Ziman, 1996; Woolgar, 1988). The role of the organisational environment in which scientists operate is substantial in the contemporary world, as we can observe the apparent and growing tension between the assumed obligation of scientists to provide society with

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objective information, and their duties associated with their institutional roles. This tension is reflected in the public discourse about the environment and, more specifically, about climate change.

It should be remembered that only in the academic model, where scientists are employed by institutions sponsored mainly with public money, they have the obligation to share all the results of their research, at all stages of the process, with the members of their community and with the wider society. It is relatively easier for them to follow the rules of the scientific ethos described by Robert Merton (Merton, 1942), especially the rule of so-called 'communism' (since scientists are profiting from the discoveries and achievements of the past generations, they are not allowed to limit access to the results of their research). In this vision, the ethics and principles of science function not only as moral obligations, but first of all as rules of conduct regulating research, so we all, as members of the society, can have absolute trust in all the pronouncements provided by scientists: according to Merton, it is impossible to perform the role of a researcher without following the rules of the ethics and principles of science.

However, in the very text introducing the category of scientific ethos, Merton signals already that some developments in the relationship between researchers and representatives of business sector are hampering practising the rule of 'communism' in science (he cites the example of the American telecommunications company, Bell Telephone, which enjoys sole proprietary rights to the technology it develops). We should be aware that the tendency observed in the middle of the former century by Robert Merton continues uninterrupted and is growing in the contemporary world.

In today's world, scientists increasingly work within a 'professional' or 'corporate' model. As employed by corporations, they have to follow the rules of the corporate world based on competition for the market. The consequence for the scientists is that they can share only those results of research that support the position of their company on the competitive market: they are allowed to publish only the 'success stories' about their research, hiding information about potential negative side effects of the findings. Conflicting obligations of this kind are especially visible in the field of life sciences, where researchers can have difficulties in sharing information about anew and more efficient medicine until their employer sells the inventory of the old medicine. Publications by Sheldon Krimsky and the ones referred to in his lectures about pathologies in sciences provide us with many examples of this phenomenon (Krimsky, 2003, 2004).

Working at the university and profiting from the authority of the academy, perceived by the general public as the guarantee of objectivity, while being funded by the private corporations, is widely practised within the 'post-academic' model (Ziman, 1996). In this model, scientists remain in the academy and retain their university affiliations, but due to their links with the corporate world

resulting from research pursuits on behalf of multinational companies funded by the (typically extremely generous) grants offered by them, scientists have to comply with the obligations of the two respective organisational environments: academia and the corporate world. This model is very misleading, since scientists are perceived as members of academia, thus observe the rules of the scientific ethics, even as their public activities are to a large extent regulated by the norms of the corporate world. According to researchers who have explored this development (Krimsky, 2004) many universities, the most prestigious ones included, strongly encourage their academic staff to look for opportunities offered by the corporate world, since engagements of this kind enhance the financial possibilities of the public research institution, allowing for new laboratories to be established and sponsoring very expensive research procedures that open the way to important discoveries that can be monetised. The important negative outcome for the wider society, apart from the ones described in reference to the corporate model, is the difficulty in finding truly objective experts willing to testify in court in cases against corporations: the number of scientists with the requisite expertise is limited, and many of them may have a history of working for the company in question.

Both the professional and the post-academic models are expanding in the contemporary world, so we should be aware of the conflicting obligations of scientists working for or cooperating with corporations. The negative consequences of the growing presence of these models mustn't be neglected, especially in sectors connected with environmental protection: mining, power generation or agriculture. We can easily assume that the discourse of those scientists operating within the professional and/or post-academic models does not have to heed the obligation to be fully neutral and objective. However, the discourse can be perceived as fully neutral and objective by the less aware members of the society, especially in cases where scientists identify themselves as university-affiliated and/or operating under the university auspices.

In reference to disciplines where scientific research is intended to produce results whose application brings enormous profits to corporations, we should be very thorough and critical in classifying the pronouncements of scientists as true and fully reliable; this is especially important with respect to branches of knowledge connected with environmental protection.

Reliable Accounts of Climate Change vs the Perspective of Laypersons

Taking the above conclusion into account, we should appreciate the role of truly reliable sources of information. It is worth noting that in the field of environmental science we all, as representatives of the global society, can have very easy access to definitely objective and professional accounts on the present state of the climate, thanks to reports prepared by the most

renowned scientists – for instance, the consecutive Reports of Intergovernmental Panel on Climate Change (IPCC, 2025). The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body, created in 1988, for assessing the science related to climate change. At present, environmental scientists from 195 member countries are engaged in the activities of this body. According to Owen (2022),

> The IPCC was created to provide policymakers with regular scientific assessments on climate change, its implications and potential future risks, as well as to put forward adaptation of the preventive measures. Through its assessments, the IPCC determines the state of knowledge on climate change. It identifies where there is agreement in the scientific community on topics related to climate change, and where further research is needed. The reports are drafted and reviewed in several stages, thus guaranteeing objectivity and transparency.

Apart from assessment reports, the IPCC is preparing special and methodology reports, for instance: Special Report on Climate Change and Cities, Global Warming of 1.5°; Climate Change and Land; 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and The Ocean and Cryosphere in a Changing Climate. The 2027 IPCC Methodology Report on Inventories for Short-lived Climate Forcers is under preparation.

The first IPCC report, FAR Climate Change, published in March 1990 (IPCC, 1990), clearly stated that the crisis is caused by human activity. This diagnosis is reinforced and repeated based on extremely reliable data in consecutive, very detailed annual reports. The most recent assessment report, published in 2023 (IPCC, 2023), reinforces the initial diagnosis.

The reports of the European Environment Agency, with a very recent one, also show the threats to the climate caused by human activity very clearly:

> Greenhouse gas emissions from human activities – mainly from burning fossil fuels, industrial production and agricultural activities – are causing our climate to change at a rapid pace. Climate change is already impacting Europeans' daily lives and will continue to do so for the foreseeable future. Already, flooding, droughts, heatwaves and other climate-related hazards are becoming more intense and frequent in Europe and abroad. These hazards have significant health and economic costs, while also impacting ecosystems.
>
> (EEA, 2025)

The reports cited above are characterised by high levels of experimental expertise, which has a practical impact and can guide the wider public. We have to be aware though that the systemic disparity of knowledge

between experts and laypeople fosters fundamental communication problems, so it is really important to know how the public perceive the findings of environmental scientists. Recent empirical studies (Potvin & Bélanger, 2024) can make us more aware that the very fact of being informed about controversial issues such as the climate crisis does not always result in the change of opinion as expected by scientists. Conceptual conflict events can result in one of the following results: (1.) sub-assimilation: where learners try to assimilate the new information but do it in a fragmental or incompetent manner, (2.) ignoring, (3.) rejection, (4.) exclusion (acknowledging data but without changing the general understanding), (5.) uncertainty about validity, (6.) uncertainty about interpretation, (7.) abeyance (temporarily suspending judgement about the data), (8.) reinterpretation of the new data to fit existing beliefs, (9.) belief decrease, (10.) peripheral change, (11.) theory change or belief change. Interestingly, 'the desired category (theory or belief change) in the sample under study was largely minority and the obstacles to the consideration of new and initially uncomfortable ideas were many' (Potvin & Bélanger, 2024, p. 2). Moreover, a growing body of research has shown that learning new concepts does not eliminate old ones (Potvin et al., 2020, p. 2), so a conceptual change event should be understood as a conceptual prevalence shift, not as a transformation. This finding can be of importance for specialists in environmental communication

Media Discourses on Climate Change

The above reports on climate change are reliable and easily accessible. However, from at least 1990 (which is somehow ironic since it is the year when the first report of the IPCC was published), we can observe in the public and media discourses the growing presence of voices questioning the role of humans in the climate crisis and even climate change itself.

Consecutive empirical studies conducted by Anabela Carvalho seek to answer a crucial question: why is the scientific discourse on climate change inadequately represented in the media? Particularly relevant in this context is her now-classic article, *Ideological Cultures and Media Discourses on Scientific Knowledge. Re-reading News on Climate Change,* published in Public Understanding of Science (Carvalho, 2007). In it, Carvalho presents the results of her research on climate change coverage in three British broadsheet newspapers: *The Guardian*, *The Independent* and *The Times* (including their respective Sunday editions). Her analysis spans the years 1985–2001, a period that concludes with the publication of the IPCC's Third Assessment Report in 2001.

Approximately 4,500 core articles on climate change were published in the three newspapers in this timeframe. A detailed discourse analysis was conducted of all articles published between 1985 and 1988. The

results reveal that, until the end of 1988, scientists were portrayed as the uncontested central actors and primary definers of climate change. The media presented the link between rising temperatures and human activity as unequivocal, relying heavily on journals such as *Science* and *Nature* as authoritative sources. Climate change was framed as a manageable and potentially solvable scientific issue to be addressed by credible experts (Carvalho, 2007, p. 228).

However, from 1991 onward, the tone of 'uncertainty' ever-more frequently characterises the references to causes of climate change in those newspapers, together with ideological stances: in *The Times* for instance 'scientific authority ranks below Conservatism, the preference for a non–regulatory government and reinforcement of the social and economic status quo' (Carvalho, 2007, p. 231). The analyses show that by 1990, science had lost most of the initial high ground in definitions of the greenhouse effect in the media. 'Governmental moves led to most media discourse being taken over by politicians and other actors' (Carvalho, 2007, p. 231). In the IPCC's second assessment report, published in 1995, it is stated even more clearly that human activities have an impact on climate. Strikingly, the analyses of science reports in the newspapers under study show that 'strong ideological filters were in place' in those newspapers, so while scientific knowledge on climate change was becoming more solid, an image of uncertainty and disagreement was amplified by newspapers like *The Times* and *The Independent*.

Also, the newspapers were giving the voice to some of the most outspoken American 'sceptics' – scientists who were known as having economic ties to fossil fuel companies (Carvalho, 2007, p. 232). This specific finding confirms the diagnoses presented in the first part of the article concerning the misleading role of scientists working within the professional or post-academic models in shaping the public discourse on climate change.

Towards the end of the 1990s, some journalists, particularly at *The Guardian* and *The Independent,* were more and more prone to show the back stages, the behind-the-scenes of science, discussing the process of science-making and the various actors' interests and commitments; in this case it was not a strategy for dismissing the claims of science, but a way to promote trust in it. At the same time, *The Times* references to social and political contexts 'generally supported negative criticism of science claims regarding climate change and its anthropogenic origin' (Carvalho, 2007, p. 236).

The analyses conducted by Carvalho also show that since the year 2000, apart from exposing political commitments, the journals under study were 'mediatising' science reports on climate change: for journalists, scientific accounts, like all other media messages, were to meet the following criteria: novelty, controversy, geographic proximity and relevance to the reader

(Carvalho, 2007). Due to those constraints, the authority of science and scientists has not become convincing enough for the growing number of average media users.

Carvalho continues her analyses in many consecutive newer publications (Santos et al., 2024), reinforcing the analysis that ideology works as a powerful selection device in deciding what scientific news is, i.e., what the relevant facts are and who are the authorised agents of the definition of science matters.

The phenomenon of mediatisation is also presented in more detail in the now classic publications by Boykoff and Boykoff. In the first of their articles cited, Boykoff and Boykoff refer to their research into prestigious American print press, then broaden the scope of their analyses to important electronic media channels (Boykoff & Boykoff, 2004). Their studies are based on descriptive content analysis of television segments and newspaper articles about climate change that appeared in the United States between 1988 and 2004. In the print media sector, they selected four major titles: The selected newspapers include *The New York Times*, *The Los Angeles Times*, *The Washington Post*, and *The Wall Street Journal*. For television news, the analysis focused on the three major evening newscasts: *ABC World News Tonight*, *CBS Evening News* and *NBC Nightly News*. They point out the fact that 'scientists generally employ a lexicon of caution and speak in a language of probability, which usually does not translate smoothly into the crisp, unequivocal commentary that is valued in the press' (Boykoff & Boykoff, 2007, p. 3). Journalists are striving to translate scientific analysis and assessment into a language more easily understood by the general public while following the first-order and the second-order norms of their profession that are often in conflict with the discourse of science.

The first-order norm of personalisation, according to which individual human tragedies and triumphs should be given priority in journalistic accounts, and news should be about individuals rather than on group dynamics or social processes, does not allow for presenting the importance of the macro-scale processes of climate change in an attractive and convincing way.

Despite being a first-order journalistic norm, the norm of dramatization is also in conflict with the discourse of science. According to this norm, news dramas emphasise crisis over continuity and presents drama 'as the source of energy that gives social problems life and sustains their growth' (Boykoff & Boykoff, 2007, p. 3). The scientific language of probability allows for limited dramatisation. Hence, the scientific diagnoses on climate change are not compelling enough for the general audience. However, when dramatised and alarmist accounts of the state of the environment appear in the media, they take on a sensationalised aspect known as 'climate porn' (Ereaut & Segnit, 2006; Carr & Reyes-Galindo, 2017), that produces an effect contrary to what was intended.

Also, the media predilection for novelty (another first-order journalistic norm) does not allow for a constructive and convincing message about climate change – environmental problems, by their nature persistent and slow-growing, are not attractive enough to grasp the attention of the media users.

Considering all the conflicting first-order norms of scientific and media discourses mentioned above, one has to evoke the second-order journalistic norm of balance and underline its role in creating the biased public discourse about climate change and other environmental issues. According to this norm, journalists should 'present the views of legitimate spokespersons of the conflicting sides in any significant dispute and provide both sides with roughly equal attention' (Entman, 1990).

Usually, this norm is portrayed as playing a positive role, as it requires journalists to 'give a voice to the other side'. However, as Boykoff and Boykoff (2004, 2007) argue, this practice can contribute to distorted media coverage, particularly through the amplification of marginal views that contradict scientific consensus. Following this norm gave space in the public discourse also to those who question the very fact of the climate crisis and the role of human activity in causing it.

Boykoff and Boykoff (2004) explored quantitatively how the balance norm has been applied to anthropogenic climate change. According to this study,

> over a 15-year period, a majority (52.7%) of prestige press articles featured balanced accounts that gave equal attention to the views that humans are responsible for climate change and to the alternative ones. Coverage was divergent from the IPCC discourse in a statistically significant way from 1990 through 2002.
>
> (Boykoff & Boykoff, 2004, p. 126)

The authors conclude that through "balance" US newspaper coverage perpetrated an 'information bias' (Boykoff & Boykoff, 2007, p. 4).

Although these studies mentioned here were published almost twenty years ago, the conclusions formulated therein remain valid. Maxwell Boykoff expanded the scope of his analyses, showing that mechanisms traced in his earlier publication operate still (McAllister et al., 2021).

As we can observe, based also on the recent experiences from the time of the COVID pandemic, the trend of mediatisation of scientific discourse is now even stronger in the media and refers not only to climate change but, more generally, to scientific critiques of other basic problems.

It is worth noticing that the conclusions presented above refer to prestigious European and American journals and 'traditional' media channels. Empirical studies into the German and American media show also that there are no significant differences between traditional mainstream and alternative media (Brand & Brunnengräber, 2012) in which the cause of

climate change is explained as mainly anthropogenic, while the means of fighting it are presented differently: traditional media were focusing on market-based instruments, hoping for the fundamental compatibility of the capitalist economy with the imperative to counter climate change. The alternative media stressed the inherent relationship between the capitalism and climate change, proposing a necessary transformation of economic activity in order to fight climate change.

The role of social media in shaping the discourse about climate change is not taken into account as a significant contributor to the discourse on climate change. However, social media is a unique mass-communication phenomenon that should be addressed separately in publications about environmental communication. It should be noted that social media is an object of concern for many researchers and activists. The role of social media in the climate change discourse is well studied (Liu & Kim, 2021; Gómez-Casillas & Gómez Márquez, 2023; Mosallaei & Feldman, 2024). Some researchers point to the potentially positive role of the social media in raising the awareness of environmental threats (Mavrodieva et al., 2019). They also warn about the negative consequences of relying on social media messages as the only or the dominant source of information (Hatfield, 2024), since climate-change misinformation is pervasive and strategically disseminated through social-media and native advertising, significantly influencing public perception and discouraging policymakers from taking action (Colarossi, 2023).

As the above studies show, the media discourses, even in the case of prestigious mainstream media, cannot easily accommodate the scientific discourse on climate change. In the case of social media, the situation is even more difficult, as misinformation about environmental crises is ubiquitous and very influential. Hence, it would be interesting to investigate the root causes of this situation.

In my opinion, the analysis of mechanisms of creation of networks of support, as presented in the Actor-Network Theory created by Bruno Latour (2005), can be useful in realising this task. One of the tentative explanations could be that the networks created by scientists in reference to climate crises are neither strong enough nor developed enough. Also, Latour's more recent assessment (Latour, 2017, 2018) of the political landscape can shed more light on the present state of the environmental discourse: according to Latour, from the nineties of the former century, when 'the powerful people of the world' realised that the ecological threat is real and the only way for them to prosper is to abandon any aspiration at sharing a common future with the rest of the world, they have engaged in massive climate change denial.

Environmental Communication as Intercultural Communication?

Another source of insight to help explain the problem of the growing discrepancy between the media and the scientific discourse on climate

change can be the contributions of science communication, and, more specifically, by representatives of this discipline referring to intercultural communication. According to Reyes-Galindo and Ribeiro Duarte (2017), to make science communication more efficient in transmitting relevant and reliable information about important problems, environmental threats included, we should approach communication between researchers and members of the global society as communication between representatives of different cultures using different languages and sharing different, even opposing values. One of the basic rules of efficient intercultural communication is cultural relativism, encouraging the researcher to refrain from all judgements and enquire about the foundations and the function of claims that differ, even dramatically, from his/her own. The conclusion for science communicators in the field of climate change would be to take into account the profiles of the recipients of their messages and suppress the top-down communication (Cortassa, 2017). Other researchers in more recent studies also propose replacing the top-down communication with laypersons, based on the 'deficit model' with a more balanced 'confidence deficit' or 'engagement deficit' (Potvin & Bélanger, 2024). Hence, the very concept of a cognitive gap between the specialists and the laypeople proves inadequate, because less knowledgeable representatives of the general public 'are no longer perceived as passive recipients of knowledge, but as active agents in their interactions with experts, thus, their scientific (il)literacy is insufficient for understanding their role and attitudes in the process of coping with science and scientists' (Cortassa, 2017, p. 129). However, in the context of climate change, the cognitive imbalance does play a central role in the relations of laypersons with experts. Cortassa (2017) concludes that in situations when claims are framed in the way that no one without a certain kind of knowledge can enter the discussion in fair conditions 'the agents need to share at least a minimum of common concepts and terminology in order to make the dialogue effective'. Hence, according to the rules of efficient intercultural communication, 'the public's culture and skills must be acknowledged as substantial mediations of their relationship with science and scientists, so, too, must the factual existence of the epistemic asymmetry underlying the process' (Cortassa, 2017, p. 129). She proposes considering 'the uneven cognitive positions of scientists and publics as an *assumption* underlying their interactions, instead of *as the obstacle* to be surpassed, and exploring how specialised knowledge circulates and is shared under this prior condition' (Cortassa, 2017, p. 130). According to this approach, the possibilities of laypeople acquiring specialised knowledge depend on *trust* of scientists' claims.

The solution proposed by Cortassa sounds optimistic and quite convincing, but we should remember that it was formulated almost ten years ago, before the COVID pandemic and before important politicians and businesspeople, questioning the role of human activity in climate change, came

to power. Sadly, it has been amply demonstrated that scientific claims that laypersons can trust is ever-more difficult to find nowadays.

We should also consider that all the problems associated with the climate crisis should be viewed within a broader context, encompassing social, political and geopolitical factors. The remedies recommended by scientists from IPCC, such as the European Green Deal, do not have to accepted by representatives of the respective societies: a study based on the representative sample of Poles in 2024 shows that only 15% of them have positive connotations with the aforementioned, while the connotations are negative for 52% of the respondents (Centrum Badania Opinii Społecznej, 2024).

As we observe recent developments in world politics, we can notice the growing tendency of using violent criticisms of the anthropogenic argument as a powerful tool in populist political discourses.

Also, as the recommendations of the IPPC experts show, the Global South suffers the most from the climate crisis caused mostly by the Global North. At the same time, in the science communication, researchers from the Global South have almost no voice: the Global North dominates in authorship (93%) and research focus (67%) (Bera et al., 2025), so the perspectives of those most affected are absent in the global discourse about the environment.

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3 Climate Diplomacy in Chains

The Role of Communication and International Investment Agreements

Michal Plšek

Introduction

When it comes to negotiating a more sustainable future, not many would think about the role of investment protection agreements. Yet, this paper argues the crucial role the international treaties concerned with protecting foreign investment have for achieving sustainable development and for serving as instruments of environmental communication.

Section "Introduction" focuses on the role of foreign direct investment (FDI) as a key factor in stimulating sustainability in the investment-receiving state (host state). Section "Sustainable Development: The Role of Investment" explains how FDI is protected in international law using bilateral investment treaties (BITs) and highlights their role in communicating environmental and development priorities to both domestic and international stakeholders. Section "The Legal Framework of Investment Protection: Signalling a Welcoming Market" fleshes out the mechanism and downsides of investment protection by showing how BITs limit the regulatory governance of signatory states. Section "The Effect of BITs in Practice" argues a way for a change in the BIT system by introducing sustainability considerations into BIT wording and utilising the model treaty approach to communicate a nation's commitment to sustainable development, as exemplified by Morocco. Section "Sustainability Diplomacy: Signs of a Priorities Shift" drills down on the idea of a paradigm shift in BIT drafting and explores pathways of enhancing their role as tools for environmental communication in diplomacy.

Sustainable Development: The Role of Investment

The Sustainable Development Goals (SDGs) unanimously agreed upon by the international community under the auspices of the United Nations (UN) are currently the most widely recognised formulation of sustainable development. The function of the SDGs is to communicate the most pressing needs the international community is currently facing, such as eliminating

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poverty, eliminating hunger or reducing inequality (United Nations, 2015). To accomplish these ambitious objectives within the timeframe set to 2030, close cooperation between states is indispensable. Additionally, the role of the private sector in providing the necessary capital and innovative technologies is crucial for the achievement of the SDGs. Indeed, the SDG 2 'Zero Hunger' Target 2.a, for instance, urges to 'Increase investment, including through enhanced international cooperation, [to achieve the target]'. The message is clear. States agreed on and are calling for an *investment increase*, by means of enhanced interstate cooperation. Therefore, the commitment to sustainable development not only guides national policies but also lays the groundwork for international investment frameworks – such as bilateral investment treaties – to serve as vital instruments in communicating a nation's environmental and policy priorities.

The call for investment promotion is also expressly contained in other SDGs. Target 1.b urges for tailoring policies to support 'investment in poverty eradication actions'. Target 7.a aims to expedite the transition to clean energy by 'promot[ing] investment in energy infrastructure and clean energy technology'. Target 10.b requires states to encourage foreign direct investment to states which need it the most, i.e., least developed countries.

In sum, the SDGs recognise investment as indispensable for pushing sustainable development forward through increasing productivity, job creation and economic growth (United Nations, 2015). In this context, investment frameworks stop being mere economic tools but may also serve as platforms for environmental communication, signalling a state's dedication to sustainable development.

However, private business activity can potentially harm the environment more readily than advance the SDGs. Therefore, investments need to be complemented by appropriate regulations and policies.

The following section examines the legal framework for FDI, highlighting how BITs are tailored to set standards for public administration while simultaneously acting as communication tool by signalling an open market.

The Legal Framework of Investment Protection: Signalling a Welcoming Market

Ever since the end of colonialism, protection of foreign investment was no longer realisable through gunboat diplomacy. A new framework was thus created in the field of international law. Protection guarantees for foreign property abroad are agreed by states in the form of international treaties. The first BIT was signed in 1959 between Germany and Pakistan.

Establishing a robust legal framework for investment not only provides the desired economic security but also lays the foundation for signalling a commitment to broader development objectives. As of March 2025, there were more than 2200 BITs (UNCTAD, 2025).

BITs play a relatively straightforward role. The states guarantee certain protection standards to investments made on their respective territories by investors from the other state. In the event an investor deems a breach of the treaty protections has occurred, it can initiate international arbitration directly against the host state. The responsibility to decide investor-state disputes has been taken away from the national judiciaries and instead is assigned to erudite lawyers who are nationals of disinterested countries. Moreover, beyond their legal function, BITs also act as communication tools, signalling to both domestic and international stakeholders that the signatory states offer a stable and investor-friendly environment.

Evidence suggests that BITs were indeed originally perceived only as a policy signal rather than a set of binding, enforceable norms (Poulsen, 2015). States believed that signing a BIT will attract foreign investors, as it will give them an advantage over those states which did not have a BIT in place (Levashova et al., 2016; Schill et al., 2015). In this sense, entering into a BIT serves as a diplomatic gesture – communicating a nation's openness to international economic engagement. States expected BITs to encourage investment, stimulating economic growth and development (Levashova et al., 2016; Dubava, 2010).

Thus, BITs are observed to have a dual function. On the one hand, they serve as a medium of communication by conveying a state's commitment to development objectives and openness to foreign capital. On the other hand, they establish binding legal norms for protecting foreign capital in the host state, effectively creating a stable legal environment for investors.

However, issues arise when the commitment to a stable legal environment overshadows the communicated commitment to development, as explored in the following section.

The Effect of BITs in Practice

All BITs generally contain the same set of binding legal protections. It would not be effective to delve deeply into all the norms here, as this was already brilliantly done by others (Kriebaum et al., 2022; McLachlan et al., 2017). This section focuses only on the norm protecting investments from expropriation, as it is the most illustrative one. The BIT between Poland and Chile is one example:

> Neither Contracting Party shall take any measures depriving, directly or indirectly, an investor of the other Contracting Party of an investment unless the following conditions are complied with:
>
> a the measures are taken in the public or national interest and in accordance with the law;
> b the measures are not discriminatory;
> c the measures are accompanied by provisions for the payment of prompt, adequate and effective compensation.

Enshrouded in legal terms, this clause carries two important messages for an investor. First, in the event its investment is nationalised by the state, compensation is guaranteed. Second, the investment is protected from both *direct* and *indirect* expropriation. Legal science defines direct expropriation as a transfer of property title (e.g., a plot of land with a factory building) to the state, which nowadays occurs rather infrequently. Conversely, indirect expropriation describes a situation when an investor's legal title remains unaffected, but the investment is 'deprived of its economic use' (Csernus & Ugale, 2023). This is crucial, because the concept of indirect expropriation has the potential to create a disconnect between the legal protections offered by BITs and the development objectives these treaties communicate.

The investor-state dispute between the company *Metalclad* and Mexico is illustrative. The factual background concerns a US company being granted a permit for the development and operation of a hazardous waste landfill by the Mexican federal government. The investor carried out the construction between 1994 and early 1995. However, a local municipality tried to halt the works, claiming that a municipal permit was also necessary. Due to protests from local communities and a subsequent denial to issue the missing permit by the municipality, the investment never began operation. Additionally, the regional government declared the landfill zone a national area for the protection of cacti, permanently precluding the operation of the facility.

The arbitrators ruled this was a case of indirect expropriation. Crucially, however, they did not pay any attention to the environmental and social aspects of the dispute. The context of local protests together with the environmental grounds relied on by the municipality in its decision not to issue the permit is not addressed at all in the arbitration award. This lack of sensitivity and openness to consider issues other than strictly legal and economic considerations on the side of investment lawyers is a cause for concern.

The *Metalclad* case carries a worrying message. Economic considerations prevail over environmental and human health-related interests. This example underscores a significant disconnect between legal norms and the broader public communication of development (not only economic, but also environmental and social) priorities. Moreover, *Metalclad* is not an isolated example. The field of international investment law has been hostile to most consideration outside of the narrow scope of investment protection (Malik, 2010). Notably, most attempts at communication with the investment tribunals from civil societies and non-governmental organisations failed for lack of will to listen on the side of the investment lawyers (Kent, 2017). When such attempts fail, the disputes are generally decided without any public participation regardless of the importance of the matters discussed for the general public or local communities specifically.

It is perhaps unsurprising that BITs have been repeatedly described as limiting states' regulatory freedom to a non-desirable degree (Kläger, 2010; Olmos Giupponi, 2016; Barker, 2017). For instance, two lawsuits were brought against the Netherlands in 2021 – *Uniper* and *RWE*. These essentially identical cases were based on a 2019 Dutch coal phase-out law. This sustainability-driven law was deemed by the investors to indirectly expropriate their investments. The amounts claimed as damages, although undisclosed, likely amount to almost EUR 4 billion, as it was in an earlier and similar case. As of 2025, both lawsuits have been discontinued by the investors. Yet, these disputes demonstrate the tension between sustainability-driven policy reforms and the investment protection framework. They highlight the lack of compatibility between the BIT's legal norms and the states' desire for advancing development.

Despite the arbitrations being discontinued, the impact of the two disputes on the communication of the European Union on investment policy was significant. Several EU member states have released official notices of withdrawing from the Energy Charter Treaty (ECT), on which the *Uniper* and *RWE* disputes were based. The European Parliament welcomed and supported these notices through a formal resolution on 24 November 2022. All the communications share a concern with the lack of respect for environmental considerations in the ECT, including the protection of fossil fuel investments (European Parliament, 2022). This series of public statements marks a significant shift, underlining the need for a reorientation of investment policy and confirming the priority of sustainable development.

Put simply, there appears to be an inconsistency between the positive sustainability-advancing effects of investments called for in the SDGs and the uncertain, governance-limiting normative effects of the current investment framework. The need for more (and sustainable) investment does not connect with the BITs, which are generally only concerned with legal norms for investment protection.

It is a positive that this lack of compatibility is being addressed by a growing number of states by utilising BITs as a tool of environmental communication, as shown in the following section.

Sustainability Diplomacy: Signs of a Priorities Shift

The content and wording of BITs depend on the will of the contracting parties. In practice, the content is agreed between the negotiation teams consisting of high-ranking state officials. It is only natural that each state has needs and preferences when it comes to a particular treaty wording. Generally, this is why some states have published a model BIT to inform potential contracting partners of what is the baseline for negotiations. Model treaties thus function as tools for communicating a state's investment priorities

and its commitment to development to both international and domestic stakeholder audiences. In addition to foreign state representatives, model BITs are thoroughly studied by local and international scholars and experts. A growing body of literature focuses on analysing model treaties, placing them in the broader development context of the publishing state (Dubava, 2010; Levashova et al., 2016; Garg et al., 2016; Hees & Moraes, 2020; Kidane, 2020; Coleman et al., 2021; Ostřanský & Pérez Aznar, 2021).

Historically, when developed capital-exporting countries were concluding BITs with developing states, such agreements were largely (Plšek, 2024) based on the developed country's model (Ostřanský & Pérez Aznar, 2023). The negotiations went rather quickly and the developing country's negotiators, often inexperienced with BIT negotiations, simply accepted what was proposed without concern about the serious normative implications for governance. There is evidence that developing countries blindly trusted their rich counterparts and did not conclude any economic analysis or impact assessment when signing BITs (Poulsen, 2015). This approach seemed reasonable, given that the conclusion of BITs was supported by important international actors, such as the United Nations Conference on Trade and Development (UNCTAD), as a tool to promote desired economic development (Poulsen, 2015). BITs were thus born as a tool for signalling market liberalisation and a welcoming environment. It was only with the proliferation of investor-state disputes in the late 2000s that some states started to exercise more caution and attention when negotiating BITs (Ostřanský & Pérez Aznar, 2021; Garg et al., 2016).

With BITs becoming a widespread practice in the 2000s, developing countries have also started to publish their model agreements. It is therefore possible to assess the goals capital-importing countries seek to achieve by concluding BITs. An illustrative example is the practice of Morocco model BIT from 2019:

> 1.1 The objectives of this Agreement are to promote investment that contributes to sustainable development in the Host Party, to encourage technology transfer and job creation, and to strengthen contacts between the private sectors of the two Parties.
>
> 1.2 The objectives of this Agreement shall be achieved without prejudice to the rights of the Parties to regulate in the public interest.

One can observe that the goal shifts from a traditional objective of economic growth to one of contribution to sustainable development. A comparison is appropriate with a BIT concluded in the same year. The 2019 BIT between Indonesia and UAE desires the following:

> […] to promote greater economic co-operation between them […].

The second example represents the traditional approach towards BIT language. The main goal is *greater economic co-operation*. The current state of

international investment law, as described above, was created from clauses like this one. The sole focus is economic growth without reference to 'outside' topics like environmental protection or social responsibility. This approach cannot be recommended to advance the SDGs (Plšek, 2024).

However, the Morocco model is clearly oriented towards investment that *contributes to sustainable development*. It also aims to encourage technology transfer and job creation, both of which are desired by the SDGs. Crucially, Morocco's model provides that its goals shall be achieved without prejudice to the regulatory governance. The model has made clear the priority to shift away from the traditional BIT in favour of one focused on sustainable (rather than only economic) development of the parties.

Put simply, Morocco's model presents a spark of hope. By explicitly embedding sustainability into the model, Morocco strategically employs its model BIT as a tool of sustainable development communication, signalling to both investors and partner states that responsible investment is a national priority. It is a clear signal to other negotiators that Morocco is determined to shift away from the traditional BIT wording focused exclusively on economic goals and instead pursue a holistic sustainability approach to foreign investment. Going forward, BITs should be recognised as key tools for diplomacy and sustainable development, where states can signal their long-term commitments through legal language that reflects evolving local priorities.

Call for a Paradigm Shift

As mentioned above, the process of creating new BITs depends entirely on the political will of the negotiating states. In a world where the unanimously agreed SDGs have existed for a decade, we may start to see more and more examples of more deliberate sustainability language introduced into BITs. While this is a positive step towards more sustainable investments, as envisaged by the SDGs, the dangers posed by climate change, environmental injustice and socio-economic inequalities perhaps warrant a more profound change to the investment framework. Put simply, this section aims to contribute to the discussion 'how far should the changes go?'

Traditional BITs extend to any and all foreign investments in a host state. Thus, all foreign investors have the guarantee of the BIT's legal protection in addition to the domestic law system. National investors, however, do not have this privilege and may only rely on domestic law in case of a dispute. The original justification for this inequality was the presumed higher risks faced by foreign investors operating in unfamiliar legal and economic environments. However, in today's interconnected global economy – where information access, regulatory transparency and investor due diligence have dramatically improved – this justification no longer holds universally. Foreign investments are oftentimes carried out by large-scale international corporations with access to vast amounts of market data and legal expertise

guiding investment decisions. Yet, under the current investment framework, they receive the same protective treatment as small-scale investors who may indeed face genuine uncertainties when entering a foreign market.

Recognising that there are states which, like Morocco, are pursuing alternative approaches to BIT drafting, it is appropriate to reconsider the criteria which qualify investments for protection. Perhaps it is appropriate to re-think whether all investors should be eligible for protection. Additional criteria could be set in place. Perhaps a tier-system of investors depending on factors such as size, the amount invested, sustainability impact, corporate responsibility practices and contribution to local development could be included. Such a model would transform BITs into means for fostering responsible investment while enhancing their role as tools of diplomacy – signalling a state's commitment to sustainability *vis-à-vis* both private and public stakeholders locally and internationally.

The options are virtually endless and depend exclusively on the negotiators. It is thus crucial to keep the state negotiators updated with BIT negotiation trends around the globe. Morocco's steps in the direction of signalling a value shift towards sustainability may inspire other states to pursue similar transformations.

The SDGs are well equipped to serve as an umbrella for a paradigm shift in drafting BITs. For instance, BITs may start to include sustainability performance indicators, allowing states can ensure that investment protection mechanisms serve broader environmental and social objectives.

To further capitalise on BITs as tools of communication, states could maintain public registries of sustainability-aligned investments and periodically review BIT-covered investments to ensure compliance with the appropriate standards and performance indicators. Such transparency could promote responsible investor behaviour and allow governments to demonstrate their sustainability efforts to international institutions and civil society.

Worthy of consideration is also a creation of an intergovernmental body (e.g., a sustainable FDI-promoting commission/agency) which would provide clarity on whether a particular investment meets the BIT's sustainability criteria. Such body could act as intermediary between investors and the host state, facilitating dialogue, enhancing transparency and reducing the likelihood of disputes. Fostering proactive communication on sustainability matters, these institutions could help align investor expectations with host state priorities, mitigating potential conflicts before they escalate (Sattorova, 2016; Desierto, 2015).

A growing number of states are embracing this paradigm shift – leveraging BITs to communicate their sustainability priorities to investors and the international community (Plšek, 2024). To further encourage such a shift, continued dialogue and knowledge-sharing among states is essential. Opportunities to exchange experiences with BIT reforms are provided by the platform of UNCITRAL Working Group III meetings, where state

representatives gather twice a year to hold talks on reforms of the international investment framework.

Conclusions

Halfway into the 2020s, the struggle to achieve sustainability is well established. Countries worldwide have pledged to reach the SDGs by the end of this decade, and clear, strategic communication of sustainability priorities has become essential to this end. It is widely acknowledged that investment flows are critical for sustainable development. Therefore, it is imperative to study how states signal their policy priorities to investors, agencies and the international community.

However, despite the urgency of the SDGs, state communication regarding sustainable investments remains scarce in the BIT framework, maintaining the traditional focus on economic development exclusively. This traditional approach tends to sideline social and environmental interests for the sake of investment protection. This lack of integration is concerning.

Nonetheless, there is evidence of aligning BITs with sustainable development. The steps taken by Morocco serve as example of how BITs can be used not only as legal instruments but also as tools for signalling development priorities. It was shown how model BITs act as tools of communication, providing insight into a state's sustainable development objectives. It is recommended to actively disseminate knowledge about ongoing treaty reforms in order to maximise BIT alignment with the SDGs.

Ultimately, a paradigm shift could reframe BITs as cornerstones for sustainability communication, embedding cooperation on responsible investment practices directly into legal commitments. States could, for instance, establish intergovernmental bodies tasked with facilitating investor dialogue, clarifying sustainability expectations and proactively addressing concerns, effectively institutionalising investor-state communication channels.

States could be using BITs to promote and reinforce their sustainable development commitments, shape investor behaviour and bridge the gap between economic interests and public policy goals. It has been shown that BITs have the potential to become effective tools of climate diplomacy and policy signalling. Future success of this paradigm shift will depend on states' openness to reimagine BITs not just as legal instruments, but as strategic tools for communicating development priorities in an era where sustainability is no longer optional but indispensable.

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4 Activists or Criminals? How States Try to Silence Climate Defenders with Criminal Justice Systems and Derogatory Communication

Natalia Pietruszka

Introduction

Along with the increasing awareness of climate change and its effects, grassroots movements began to emerge with the goal of fighting the phenomenon. In recent years, as their actions, such as 'attacking' recognisable artwork, bring more publicity to the topic of climate change, voices are being raised among politicians that the behaviour of such groups should be criminalised. This rhetoric comes along with the legal changes and strong reactions from the side of the criminal justice systems.

Recently, human rights experts, including, e.g., Dunja Mijatović, Council of Europe's Commissioner for HR and Volker Türk, the UN's high commissioner for HR, began to alarm the public that a crackdown is taking place on climate protesters. The involvement of the states in this kind of repression and the criminalisation of environmental defenders cannot be overlooked (Kyte & Roncon, 2023). A growing number of countries across the globe pass anti-protest laws and try to label non-violent activists as 'eco-terrorists' and 'looters' (White & South, 2013). In many cases, the measures taken by the authorities are severe, aimed at silencing the defenders.

How does it stand in relation to the civic duty to engage in environmental justice protection (Lemons & Brown, 2011)? Are these actions indeed necessary, or do they constitute the misuse of criminal justice systems to silence the EHRDs? To answer these questions, the author analyses legal regulations, official reports and the literature. These sources were supplemented by an analysis of two types of online publications – official pages of internationally recognisable human rights organisations, operating, e.g., in the environmental sphere (such as Amnesty International, Human Rights Watch) and providing reports on the topic, and online media outlets of local or regional significance, in which cases of criminalisation and defamation by particular states are depicted.

Such issues as main criminalisation forms, misuse of precautionary measures, issuance of new anti-protest laws, smear campaigns and detrimental

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language are analysed. The effects of criminalisation on the defenders and their surroundings are shortly addressed.

Environmental Human Rights Defenders

There is no broadly accepted definition of the Environmental Human Rights Defenders (hereinafter referred to also as 'EHRDs' or 'environmental defenders'). The UN Environment uses a broad definition, describing with this term persons 'defending, promoting, and protecting environmental rights (including constitutional rights to a clean and healthy environment)' (UN Environment, 2018). Another definition, introduced by A. Scheidel et al., describes EHRDs as 'individuals and collectives who protect the environment and protest unjust and unsustainable resource uses because of social and environmental reasons' (Scheidel et al., 2020). Michel Forst, the U.N. Special Rapporteur, uses a more detailed description, defining the environmental defenders as 'individuals and groups who, in their personal or professional capacity and in a peaceful manner, strive to protect and promote human rights relating to the environment, including water, air, land, flora, and fauna' (United Nations General Assembly, 2016).

The definitions, even though they differ on various levels, all focus not on the features of the particular individual or group, but on their actions related to the environment – people, communities and organisations, who engage in the peaceful protection of the environment or land rights (Swedish Society for Nature Conservation, 2021), whether it is done professionally or voluntarily.

Criminalisation of EHRDs

Criminalisation may be defined in various ways as well. The Inter-American Commission on Human Rights described criminalisation of human right defenders as the

> manipulation of the punitive power of the State by State and non-State actors in order to control, punish, or prevent the exercise of the right to defend human rights. It is used to retaliate against, threaten, harass, punish, intimidate, defame, and delegitimize environmental defenders.
>
> (Inter-American Commission on Human Rights, 2019)

Amnesty International defines criminalisation of protests as

> the use of the punitive power of the State to dissuade, punish or prevent the exercise of the right to protest and, in some cases, social and political participation more broadly, through the arbitrary, disproportionate

> or repeated use of the criminal justice system against demonstrations, activists, social or political leaders for their participation in protests, or even the accusation of having organised or being part of the organising or convening collective or entity.
>
> (Amnistía Internacional, 2023)

Overall, at its simplest, it is the arbitrary use of the criminal justice system in order to control and punish people who wish to defend human rights, including environmental rights. It may take different forms (discussed below) and aims at silencing activists not only by engaging them in timely and costly proceedings, but also by stigmatising and alienating them. Defining the defenders as 'criminals' helps in isolating them from support networks and further disrupts their work (Birss, 2017).

To the fact that the EHDRs are especially vulnerable to criminalisation, many factors contribute. The aggravating fight against climate change and the growing demand for natural resources reshape the situation and contribute to more frequent conflicts between activists on one side and the authorities and companies exploiting natural resources on the other (Inter-American Commission on Human Rights, 2019). Further, the environmental defenders often belong to especially vulnerable groups, such as Indigenous communities.

As an example, the Marlin Mine case can be mentioned, which is considered one of the first cases that brought public attention to the phenomenon of criminalisation and detrimental language being used to silence environmental defenders. The Marlin Mine was opened in the early 2000s in western Guatemala, in San Miguel Ixtahuacán, a rural Indigenous municipality inhabited mostly by the Maya-Mam. Soon after its opening, the local communities started to notice negative effects of the mine, such as health impacts and land contamination, and started peaceful protests against the mine's operations. The violence quickly escalated, leading to at least 12 people being charged (including a local mayor), 20 injured and one killed. The protests led to community division – participants were ostracised by the authorities and the community. As a result, according to experts, criminalisation started to be perceived as a useful tool used by private actors and their state allies (Lakhani, 2023). Other cases which brought the attention of the broader public to the criminalisation of the EHRDs are, e.g., the Dakota Access Pipeline case, and the recently implemented UK *Police, Crime, Sentencing and Courts Act 2022* (Amnesty International UK, 2021).

The main forms of state actions related to the criminalisation of the environmental defenders may be divided into several groups: charges used typically in such cases, passing new criminal, anti-protest laws, abuse of precautionary measures, other fair trial infringements and excessive use of force. They are often accompanied by communication aiming at the depreciation of the activists and their work.

Type of Charges

Some repetitive patterns may be spotted. One of them is related to the types of charges occurring in this type of proceedings and their characteristics. First of all, they are often vague, imprecise and time-consuming to disprove (Lakhani et al., 2023). Very often, after long and costly proceedings, they turn out to be unfounded. Furthermore, the charges tend to be unduly elevated (Birss, 2017). Sometimes, they are based solely on someone's role as a community leader, which somehow 'automatically' implies their responsibility for organising the protests and presumptive offences caused during their duration (Amnesty International, 2018).

Furthermore, it has been observed that some types of charges occur much more often than others. The first group consists of the offences against the state. This group covers a broad range of charges from terrorism (e.g., the Philippines, Chile and Peru were criticised for extensive application of this kind of charges) (Article 19, 2016), communist insurgency, e.g., in the Philippines (Global Witness, 2023), subversion, sabotage, to conspiracy, spying, e.g., the charges against Iran's Persian Wildlife Heritage Foundation, as well as such vague provisions as 'disturbing public order' as with Vietnam's art. 318 of the Criminal Code. The excessive use of national security and counter-terrorism legislation was extensively addressed by UN bodies (Office of the United Nations High Commissioner for Human Rights, 2008).

The second group of charges relate directly to the protest organisation and participation – illicit association (Lakhani et al., 2023), trespassing, perturbation of public order and offences that prioritise the freedom of movement over the other rights (Inter-American Commission on Human Rights, 2015), e.g., roadway obstruction. Also lack of prior permission for the demonstration (Inter-American Commission on Human Rights, 2015) falls into this category. Another group is related to NGO operations and concerns such issues as tax evasion, foreign funding and lack of registration.

Some strategies of criminalisation also include charges related to grave criminal offences, e.g., attempted murder and kidnapping, often with fabricated evidence. Further charges broadly used in the cases against the environmental defenders are land usurpation, defamation, libel and slander (Inter-American Commission on Human Rights, 2015), incitement to crime, accusations of participation in the organised crime, e.g., Last Generation (Germany) (Michalak, A., Rzeczpospolita.pl, 24.05.2023) and 'working in association with gang members' (El Salvador) (Inter-American Commission on Human Rights, 2022). Sometimes, the defenders are accused of offences applicable to public officials only.

New Controversial Anti-Protest Laws

Another type of action taken by the states is introducing new anti-protest laws and increasingly restrictive frameworks, which limit society's ability

to monitor the state's actions (Council of Europe, 2021). This may include, e.g., creating new offences, also those that criminalise non-violent actions (e.g., possession of lock-on devices in Australia), laws intended explicitly to protect expansively defined critical infrastructure (e.g., fossil fuel pipelines and oil shipping lanes) and national security.

Often the new bills impose increased penalties for crimes related to environmental activism (e.g., for blocking roads and ports), and introduce new procedural requirements related to the operations of the environmental NGOs (e.g., obligatory audits, possession of new permits, and prohibition of foreign funding). Such bills were introduced, e.g., in the United Kingdom and Australia. In France as well, attempts were made to pass a new Global security law that allows, e.g., generalised surveillance, including via drones, and a new offence: 'provoking the identification of the police'; the Constitutional Council ruled several provisions to violate, e.g., the right to privacy and freedom of peaceful assembly, and are unconstitutional (Amnesty International, 2021).

Precautionary Measures

One of the main issues raised in relation to the precautionary measures being misused in the case of environmental defenders is illegal and arbitrary detention, especially in relation to pre-trial detention (Inter-American Commission on Human Rights, 2019). The arbitrary arrests and detentions of environmental rights defenders are a serious issue all around the world, from Vietnam (e.g., Hoàng Thị Minh Hồng, tax fraud charges), through Iran (Persian Wildlife Heritage Foundation, spying charges), Uganda (arrest of anti-EACOP – East African Crude Oil Pipeline – activists) to Kazakhstan (Sergey Solyanik, irregularities in registration), to India (e.g., Disha Ravi, criminal conspiracy and sedition) (Human Rights Watch, 2023; Crude Accountability, 2019; Human Rights Watch, 2023).

A relatively common type of action is issuing 'pending' arrest warrants – the execution of which is held in seemingly permanent abeyance – in order to stop the defenders from performing their activities as a result of the fear of the arrest (Inter-American Commission on Human Rights, 2015). Another type of action taken is repetitive arrest and detention of activists. Also, preventive custody without being charged with a criminal offence is used, e.g., to prevent defenders from attending a particular protest.

To prevent defenders from engaging in public demonstrations, other proactive measures are also used, e.g., the use of bans on attending public demonstrations, visiting certain places, or on leaving the country, and issuing orders to report in court on a periodic basis.

Fair Trial Rule Infringements

The fair trial rule (which consists of several guarantees related to the way the proceedings should be conducted, e.g., fairly, justly and with all procedural

regularities) infringement, however, is not limited to prolonged detentions and the arbitrary use of precautionary measures. The trials may be unreasonably long and extensive, which forces defenders to commit significant resources and time to their own defence (Inter-American Commission on Human Rights, 2019), instead of to their environmental protection activism.

False allegations and fabricated charges are used to discourage EHRDs from their activist work and to silence them into stopping their activism (Swedish Society for Nature Conservation, 2021). Along with the accusations described above, fabricated evidence is used in such cases. The right to a defence is being limited. Contact with a professional attorney is being restricted, and defenders are not provided with adequate time and means for preparation of the defence, contrary to international standards.

Further alterations to the criminal proceedings may consist, e.g., of torture and ill-treatment in order to obtain confession (e.g., as reported in the case of wildlife defender and citizen of Iran, Niloufar Bayan), and lastly, of disproportionate punishment.

Also, highly related to the fair trial principle of legality is often not applied, e.g., in relation to the way of formulating the offences. They are described in an ambiguous and broad with unclear descriptors evaluating the participation in the crime. This allows their wide and arbitrary application, often backed by a political motivation (Inter-American Commission on Human Rights, 2015). Also, the performance of the authorities raises questions in relation to the principle of legality. This may relate, e.g., to the discretionary decisions of the justice system, assessing elements of crimes in a way not even close to the international law standards, carrying out the detention in a way inconsistent with the right of personal liberty or, in many cases, with the excessive use of force.

Excessive Use of Force by the Executive

Excessive use of force by the executive power, mostly by the police, is another issue specified in vast numbers of reports by environmental defenders. It is mostly, but not only, related to their participation in physical protests.

First of all, the use of the measures not proportional to the scale of the event is reported, as very often excessive force is used against unarmed activists. Among other measures, water cannons and tear gas are used to disperse the protests, e.g., during the Dakota Access pipeline protests, where 26 unarmed activists were hospitalised and more than 300 were reported injured (Wong, 2016). Rubber bullets are being used during, among others, peaceful marches against mining operations in Argentina's La Rioja Province in 2015, where five people, including a congressman, were reported injured (Article 19, 2016).

Another issue, which primarily affects Indigenous defenders, is aggressive forced evictions. The lack of land title often leads to criminal courts.

The evictions are carried out without previous notification to the members of the local communities. No reasonable time is provided in order to pack their belongings and find a new settlement (Amnesty International, 2018). Some countries also opt to use the army to suppress the demonstrations. Peru, for example, drastically relaxed the requirements for military intervention (Article 19, 2016).

Smear Campaigns

The criminalisation of the EHRDs often extends beyond legal measures. Another aspect is its association with smear campaigns and hate speech related to the phenomenon. Actions taken by the authorities, including criminalisation through law, often come along with delegitimisation through language. Such issues occur on various levels – with the media, politicians, but also the surroundings of the activists.

Officials publicly accuse environmental defenders of alleged crimes related to unverified charges, prior to any judicial decision (Inter-American Commission on Human Rights, 2015; Birss, 2017). This undermines the presumption of innocence and leads to treating the defenders as criminals, also among the regular members of society. It may further cause the diminishment of the societal influence of the EHRDs, as the smear campaigns undermine their credibility.

As an example, literature enlists the situation in Brazil during the Amazon fires in 2019 (Civicus, 2019). When the attention of the international public focused on the Amazon fires, Jair Bolsonaro stated that the environmental activists deliberately set fire to the forest in order to gain international sympathy and funding. Bolsonaro was a staunch opponent of activism when he was running for office, and the presidency gave him a much more powerful platform to share his views.

Other Damaging Communication Strategies

Criminalisation goes hand in hand with the delegitimising language in relation to EHRDs – both on the side of politicians and the media, who frame activists as radical, unpatriotic and dangerous. These trends reinforce each other. Environmental defenders are being called names such as 'eco-terrorists', 'militants', 'anti-development' (Stark, 2022), 'enemies of the state', 'terrorists', 'criminals' and 'extremists' (Global Witness, 2019). Stigmatisation is further deepened by associating EHRDs with socially unacceptable behaviours. As Amnesty International points out in the example of Paraguay, human rights defenders are defamed with slanders such as 'alcoholics', 'drug addicts' and 'thieves' (Amnesty International, 2018).

The discriminative and defamatory language is used to stigmatise the defenders and to weaken their position in society. This rhetoric not only

distorts public perception, but may also lead to isolation and silencing the activists' voices. Criminalisation may lead to justification for indifference to the defenders' situation, and, in more extreme cases, even to hostility. The public focuses on the alleged criminal activities of the individuals or groups and does not pay proper attention to their cause and the point they are trying to make (Glazebrook & Opoku, 2018).

In relation to the above, the framing used by the officials should be mentioned. Often, they define the issues related to the topic in a way that minimises the importance of environmental concerns. As such, protests may be framed as, e.g., disruptive to economic and social stability, and protesters as obstructing progress or endangering the 'regular' citizens. This can shift attention from the environmental issues brought up by the protesters to the perceived harm caused by the protests.

Moreover, the political rhetoric is being used to control the narrative. Officials use narrations discrediting the EHRDs by associating them with broader political ideologies, especially those which are unpopular or disruptive. For instance, by depicting activists and defenders as pawns of the left wing, conservative-leaning citizens can be turned them.

It cannot be overlooked that such discourses may pose a threat to democracy (Forst, 2023) and the democratic processes in a global context – it obstructs public debate, undermines informed public discourse and hinders collective action in relation to important issues such as climate change. They increase environmental tensions and decrease the levels of trust in environmental activists' actions (Vuong et al., 2023). From the global perspective, the misinformation and negative portrayal of activists on various media platforms, including the officials' accounts, worsen these challenges, with digital narratives increasingly influencing public opinion and discussions about policies.

Effects of Criminalisation and Damaging Communication Strategies

Apart from the direct influence on the defenders' lives, such as arrests and time engaged in the proceedings, the criminalisation may impact lives of their own and of their surroundings, in numerous ways – causing both individual and collective effects on the defenders' lives.

First, the effect on the health of the defenders cannot be overlooked, related to both physical and mental aspects. The list of symptoms in the literature is broad – from loneliness (Council of Europe, 2021), depression, fear, insecurity and frustration (Inter-American Commission on Human Rights, 2019), to chronic gastritis, insomnia, impotence and uncontrolled hypertension (Inter-American Commission on Human Rights, 2015).

Impacts on the social and family relationships is observed, e.g., due to the separation from activists' families in order to avoid detention. The

defenders are often subject to social ostracism and stigmatisation, as their actions affect the surroundings' functionality as a group, affecting its structures (Inter-American Commission on Human Rights, 2015). Criminalisation may also lead to community division. The climate of fear and threats may be spread and lead to collective insecurity and mistrust (Amnistía Internacional, 2023).

From the economic point of view, costs are incurred, e.g., professional legal services Apart from the direct costs of the judicial proceedings, such as attorney's fees and bail, other costs, such as travel expenses (often multiplied, e.g., due to postponed hearings) must be taken into account. In some cases, defenders lose their jobs and therefore their income, e.g., due to being in custody (Amnistía Internacional, 2023)

Lastly, the long-term effects on the defence of human rights must be considered. Criminal proceedings may affect the number of donors of the organisation (Inter-American Commission on Human Rights, 2015). A collective stigma may develop (Inter-American Commission on Human Rights, 2022), discouraging other defenders and leading to the weakening of the organisation, or even its dissolution. It may lead to the reduction of the space for the defenders to pursue their work and to a chilling effect (Council of Europe, 2021). But not always. As Aura Lolita Chavez Ixcaquic, a Guatemalan activist, says: 'We are still alive here. For as long as we continue to believe that coexistence with Mother Earth is a responsibility and a life-long commitment, we will continue fighting. (…). This is our hope for life' (Civicus, 2019).

Towards a Better Future

It cannot be overlooked that some states have started paying attention to the issue. After the Extinction Rebellion protests in Kaisaniemi (Finland) were dispersed by the use of pepper spray, the Interior Minister directly declared that the use of force must always be the last resort, the actions taken by the Police must be evaluated and the guidelines updated (Yle News, 2020). In Mongolia, a draft law on EHRDs was created in cooperation with civil society and environmental researchers. It aims to protect the activists' rights, e.g., by clarifying their legal status (GANHRI, 2022). In Slovakia, research was conducted in 2021, which aimed at identifying the experience of threats and other restrictions of the environment defenders, e.g., by administrative acts (GANHRI, 2022).

A great step forward was the Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean, known as the Escazú Agreement. Introduced in 2018, the Escazú Agreement is the first legally binding instrument in Latin America and the Caribbean containing provisions on the rights of EHRDs and specific commitments to their protection (Civicus, 2019).

Inspired by the Aarhus Convention's model (recognising the special status of environmental defenders and obliging the states to take proactive steps to protect them), in Article 9 it creates a protection regime for the EHRDs, e.g., by obliging the parties to ensure a safe environment for the defenders; take adequate and effective measures to recognise, protect and promote their rights and to take appropriate, effective and timely measures to prevent and punish attacks against environmental defenders (Civicus, 2019).

The change is visible also in the case law. The Supreme Court in the United Kingdom, in the case of Ziegler, acknowledged that the right to protest should be weighed properly, compatibly with the ECHR. In Canada and Germany, some peaceful EHRDs were given only symbolic sentences, as an acknowledgement of their just motivations (Sierra, 2023).

However, further changes shall be put forward. These may include educational campaigns, showing the importance of the work done by the defenders (Amnistía Internacional, 2023), publishing guidelines on defenders' security and documentation (Kyte & Roncon, 2023), with the use of force as a last resort. The criminalisation of environmental activists should also be monitored, as currently, there is no comprehensive data on this matter (Inter-American Commission on Human Rights, 2019).

Above all, though, the work towards a better future should include public support for the environmental defenders and recognition of their work and their role in the society, including their contributions to sustainability and social change. Such an acknowledgement, together with eliminating stigmatising language and taking measures against hate speech, is an essential step if we want to mitigate the misuse of the criminal justice system and the delegitimisation by language for purposes of silencing environmental defenders. By addressing these factors, societies can better protect individuals engaged in environmental activism from legal and social marginalisation. This way, they can promote a more supportive framework for activism in global terms.

Conclusions

It seems that criminalisation of the acts of environmental activists cannot be treated as a phenomenon characteristic of individual states but appears to be an emerging trend around the globe, used to silence the defenders. It may take various forms, from passing new anti-protest laws, through changes of interpretation, and abuse of precautionary measures, to excessive use of force. In many cases, the measures taken by the authorities are disproportionate, aimed at silencing the defenders. They are often accompanied by defamatory language and smear campaigns aimed at intimidating environmental activists and reducing their role in society.

The environmental activists are not above the law. But their stigmatisation and false accusations of political and economic motivations cannot

be permitted. Criminalisation is not an adequate way to respond to their civil disobedience (Sierra, 2023), and changes should be proposed in this regard. The authorities should publicly recognise the legitimate work done by EHRDs. Judicialisation and smear campaigns should not be used as a tool to repress environmental actions.

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5 Communication Strategies for Environmental Justice

A Feminist Approach

Justyna Arendarska

Introduction

Climate change is one of the most pressing global challenges of the 21st century, posing severe threats to ecosystems, human societies and economic stability. Rising temperatures, extreme weather events and biodiversity loss are not only environmental concerns but also social and political issues that disproportionately affect marginalised communities. Over recent decades, climate diplomacy has evolved significantly, shaped by international agreements such as the *Kyoto Protocol* (United Nations, 1998) and the Paris Agreement (2015). These agreements have been instrumental in shaping global political narratives, integrating climate considerations into foreign policy and guiding national strategies for climate adaptation and mitigation.

However, these frameworks differ considerably in addressing gender perspectives within climate action. The Kyoto Protocol, adopted under the United Nations Framework Convention on Climate Change (UNFCCC), primarily emphasised binding emission reduction targets for developed countries but notably lacked attention to gender inclusivity. This omission has faced substantial criticism from academics and women's rights activists, highlighting a broader pattern of neglecting social dimensions in early climate governance, which favoured market-driven solutions over equity-focused approaches.

In contrast, the Paris Agreement explicitly embraces a gender-responsive framework. Its preamble acknowledges the necessity of respecting and promoting human rights, including gender equality, women's empowerment and intergenerational equity, marking a significant advancement in international climate policy. This approach aligns closely with principles of environmental justice, emphasising that marginalised communities, particularly women, disproportionately experience climate-related vulnerabilities and must be central in decision-making processes.

The article claims that feminist foreign policy (FFP) provides a robust and complementary framework for addressing the multifaceted realities

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of climate change. Central to FFP are principles of justice and inclusivity, closely mirroring the core tenets of environmental justice, which underscore the disproportionate impact of climate change on marginalised groups. Feminist foreign policy enhances these conversations by amplifying marginalised voices, thereby influencing public discourse and shaping inclusive and equitable policy agendas. To achieve this goal, the study is guided by the following key research questions:

1 How does feminist foreign policy contribute to environmental communication?
2 What are the key feminist strategies that can improve environmental communication strategies?

Furthermore, I claim that by integrating feminist principles into strategic environmental communication, states and international institutions can more effectively identify and respond to intersectional and gender-specific vulnerabilities linked to climate change and other environmental issues. Such an intersectional approach not only ensures gender parity but also facilitates broader systemic change, fostering resilience and sustainable development. The interconnectedness of environmental justice, environmental communication and feminist foreign policy thus provides robust theoretical and practical foundations for meaningful and equitable climate action at local, national and global scales.

Intersections of Environmental Justice and Feminist Foreign Policy: The Gendered Dimensions of Climate Action

Environmental communication is closely linked to the concept of environmental justice, defined as a multifaceted framework addressing the fair distribution of environmental risks, burdens and benefits across populations, irrespective of race, colour, national origin or socio-economic status (Sayegh, 2020; Salem, 2019). Emerging initially in the United States, environmental justice responds to structural inequalities inherent in climate policies and actions, highlighting how disadvantaged and marginalised communities disproportionately suffer the effects of environmental degradation, pollution and climate change (Stephens, 2007; Millner, 2011).

According to MacGregor (2021), environmental justice integrates three key dimensions:

1 **Distributive justice** – the equitable allocation of environmental resources (e.g., clean air, water and land) and the mitigation of environmental harms (e.g., pollution, deforestation, climate change impacts).
2 **Procedural justice** – the right of all individuals and communities, especially marginalised groups, to meaningful participation in environmental policy-making and governance.

3 **Recognition justice** – the acknowledgment of diverse identities, experiences and knowledge systems, ensuring that historically excluded voices – such as women, Indigenous peoples and low-income communities – are respected and included in environmental decision-making.

Environmental justice movements advocate precisely for these forms of justice, emphasising not only fair resource distribution but also meaningful participation and recognition of diverse community experiences (Schlosberg, 2004). Although the concept began as a local response to issues such as toxic dumping, it has expanded into a global movement addressing international environmental inequalities, including climate injustice and unequal resource exploitation by wealthier nations and groups (Fritz, 1999; Temper, 2018). Today, environmental justice is recognised as a global concern, uniting communities worldwide through common experiences and shared goals (Claudio, 2007). In this context, as Weder and Milstein (2021) emphasise effective environmental communication plays a critical role in raising awareness, facilitating dialogue and empowering marginalised communities to influence environmental policies, thus reinforcing environmental justice.

It should be noted that the climate crisis disproportionately impacts women. The United Nations highlighted years ago that climate warming and its associated consequences primarily affect the lives and well-being of women. This stems from unequal access to resources. Women also face social, economic and political barriers that limit their adaptability and capacity to counteract unfavourable changes, as they are less mobile in comparison to men (UN WomenWatch, 2009). Recent reports from international organisations also confirm the persistent disparities in access to resources and tools for mitigating the effects of climate change (WEDO, 2022).

A feminist and intersectional approach to environmental justice highlights how gender inequality intersects with environmental risks, recognising that women and marginalised communities are often disproportionately affected by environmental degradation due to socio-economic vulnerabilities and systemic exclusion from political processes (MacGregor, 2021; WEDO, 2022). In this context, a feminist perspective on global governance has gained prominence as a concept that seeks to integrate gender equality, human rights and social justice into international relations (Cohn & Duncanson, 2024). Feminist approaches to environmental governance challenge traditional power structures by advocating for equitable decision-making, participatory governance and the inclusion of marginalised voices in global policy-making (MacGregor, 2021). Given the increasing recognition of climate change as a diplomatic and security issue, feminist foreign policy (FFP) offers a focused and actionable framework for rethinking how environmental communication should be framed and executed on the global stage (Cohn & Duncanson, 2024). Rather than engaging with

the broader theoretical scope of ecofeminism, this article situates its analysis within the applied realm of FFP, arguing that feminist foreign policy can enhance environmental communication by fostering more inclusive, participatory and justice-oriented engagement strategies (WEDO, 2022; MacGregor, 2021).

In this article, I adopt Hansen's perspective (Hansen, 2006), arguing that the very act of labelling a foreign policy framework as 'feminist' constitutes a significant communicative act. It signals specific values and priorities – primarily gender equality and human rights – to both domestic and international audiences. This labelling helps shape the context for all subsequent communication, including environmental communication, as communication itself performs constitutive functions: it shapes understandings, meanings and values. By defining the core political strategy as 'feminist', international engagement – including environmental initiatives – is inherently framed through the lens of a specific ideology. This framing communicates a commitment to treating gender equality as an overarching goal, which in turn influences how environmental issues are articulated and prioritised within this policy framework, setting expectations and norms for both the content and form of communication.

Foundations of Feminist Foreign Policy: Human Rights, Care Ethics and Inclusive Diplomacy

> The International Research Center on Women outlines feminist foreign policy (FFP) as a policy of a state that defines its interactions with other states, as well as movements and other non-state actors, in a manner that prioritizes peace, gender equality, and environmental integrity; enshrines, promotes, and protects the human rights of all; seeks to disrupt colonial, racist, patriarchal, and male-dominated power structures; and allocates significant resources, including research, to achieve that vision. Feminist foreign policy is coherent in its approach across all its levers of influence, anchored by the exercise of those values at home and co-created with feminist activists, groups, and movements, at home and abroad.
>
> (Thompson et al., 2021)

Thus, feminist foreign policy encompasses activities beyond traditional diplomacy, engaging international organisations, civil society and diverse non-state actors.

Research increasingly demonstrates tangible benefits from integrating gender equality into diplomacy, despite diplomacy remaining predominantly male-dominated. Studies indicate that women diplomats often exhibit more conciliatory, empathetic and relationship-oriented approaches in international negotiations (Aggestam & Towns, 2019). However, feminist foreign

policy transcends merely achieving gender parity in diplomatic positions. It critically challenges traditional theories of international relations, which typically reflect hegemonic masculinity characterised by hierarchical structures, aggression and violence (Scheyer & Kumskova, 2019) and are deeply intertwined with post-colonial legacies (Blanchard, 2003). Radical feminist perspectives further critique contemporary international relations for excessive securitisation and militarisation, notably visible in global crises such as migration and climate change (Thomson, 2022; Philipson Garcia, 2023).

Feminist foreign policy is deeply rooted in human rights, emphasising cooperation, empathy and multilateralism (Scheyer & Kumskova, 2019) identify several core indicators of feminist foreign policy, including political dialogue, feminist political economy prioritising individual safety and well-being, empathetic communities founded on trust, global justice, shared responsibility, local inclusivity and intersectional gender analyses. Consequently, feminist foreign policy addresses broader issues beyond gender equality alone – it provides alternative frameworks for responding to complex global challenges, such as migration and climate crises, by emphasising individual well-being, equity and global justice (CAN Europe, 2023). Research underscores that feminist foreign policy facilitates structural transformations necessary for effectively and equitably addressing climate and migration issues, promoting intersectional justice, care, non-violence and inclusive representation in international decision-making (Jiménez Thomas, 2023).

Canada and Sweden adopted feminist foreign policies based on moral and strategic motivations. Morally, their commitment stems from foundational values such as human rights, gender equality and social justice. Canada explicitly positions feminist principles at the core of its foreign policy, recognising that participation, inclusion and non-discrimination are essential for sustainable and equitable development and peace (Global Affairs Canada, 2023). Sweden framed its feminist policy as a moral imperative, viewing gender equality both as an intrinsic goal and as essential for broader strategic objectives like peace, security and sustainable development (Government Offices of Sweden, Ministry for Foreign Affairs, 2019). Strategically, both countries utilised feminist foreign policy as a soft-power instrument, enhancing their global influence, fostering positive international reputations and contributing to long-term stability by preventing conflicts and building societal resilience to global threats such as climate change (Global Affairs Canada, 2023).

Furthermore, feminist foreign policy aligns closely with care ethics, emphasising inclusivity, justice, collective well-being and sustainable relationships with the environment (Aggestam et al., 2019; Light, 2017). Environmental communication similarly can evolve beyond crisis documentation towards care-driven and justice-oriented practices (Pezzullo, 2024). This involves leveraging storytelling, interdisciplinary dialogue and participatory methods, particularly effective in addressing intersectional

issues such as environmental racism, which disproportionately affects women (Gathii, 2020). Thus, feminist foreign policy and environmental communication demonstrate significant synergy, mutually reinforcing their efforts towards social and ecological justice.

Environmental Communication: Integrating Ethics, Praxis and Transformative Potential

Environmental communication can be defined as symbolic action that encompasses naming, shaping and negotiating ecological relationships between people and the environment. Its ethical foundation rests upon two key principles: care ethics, emphasising interdependence, shared responsibility and sustainable relationships with the environment; and crisis ethics, highlighting the urgency of action in addressing environmental and social threats (Pezzullo & Cox, 2022). Furthermore, Weder and Milstein (2021) characterise environmental communication as a transformative discipline with the potential to fundamentally alter perceptions and inspire changes in social and ecological behaviours, facilitating alternative ways of interacting within societies and ecosystems. Most importantly, environmental communication is guided by core principles such as intersectionality, democratic dialogue, transparency, critical reflexivity, storytelling, action orientation, regeneration, holism, empathy and respect. These principles collectively shape environmental communication as an ethically aware, socially inclusive and action-driven field. By integrating holistic perspectives, recognising complex social inequalities and promoting active participation, environmental communication serves as a transformative tool capable of effectively addressing contemporary ecological challenges through informed, compassionate and critically reflective approaches (Weder & Andonov, 2023).

Achieving environmental communication goals requires the use of diverse and often integrated strategies. These include disseminating knowledge and raising awareness, applying marketing techniques to promote voluntary behavioural change for the benefit of the environment, providing the public with credible information about the state of the environment and environmental policies, translating scientific research into accessible language for both policymakers and the public, reporting on corporate environmental activities and building organisational image, engaging in dialogue with stakeholders, influencing political decision-makers and public opinion to support specific environmental solutions, informing about environmental risks and appropriate responses and designing and facilitating participatory processes that actively involve communities in decision-making. Ultimately, environmental communication seeks to foster deeper transformations in value systems, social norms and institutional structures in pursuit of sustainable development (Jarreau et al., 2017; Weder & Andonov, 2023).

In this context, the insights of Jarreau, Altinay, and Reynolds (2017) are particularly relevant. They argue that effective environmental communication is grounded in understanding the audience; localising messages; building trust-based relationships and delivering clear, action-oriented information. Emotional storytelling, value-driven framing and the strategic use of social norms and behavioural psychology are also essential to foster engagement and promoting pro-environmental behaviour.

Although not all countries implementing feminist foreign policy explicitly link gender-sensitive approaches with the communication of environmental goals, a review of strategic documents and official government materials from Sweden, Canada and Germany reveals a positive correlation. These three countries share a set of normative commitments in international politics, including support for multilateral diplomacy, human rights, democracy, sustainable development and climate change mitigation. They also actively collaborate in international forums, such as United Nations climate conferences (COP) and peacebuilding or humanitarian initiatives under the auspices of the UN.

In their feminist foreign policy frameworks, Sweden, Canada and Germany integrate gender-sensitive principles into environmental governance. This includes highlighting women as agents of change and as populations disproportionately affected by climate crises, as well as recognising Indigenous communities as both exceptionally vulnerable to environmental degradation and key holders of ecological knowledge. These practices suggest a promising connection between feminist foreign policy and inclusive environmental communication. However, the extent to which gender mainstreaming in foreign policy frameworks effectively translates into environmental communication strategies remains an open question. This article therefore seeks to examine whether, and how, the feminist foreign policy commitments of Sweden, Canada and Germany are operationalised in the field of environmental communication – particularly in terms of inclusive messaging, participatory approaches and the representation of marginalised groups such as women and Indigenous communities.

Sweden

The main objective of the FPZ was to contribute to gender equality and the full enjoyment of human rights by all women and girls worldwide. This policy was to permeate all three areas of the Swedish foreign service: foreign and security policy, development cooperation and trade and promotion policy. Sweden sought to use all available foreign policy tools – from diplomacy and dialogue, through development assistance, to cooperation in international organisations – to achieve the FPZ's objectives. An important element was also the promotion of the FPZ internationally and encouraging other countries to adopt similar strategies (Ministry of Foreign Affairs, 2019).

Swedish Feminist Foreign Policy (FFP) offers a pioneering model for the integration of gender-sensitive environmental communication within international diplomacy. Rather than treating environmental issues and gender equality as separate policy spheres, the Swedish approach demonstrates how feminist principles – centred on rights, representation and resources – can be operationalised through strategic communication, multilateral advocacy and alliance-building. The implementation report "Sweden's Feminist Foreign Policy: Examples from Three Years of Implementation" illustrates this intersection through Sweden's active role in mainstreaming gender perspectives in climate governance (e.g., COP21), supporting gender-sensitive strategies within global environmental funds (such as the Green Climate Fund and Adaptation Fund) and amplifying women's voices in global campaign Women's Global Call for Climate Justice (Government Offices of Sweden, 2018).

Germany

Germany, as one of the key players on the international stage, formally joined the group of countries implementing FFP in 2023 by publishing official guidelines from the Ministry of Foreign Affairs (Auswärtiges Amt – AA) and a strategy from the Ministry for Economic Cooperation and Development (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung – BMZ). This step is part of a broader trend observed in countries such as Sweden (which was a pioneer in 2014, although it later formally abandoned this label), Canada, France and Mexico. Germany's adoption of the FFP signals its intention to integrate gender equality and the rights of marginalised groups more systematically into all dimensions of its foreign policy, including in response to global environmental challenges.

Germany's Feminist Foreign Policy positions environmental communication as a tool for transformative justice, demanding that climate narratives actively address power asymmetries and amplify the voices of women and marginalised groups (Federal Foreign Office, 2023). It emphasises gender-responsive, intersectional messaging that challenges colonial and patriarchal structures, while promoting inclusive participation in climate diplomacy and decision-making. Communication is expected to align with principles of care, solidarity, and human security – reframing climate action as a shared moral responsibility rather than a technocratic or militarised endeavour.

The BMZ's feminist development policy places particular emphasis on inclusive, empowering and transformative communication that serves to change dominant social and environmental norms. A key guideline is to promote women and marginalised groups as 'agents of change' – active participants in transformation processes, including in the field of climate

and environmental policies. The document emphasises the need for equal representation of women in decision-making bodies and for intersectional and culturally sensitive communication tailored to the diverse identities and experiences of the audience. The BMZ also points to the need to build dialogue with society as a whole – including men, religious and traditional leaders – as a prerequisite for achieving lasting changes in norms and values. In line with this strategy, feminist communication should be transparent, partnership-based and supportive of participation, both at the institutional and local community levels, contributing to overcoming structural inequalities and building just and sustainable societies (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung [BMZ], 2023).

Canada

Canada has embraced a feminist approach to foreign policy, placing it at the core of its international engagement. This commitment has been reinforced through public declarations by government leaders who openly identify as feminists, as well as through the adoption of targeted frameworks such as the Feminist International Assistance Policy (FIAP). Although a formal and comprehensive Feminist Foreign Policy (FFP) document has not yet been fully articulated, the FIAP – launched in 2017 – functions as a central pillar and de facto expression of Canada's FFP, particularly in the realm of international development assistance. It is important to recognise, however, that a fully developed FFP encompasses a broader scope, including diplomacy, trade, security and development.

In Canada's Feminist Foreign Policy (FFP), expressed through the Feminist International Assistance Policy (FIAP), climate goals constitute one of the key action areas. 'Environment and Climate Action' stands as one of the five main action areas alongside the core focus on gender equality. FIAP explicitly aligns Canada's policy efforts with the Paris Agreement on climate change and supports the UN Sustainable Development Goals. A distinctive feature of the Canadian approach is the integration of climate objectives with a feminist perspective, acknowledging that climate change disproportionately affects women and girls, who often have limited access to adaptation resources. The policy recognises that including women in climate planning and implementation leads to more effective solutions, which is why Canada commits to investing in climate initiatives that simultaneously advance gender equality and empower women and girls in developing countries.

The Feminist International Assistance Policy (FIAP) mandates that environmental issues – such as climate change, resource management and biodiversity loss – be addressed through the lens of gender equality and

human rights. This marks a significant departure from traditional approaches centred solely on scientific, economic or conservation frameworks, and instead promotes a perspective grounded in social justice, equity and the recognition of differential impacts on diverse human populations (Global Affairs Canada, 2023).

FIAP is committed to inclusivity and addressing multiple, intersecting forms of discrimination (based on gender, race, ethnicity, Indigenous status, disability, etc.). This principle *should* translate into environmental communication that avoids homogenising the concept of 'women' and instead tells nuanced stories that reflect diverse experiences and identities.

The emphasis on 'activist' and 'transformative' approaches suggests that the communications shaped by FIAP are intended not only to inform, but also to explicitly challenge existing power structures and norms that perpetuate both gender inequality and environmental harm. Environmental communication includes advocacy and social marketing. FIAP thus pushes environmental communication beyond neutral information dissemination towards active advocacy for systemic change (Global Affairs Canada, 2023).

Towards Gender-Sensitive Environmental Communication?

The findings of this study suggest that Sweden, Canada and Germany have each advanced their own interpretations of feminist foreign policy (FFP), and while differences in implementation persist, these countries exhibit converging commitments in the domains of gender equality, multilateral diplomacy, sustainable development and climate action. Their official documents, strategies and diplomatic initiatives demonstrate an increasing awareness of the intersection between environmental challenges and gender-based inequalities.

All three countries integrate gender-sensitive language and normative frameworks into their strategic visions. Sweden's earlier FFP emphasised mainstreaming gender across climate policy tools, such as participation in COP21 negotiations, support for the Green Climate Fund and global campaigns such as the Women's Global Call for Climate Justice. Germany's FFP guidelines (2023) and feminist development strategy (BMZ, 2023) explicitly address the need for intersectional and transformative communication, rooted in care, solidarity and the acknowledgment of Indigenous knowledge. Canada's Feminist International Assistance Policy (FIAP) operationalises gender equality in its environmental commitments, aiming to move beyond neutral information dissemination towards active, justice-oriented advocacy and storytelling. In all three cases, women and marginalised groups are framed as both especially vulnerable to climate impacts and as essential agents of change in environmental governance.

However, the extent to which gender mainstreaming within foreign policy frameworks translates into coherent, inclusive environmental

communication remains subject to critical scrutiny. Despite this discursive alignment, challenges remain in terms of practical coherence and political consistency. While feminist foreign policy (FFP) offers a normative framework grounded in gender equality, human rights and inclusive diplomacy, it has also been subject to significant critique – both conceptually and in practice. Scholars have argued that in its current form, FFP often reproduces colonial hierarchies and paternalistic logics, particularly in relation to Indigenous communities and the Global South. As Bergman Rosamond, Cheung, and De Leeuw (2024) note, expressions of feminist 'care' may serve to reinforce state-centric authority and silence marginalised voices, especially when they fail to address historical and ongoing forms of structural violence. Moreover, feminist commitments are frequently instrumentalised for reputational gains, rather than enabling genuine redistribution of power. Even in progressive states such as Sweden, there are strong structural barriers to the implementation of intersectional values (Singleton et al., 2022). In other cases, gender mainstreaming remains largely rhetorical and fails to translate into institutional mechanisms or lasting transformations within climate policy frameworks (Alber et al., 2021). This disconnect between discourse and practice suggests that without structural reforms and sustained political will, feminist foreign policy risks becoming a symbolic gesture rather than a vehicle for meaningful change.

Novović (2024), in her systemic analysis of Canada's FFP, identifies critical gaps in political coherence, interministerial coordination and institutional capacity, revealing that despite strong rhetorical alignment with feminist values, practical implementation remains fragmented and under-resourced. Similarly, Rosén Sundström and Elgström (2020) highlight that even Sweden's pioneering FFP, while positively received in normative terms, faced limitations in terms of clarity, legitimacy and uptake by other states. These critiques call into question whether feminist foreign policy constitutes a transformative approach to international engagement or whether it risks becoming a symbolic project detached from material change. Recognising these tensions is essential for any empirical or normative assessment of how FFP shapes environmental communication and climate diplomacy.

Canada's continued support for extractive industries and arms trade contradicts the transformative goals espoused in FIAP. Similarly, Sweden's FFP was formally abandoned in 2023 despite prior international leadership. Moreover, feminist foreign policy is often critiqued for being rooted in liberal feminist or neoliberal frameworks, which prioritise representation and soft power over structural transformation. These tensions raise the question of whether FFP constitutes a symbolic narrative or a substantive policy tool in environmental diplomacy.

Nonetheless, feminist foreign policy can serve as a productive analytical lens for evaluating and potentially reorienting environmental communication. It foregrounds practices that integrate gender-sensitive and

intersectional language into environmental discourse, acknowledge and elevate Indigenous and marginalised groups, promote inclusive participation in environmental governance and frame climate change as a matter of care, human security and global justice. These strategies contribute to a shift from technocratic and securitised environmental messaging towards more participatory, ethical and transformative forms of communication. Still, the research leaves open the empirical question of how deeply embedded these principles are across institutional contexts and whether they consistently inform diplomatic practice, media campaigns or public engagement.

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6 'Stand Up for Us as We Stand Up for the Earth'

Sámi People Communicating About Human Rights and the Environment in Norway and Sweden

Maja Chacińska

The quotation in the title of this chapter originates from a performance at Climate Live Sweden 2021 by the Sámi artist Sofia Jannok (2021) who, through this statement, encourages Swedish youth to support various Sámi causes. The Sámi are the only Indigenous people in Europe, inhabiting the Northern regions of Norway, Finland and Sweden alongside the Kola Peninsula in Russia. Comparable to Indigenous communities globally, the Sámi have endured colonisation, racism, displacement and territorial encroachment by the Finnish, Norwegian, Russian and Swedish states (e.g., Ombudsmannen mot etnisk diskriminering, 2008, p. 20). Although the situation has improved and constitutional provisions in these nations safeguard various rights of Indigenous peoples, some violations persist.

The purpose of this chapter is to demonstrate the media communicating strategies employed by the Sámi community concerning environment and human rights violations using two cases as examples: a prospective iron ore mine in Kallak/Gállok (in Swedish/Sámi) Sweden and a wind power plant in Fosen in Norway.

The methodological approach to the analysis assumes that all political media communication is constructed, and both the sender and the receiver of the communication use 'frameworks or schemata' to create and interpret its meaning. The frame is understood according to Erving Goffman as an idea or a tool that 'allows its user to locate, perceive, identify, and label' media communication (Goffman, 1986, p. 21).

In undertaking this research, the principal emphasis was placed on the forms of communication and how they are framed: is the framing different on various accounts? Are there differences of approach and subsequently arguments between Norway and Sweden? As a non-Indigenous researching Indigenous people, the author's focus is on how the communication can be received and perceived by the 'outsiders'. It has not been the purpose of the

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author to determine what the intentions of the communicators are but what is clearly communicated verbally and visually.

The Sámi communication includes official channels such as parliaments and public service media, yet this study primarily focuses on the social media profiles of non-governmental organisations, celebrities and individuals, as they have a global reach and can be easily automatically translated into the recipients' language whereas Swedish or Norwegian public service media reach only the audiences who understand these languages. The material examined comprised: activist Instagram profiles identified by searching for #gallok, #kallak, #fosen and #fosensaken: @nsr_nuorat, @gallok.se, @greenpewacesverige, @skogsupproret, @gruvfrijokkmok, @wwfsverige, @gronungdom, @anders_sunna, @sofiajannok, @gretathunberg, @naturogungdom, @ellamariehi, @amnestysverige, @saminuorra, @amnesty_norge, @maxidamarak, @timmiemarak. The analysis does not include the comments on the Instagram content, as the aim is to assess communication produced by its creators.

The analysed Norwegian and Swedish cases exhibit numerous similarities but also some differences. The first case concerns a prospected mine in Gállok. In 2010, a British company, Beowulf Mining, commenced test drilling for iron ore in the area and in 2013 applied for a mining concession within traditional reindeer grazing territory. This issue sparked initial protests on-site in 2013 and a conflict persisting to the moment when this chapter is being written (January 2025). The Swedish government granted Beowulf Mining the permit in March 2022. The same month a Swedish environmental organisation (The Swedish Society for Nature Conservation, Naturskyddsföreningen) together with two Sámi communities (samebyar Jåhkågasska and Sirges) applied to the Supreme Administrative Court for a legal review of the concession, subsequently drawing support from various Sámi activists. The legal action of the organisation revolved around the assertion that 'The Gállok mine is not compatible with the requirements of the Swedish Environmental Code' (Fagerström, 2022; Naturskyddsföreningen, 2022). In June 2024, the Court declared that the government decision would remain in force. Meanwhile, in August 2024, UNESCO urged Sweden not to make any new decisions while the agency was awaiting an expert report.

The Norwegian case also concerns reindeer husbandry. In 2012, Norwegian government selected the area of Fosen that has been reindeer grazing land for the construction of a wind farm. Despite protests, the construction of the plant, the second largest in Europe, started in 2019. The disagreement culminated in a legal trial before the Norwegian Supreme Court, which resulted in Fosen Vind and the Norwegian state being found guilty of violating human rights of Sámi people on 11 October 2021. However, notwithstanding the ruling, as of January 2025, the wind turbines remain in place, intensifying tensions between the Sámi and the Norwegian state.

In March 2023, the government issued an apology for the human rights violation (Norwegian Government, 2023) but simultaneously, state-owned energy operator Statnett was contemplating development in another winter reindeer pasture belonging to the same reindeer owners (IWGIA, 2023).

When the communication about the cases started, social media were not yet well established as places of activism, so in the beginning the main communication channels were traditional media and the official websites. However, in the recent years social media, mainly Instagram profiles, have become the main communication platforms for the Sámi activists in those cases.

Instagram Accounts

Social media, particularly Instagram, perhaps stands out as the most important mode of media communication in these cases: it reaches a substantial audience, and even when the communication is held in Scandinavian and Sámi languages, it can be easily and immediately translated through Instagram tools into the followers' preferred languages. The visual character of Instagram also enhances its potential to reach a broader audience, as the parent company Meta grants selected video content greater exposure by promoting it across both Instagram and Facebook. However, to facilitate this free of charge promotion, the content on Instagram must be posted as reels in addition to regular posts or stories.

In the Fosen case, Instagram activities demonstrate higher level of organisation and impact (explained further) compared to the Gállok case, despite the latter having two Instagram accounts dedicated to the case @gruvfrittjokkmokk and @gallok.se. However, those accounts are relatively small. The first account (whose name in English is 'Jokkmokk free of mines') has almost 2,500 followers. However, its last activity dates back to 7 July 2023 (which can be explained by the standstill in the case awaiting the Supreme Administrative Court's decision). This account was initiated in 2022 and its first ten posts featured works by Sámi artist Anders Sunna who also advocates for the cause through his Instagram account @anders_sunna.

Sunna's art presents an intriguing approach to the content, featuring a symbolic image of death with a silencing gesture – a finger on the lips. Positioned in the top left corner of the image is the word 'Gruvhotet' ('Mining threat'). On the bottom of the images there are Roman numerals ranging from one to ten, corresponding to the first to last posts in the series. Following the number there are drawings, some in a style of runic signs on Sámi rune drums, and Swedish words that they represent: heritage, forest, water, air, remains, reindeer husbandry, fishery, hunting, species and the future. In these initial communications regarding the Gállok case, the focus primarily revolves around the nature and aspects of Sámi culture.

From the 11th post onward, the imagery consists mainly of the photographs of nature in Gállok with the phrase 'This is Gállok' in Sámi, English, and Swedish. In the post text, the authors state that their aim is to show what Gállok truly is. Despite having an account of not many followers the posts gather a good number of likes, usually around 300 but in some case over 900.

The struggle surrounding the Gállok case primarily depends on posts from other accounts, particularly those of celebrities and activists. While these accounts may not consistently drive protests and their support tends to be sporadic, a single post can ignite considerable activism. Noteworthy in the Gállok case are organisational accounts such as Skogsupproret – avkolonisera Sapmi (The Forest Rebellion – Decolonise Sapmi, @skogsupproret7,000 followers), and Amnesty International Sverige (@amnestysverige, follower count exceeding 51,000).

Celebrities who have publicly supported the Gállok cause primarily consist of popular Sámi artists known in Scandinavian countries. Example can be the Märak artist family – the mother Nik Annika and her daughters Maxida and Timimie. Maxida, the most prominent among them on the platform with nearly 65 thousand followers, lives in Jokkmokk, which adds a personal dimension to her advocacy (@maxidamarak). One of Maxida's videos addressing the Gállok cause, posted on 11 January 2022, gathered over 200,000 views (her other videos from the same time ranged from 30,000 to 50,000 views). Furthermore, this video was reposted by another Swedish personality and EU PM, Alice Bah Kuhnke, who has over 100,000 followers on the platform. Kuhnke also published her own post on the Gállok cause on 6 December 2021.

Close to the date of the Supreme Administrative Court hearing in September 2023, Maxida Märak published nine posts about the case. Among these, two portray a group of activists alongside Märak in front of the court building. The first post published on 20 September is complemented by Märak's song called Regn (Rain) that has significant lyrics. The song is a fusion of rap with elements of soul and resembles a protest anthem. The lyrics of the chorus say: 'You walk on our graves. We come up as lichen… soon we are blown away, the ashes that fall down form a rain'.

Another Sámi artist from Sweden who has supported the Gállok case on her Instagram account (with over 30,000 followers) is Sofia Jannok (@sofiajannok). The artist is a singer and actor, but she is also well-known for her climate activism. She advocates for the causes connected to climate crisis around the world. For her efforts Jannok received, for example, an award from WWF Sweden, the 2022 Environmental Hero of the Year. Many of her posts concern the climate crisis in general, climate anxiety and the effects of the climate crisis on Indigenous people (e.g., 26 August 2023; 16 June 2022; 8 April 2021). The images posted are emotionally charged and often accompanied by Sámi music and lyrics of her songs.

Similarly to Maxida Märak, Jannok published a series of post on the Gállok case in proximity to the date of the Swedish government's concession decision in early 2022. On 22 January 2022, the artist posted a photo of herself standing on a forest road in a shirt with the text 'Strong resilient Indigenous' in front of a stone arrangement stating: 'no mining'. The post text contains the lyrics of her song translated into English, in which she compares colonisers to thieves:

> A habit of thieving
> is like the ocean
> Never stops its motions
> Dangerous, so dangerous
> to me.

Further in the text, writing about the Swedish government's upcoming decision, Jannok refers to both the environment and human rights. Her next post, from 4 February 2022, is a photo from an article in the largest Swedish newspaper *Aftonbladet* opposing the mine in Gállok. Four days later, on 8 February, Jannok published a short extract from her interview for Norwegian public service television in which she speaks about Gállok, claiming that the Sámi need to protect their 'territories, land, and water'. Interestingly, a difference in reception of Instagram formats mentioned earlier can be observed here: the post gathered over a thousand likes and it had over 25,000 views in the reel format (the interview is in Sámi with subtitles only in Norwegian).

The most prominent and viewed Instagram endorsements of the Gállok cause were those posted by Greta Thunberg (@gretathunberg). The activist has used her Instagram platform to advocate for various Sámi causes connected with environment. In her Instagram account, Greta Thunberg primarily features weekly Friday posts depicting her gathering with some activist in front of the Swedish Parliament. In the case of Gállok, she posted a series starting on 28 January 2022, featuring her weekly post on School Strike, but in this photo one of the activists standing in front of the Swedish Parliament held a sign in Swedish that read 'Save Gállok'. On 30 January 2022, when the Swedish government decision on the matter was expected imminently, Thunberg published a post with a series of information signs about the case encouraging the followers to sign the petition. Subsequently, on 4 February 2022 her weekly School Strike update was posted from Jokkmokk. The picture shows a group of young individuals, some of them in the traditional Sámi attire, standing with a sign 'No mining in Gállok reindeer-herding area'. Two days later Thunberg shared a similar photo but featuring several Sámi activists and a prominent display of the Sámi flag. Each of those posts gathered over 100,000 likes.

The final engagement from Thunberg prior to the Swedish government's decision was a two-minute emotionally charged video posted on 10 February 2022. Throughout the entire video the viewer hears *joik*[1] being sung by one of the participants, in the background. Various young Sámi activists and the activists from Fridays for Future speak in the film strongly about the Swedish government, calling it racist and colonial. 'A no is a no' says one of the activists at the end of the film with another one adding 'Hello Swedish government, I just wanted to tell you that there will not be a mine here!' The video garnered over 400,000 views.

As previously noted, the Norwegian Instagram campaign exhibits greater coordination and focus. The primary actions are organised through the account of the Norwegian Sámi Youth Council NSR Nuorat (youth division of Norwegian Sámi National Association). Prior to November 2022, the Instagram account @nsr_nuorat featured photos and information concerning young Sámi, their lives and activities, and promoting various Sámi events. However, in October 2022, on the first anniversary of the Supreme Court's decision in the Fosen case, the account became the main channel of communication for the Sámi rights connected with the verdict.

This campaign started on 13 October when a post about a small protest in Oslo was shared with a banner proclaiming (an) ONGOING HUMAN RIGHTS VIOLATION in all-caps. The subsequent post on 18 October was the beginning of a campaign still underway of February 2024. The account mainly features images from the wind power plant and some activists with each post indicating the number of days since the Supreme Court decision, such as '754 days of human rights violations' (in Norwegian). It started at 372 days, and the count reached 868 by the end of February 2024. In between those posts there have been updates regarding on-site protests that culminated in October 2023 on the second anniversary of the court decision. The Sámi activists gathered in Oslo, blocked the main street, protested in front of the Norwegian Parliament as well as occupied Ministry of Petroleum and Energy for four days until they were arrested, all of which was documented in the Instagram posts.

Unlike the Swedish Instagram profiles, the account belonging to NSR Nuorat publishes posts together with the supporting organisations and individuals. Several posts have up to four authors, including Natur og Ungdom (Nature and Youth, a Norwegian environmental organisation, @naturogungdom), Elle Nystad (@ellenystad, the chair of NSR Nuorat), Ella Marie Hætta Isaksen (@ellamariehi, actor, artist and activist) and Greta Thunberg. This strategy, though simple, focuses the campaign on a single online location and significantly enhances the viewership of the posts. When the protests started, the initial post with the number of days received 71 likes. Meanwhile, in February 2023 a post jointly shared by NSR Nuorat and Natur og Ungdom featuring a photo of Greta Thunberg with a text 'Greta comes. Will you come?' received 2,165 likes, meanwhile

the post from the protest published together with Greta Thunberg gathered nearly 25,000 likes. The creators of the account also make sure to post content as reels thus enhancing the viewership (e.g., the post on 12 October 2023 received 198,000 views and 4,969 likes).

One of the Sámi public figures driving the protests is Ella Marie Hætta Isaksen, an important Sámi activist and celebrity from Norway. Her Instagram account has 34,000 followers and regularly features content with images and videos concerning the case. One of her posts in February 2024 concerned the anniversary of the protests in Oslo. Another Sámi celebrity who has advocated for the Fosen case on her account is Sofia Jannok. She published several posts in March and October 2023 about the demonstrations in Oslo urging her followers to support the protest in Fosen case with human rights arguments countering environmental claims: 'We need renewable energy to solve the climate crisis, but Indigenous people have sacrifices enough in the face of climate changes (…) and we cannot have the renewable energy that violates human rights'.

Greta Thunberg endorsed the case and the protests in October 2023 when, in a short video featured on the @nsr_nuorat account, she invited the viewers to join her and the protesters in Oslo. This call to action garnered a response of over 30,000 likes, a figure that while less than Thunberg's posts generate – often exceeding 400,000 likes – was still an impact greater than the organisation would make on their own. Thunberg's most popular post concerning Fosen (189,574 likes) featured a video, depicting the Norwegian police forcibly removing the activist from the Ministry of Petroleum and Energy premises on the night of 27 February 2023, shared together with @nsr_nuorat. The footage shows the protesters being carried away while shouting slogans about the rights of Indigenous people. In a subsequent post on 2 March, Greta Thunberg is present in one of the photos protesting with the Sámi activists and in another is carried away by the police.

Framing, Strategies and Effectiveness – Discussion and Conclusions

Three primary framing approaches can be distinguished in the analysed communications. First is the environmental perspective – the protested enterprises are deemed harmful for the environment. Second is the cultural angle – the mine and the wind power projects are harmful to Sámi culture. Third is the human rights perspective that highlights the violation of the Indigenous people's rights. The environmental frame is usually separated from the cultural and human rights arguments whereas the latter two are frequently intertwined or merged into one in these communications – portraying harm to Sámi cultural activities as a violation of their human rights.

In communications concerning the Gállok mining plans, all three perspectives are presented, yet the environmental viewpoint appears to be dominant. The environmental claims are frequently used in this case as highlighted in the analysis earlier in the chapter. Nature preservation and dire implications for the environment are one of the main frames employed by the activists. While cultural assertions are also emphasised in these communications, the use of the 'green transition' argument by the Swedish government and Beowulf Mining, seemed to direct Sámi and their supporters towards this line of argumentation. Consequently, numerous aspects of communication are framed through an environmental lens, the main factors including testing the case in Supreme Administrative Court and engaging environmental activists and organisations such as Greta Thunberg and Skogsupproret as well as Green Peace Sweden (e.g., @greenpeacesverige posts from 24 February 2024 and 25 June 2022) and Grön Ungdom (Green Youth). The latter called the decision on Gállok 'anti-nature' in their post on 27 March 2022 (and in posts @gronungdom 14 January 2022, 5 February 2022, and 6 February 2022).

To some extent the environmental arguments were also most justified and sensible in reference to the Gállok mine being planned in proximity to Laponia, classified as a World Heritage Site by the UN agency UNESCO because it is Europe's largest continuous wilderness. Greta Thunberg's posts on Gállok also strongly emphasise that the case is an 'environmental justice issue' and referring to the area where Sámi live as 'experiencing heating four times faster than the global average' (30 January 2022).

The environmental approach is also evident in the visual aspects of the communication about Gállok, as the Instagram accounts draw attention by publishing images. In the Gállok case, many of the analysed accounts, as demonstrated earlier, feature photographs showcasing the beautiful environment that could potentially be devastated by the mining activities. The Sámi in these communications are to be viewed as custodians of the natural world, a concept alluded to by Sofia Jannok in her concert mentioned in the beginning of this chapter (Jannok, 2021).

The cultural rights of Sámi people are also frequently expressed in the communications about the Gállok case. These expressions often centre around the rights associated with reindeer husbandry, hunting, and the broader aspects of the Sámi way of life. This emphasis can be particularly credited to the posts of Sámi artists, such as Sofia Jannok and Maxida Märak. Within the context of the Gállok case, emotional artistic expressions frequently refer to themes of colonialism, land appropriation, displacement and the enduring legacy of ancestral heritage. Such discourse often frames the communication around the uprooting and destruction of this Indigenous culture.

Human rights arguments are less consistently raised in the communication on the Gállok conflict. It is noteworthy that this approach was

employed at an early stage of the conflict in 2012, before the environmental framework was applied within the context of the Supreme Court proceeding. After the court case started, the only primary human rights approach on Instagram were endorsements from Amnesty International Sweden (e.g., posts from 20 January and 22 March 2022 and 19 September 2023). Amnesty's posts consistently convey the message that the mining industry and its mines pose a threat to the rights of the Sámi people.

In the Fosen case, the primary focus remains on the claims of human rights throughout the entire discourse, as demonstrated earlier in the analysis. This can be easily explained by the fact that since the Supreme Court's ruling on the violation of human rights, the law squarely supports the Sámi people in this regard. This standpoint is evident in all communications not only in the verbal aspects, but also the visuals that seldom show the beauty of nature in Fosen, but instead show young Sámi fighting. Also unlike in the communication on Gállok, there is nothing on the biological diversity conventions referring to the Fosen case. It is evident in this instance that, in contrast to the Swedish government's argument 'mines for green transformation' and the general common perception of mining and mines, a wind power plant is universally acknowledged as green energy. Therefore, using environmental arguments in the Fosen case would necessarily bring into the debate the various climate arguments between the Norwegian government and the Sámi people. Consequently, it appears reasonable to emphasise alternative aspects instead of attempting to determine 'whose climate is more important'.

Interestingly, perhaps the most important supporter of the Fosen cause – Greta Thunberg – also focuses on the human rights violations, despite the activist's focus on environmental causes. In the Norwegian case, in March 2023 Sametinget also contacted Francisco Calí Tzay, the UN Special Rapporteur on the rights of Indigenous Peoples[2] (Muotka, 2023).

The strategies used by the Fosen activists in their communications also seems to be more cohesive and targeted, particularly focused around the protest in Oslo proving more effective in garnering support from various groups, including the Sámi communities and individuals across the Nordic countries. On multiple accounts, Sámi individuals from Sweden and Finland encourage others to travel to Oslo and join the protest (e.g., @mirjapalo.se 2 March 2023, @formarks 11 October 2023, @eleonoraalariesto 11 October 2023) or join the protests themselves, a situation not observed in case of Gállok. The Fosen case received also support from various organisations on the Swedish side. The account of Samiska riksungdomsförbundet (a Sámi youth organisation in Sweden) published several posts on Fosen protests on their account @saminuorra (e.g., 26 February 2023, 3 June 2023, 11 & 12 October 2023). Additionally, Swedish public service radio had a series of news about the Oslo protests (Sveriges Radio, 2023).

It could be argued that the substantial support for the Oslo protest was due to the scale of the event. However, the protests in the Gállok case, like

the above-mentioned one led by Greta Thunberg in Jokkmokk or the gatherings in Stockholm in connection to the Supreme Administrative Court proceedings, could potentially achieve a similar impact if the communication were more focused.

Of course, due to the multitude of factors at play beyond mere media communication, it is difficult to establish which frames and which forms of communications have been more effective. The Sámi plaintiffs' court victory over the Norwegian government should not be regarded as evidence solely of effective communication strategies, but rather of a functioning democracy. Following the Swedish Administrative Court's verdict, it may become possible to analyse which legal approach, whether environmental or human rights-based, proved more effective. Nonetheless, the extent of national and international response to the communication efforts can serve as a measure of success. In this case, the Fosen protests, framed within the context of human rights, have evidently achieved greater success.

The fact that in these cases the governments of Norway and Sweden act either against the law (Norway) or against multiple environmental impact assessments (Sweden) appears to support another theory about the media – the CNN effect. According to the theory media can strongly affect government policy but only when there is an absence of policy on the issue. In Fosen as well as Gállok, despite existing persistent media coverage and pressure on the governments, the latter positions are so certain that the effect of the media on policy decisions seems to be minimal (Robinson, 2005, p. 38).

Notes

1 Joik is a unique form of vocal and musical expression with ancient origins, deeply woven into the fabric of Sámi life and culture. Within the discourse of contemporary Sámi identity, joik symbolizes the endurance and vitality of indigenous culture. It also reflects the profound connections between individuals, their community, and the surrounding natur world (Kjellström et al., 1988, pp. 89–91).
2 https://www.ohchr.org/en/documents/thematic-reports/ahrc5747-indigenous-persons-disabilities-report-special-rapporteur.

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7 The Potential for Branding in Environmental Communication

A Case Study of Switzerland

Magdalena Ratajczak and
Marta Ryniejska-Kiełdanowicz

Introduction

In recent years, sustainable development has emerged as an important concept recognised by countries almost all over the world. They are declaring their commitment to the Sustainable Development Goals (SDGs) and launching a range of policies to achieve them. In this article, we want to show that nation branding provides an opportunity for countries to communicate the Sustainable Development Goals. As an example, we will use Switzerland, a well-known, recognisable country, but seen through the prism of numerous stereotypical associations, namely wristwatches, banks, chocolate and nature. Switzerland accommodates numerous differences: linguistic, religious, cultural, geographical and political.

The authors aim to show the potential of branding in environmental communication as a tool that helps countries and international organisations to shape their image in the context of global activities. The authors will indicate what elements are used in conducting these activities and what impact they have on a multidimensional construction such as the image of Switzerland. Furthermore, they will identify the consequences in the construction of the country brand. They will focus primarily on environmental assets, including the skilful use of geographical assets, using the principles of sustainable development. The text will make use of source material, in particular documents and strategies for sustainable development, tourism development and official government communiqués. We place our considerations in the context of social constructivism, which attributes the greatest role to norms, values and ideas, and a likewise important element of the constructivist paradigm is the shaping of international environmental norms and the idea of climate justice in the international arena. Global campaigns to influence public opinion are important here, as contemporary climate challenges require cooperation and the creation of new norms and values in the global arena.

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Moreover, contemporary global studies analyse political, economic or cultural interdependencies. In this context, attention is increasingly being paid to the role of climate communication, which can be treated not only as a tool for education but also, as in the case of Switzerland, for identity building. Branding in this context therefore becomes an important instrument that combines climate communication with diplomacy. It can also be analysed in the context of so-called 'soft power' in the sense of Joseph Nye (Nye, 2009), for example, in the context of specific initiatives such as Blue Peace, which allows Switzerland to present itself as a mediator, innovator, and consequently a globally responsible actor, or the Clean-Tech initiative, which builds the image of the state as a leader in environmental innovation and climate neutrality. Such narratives are social mobilisation strategies (Babic, 2021). Switzerland uses its national brand in diplomatic activities, such as at COP climate summits, to reinforce its image as a country committed to combating climate change.

Climate Communication in a Global Context

There is no doubt that in the context of the growing importance of environmental issues on international agendas, state climate policies are gaining new functions and significance. Increasingly, it is ceasing to be solely an element of internal development strategy or a response to environmental challenges, and is beginning to function as a diplomatic tool and a means of influence in international relations. Parallel to climate diplomacy, the concept of climate communication is developing as a tool not only for informing societies about climate action, but also as a form of legitimising decision-making processes. According to Hoppe, this communication takes the form of a multi-channel deliberative information management strategy, involving state institutions, the media, NGOs and citizens in the process of co-creating the climate policy narrative. It is defined as a process of environmental information exchange aimed at shaping pro-environmental attitudes and behaviour in society and supporting environmental protection and sustainable development activities (Hoppe et al., 2024). Susanne C. Moser and Lisa Dilling also describe a process for communicating about climate change. They highlight the important issue of taking the cultural and political context into account and using appropriate communication strategies. The complexity of the problem itself, as well as cultural and political conflicts and differences in risk perceptions, can make effective communication and mobilisation of action difficult (Moser & Dilling, 2011). There is no doubt that states which effectively integrate climate policy with other areas of their foreign activities have the opportunity to establish themselves as leaders in environmental transformation and develop new forms of bilateral and multilateral cooperation.

To properly analyse Switzerland's climate communication in the context of branding, it is necessary to refer to its definition. Nadia Kaneva has proposed three approaches to the issue: an economic-technical approach, a political approach and a cultural approach (Kaneva, 2011). Obviously, the first one, which focuses on the area of marketing, management or tourism, is the dominant one. However, in the context of Switzerland, it is still worth referring to Fiona Gilmore's concept of identity and 'core ideology', which is a kind of 'spirit of the nation' in relation to the people as well as the state (Gilmore, 2002).

The concept of so-called niche diplomacy (Henrikson, 2005) is often used in relation to Switzerland. It denotes the specialisation of a country in a specific area. In principle, niche diplomacy is attributed to countries located in the periphery, whereas Switzerland is located in the very centre of Europe, but it is also utilised by small countries that do not have the opportunity to use 'hard power' to the same extent as the big ones. In such cases, the emphasis is often placed on instruments of influence that rely on persuasion rather than force. Joseph Nye conceptualises *soft power* as a state's ability to influence the preferences and behaviour of other actors in the international system through attraction rather than coercion or material inducements. Unlike 'hard power', which relies on military force or economic leverage, soft power operates by projecting cultural values, political ideals and foreign policies that are perceived as legitimate or desirable by others (Nye, 2009). In this context, niche diplomacy can be interpreted as a strategic use of soft power, where countries like Switzerland capitalise on their reputation, neutrality and competence in selected policy domains. However, in the case of Switzerland, one can speak of a certain isolation of the country due to the fact that it is not a member of the EU and is much less frequent in public discourse.

The Multidimensionality of Swiss Branding

When writing about Switzerland's image, its cultural diversity should not be forgotten; it is one of the most important elements of Swiss identity. With more than 8.2 million inhabitants, this country is one of the most diverse of European societies. The country officially has four national and official languages, corresponding to the four national communities of Switzerland. Religious diversity is another of the country's symbols. The two largest religious communities are Catholics (38%) and Protestants (26%), but Muslims (5%) are a growing group. However, it must be acknowledged that, especially in the last few decades, the linguistic and religious structure in Switzerland has been influenced by migration (Ratajczak, 2020).

Diversity is not just limited to language and religion. Switzerland is a hugely diverse country also in a political sense. The country is governed

on three levels: federal, regional and local. Switzerland is made up of 26 autonomous cantons, comprising 2,636 municipalities. But what makes Switzerland an interesting example to analyse in the context of environmental communication is its diversity in terms of geographical location. It is hard not to agree with Stein Rokkan, who called Switzerland a European microcosm, due to its cultural, linguistic, religious and regional diversity (Steiner, 1996).

External observers of this 'microcosm' quite often ask the question of how to define 'Swissness' in such a case, and what influence these aforementioned differences have on its shape. The authors of this article also sought the answer during interviews and research in numerous Swiss public organisations and institutions that have been conducted in Switzerland for almost 30 years. Schweiz Tourismus, which is one of several institutions involved in Swiss public diplomacy and the promotion of Switzerland abroad, argues that

> the language communities have different traditions and customs. Even their shared history only goes back two centuries. The united state remains a supreme value for the Swiss. The general stance is summed up by the formula *unity but not uniformity*.
>
> (Holidays, travel and sightseeing | Switzerland Tourism, n.d.)

In 2015, Schweiz Tourismus launched the #INLOVEWITHSWITZERLAND campaign. Using this popular hashtag, the Swiss declared their attachment to their homeland. On the occasion of this campaign, a number of campaigns from previous years, very similar in nature, were evoked. Governments have instruments that allow them to manage this sector of the economy effectively, such as significant budgets and access to information. The development of tourism is undoubtedly also influenced by political, economic, socio-psychological and demographic factors, as well as the country's tourism assets. Positive associations associated with Switzerland can also become a starting point for building a strong reputation for the country. This requires, of course, that the guiding idea of the tourism brand is compatible with that of the national brand, which allows for effective communication and the building of strong and positive associations. However, new challenges, such as the concept of sustainable development, which countries are increasingly focusing on in their promotional strategies, are of increasing importance. It poses a major challenge to those in power, who usually want to attract tourists while keeping in mind environmental issues and looking after the interests of their inhabitants.

This is not a straightforward process, as it takes the agreement of government, tourism industry partners, and local communities to pursue sustainable tourism policies, and these are often groups with divergent interests, goals, values and perspectives (Timur & Getz, 2009). When talking about

sustainable tourism we need to consider its economic, social and cultural dimensions, as well as ensuring that resources are managed in such a way that they can support future generations in accordance with the preservation of fundamental ecological processes, biodiversity and biological resources (Timur & Getz, 2009). As Anna Królikowska-Tomczak notes, tourism can be a means to achieve the goals of sustainable development, promote pro-ecological attitudes, thus influencing the shaping of a positive image of a place. As Anna Królikowska-Tomczak (2017) notes, tourism can serve as a tool for achieving sustainable development goals, promoting pro-environmental attitudes and shaping a positive image of a place. Climate change, along with concepts such as 'green', 'eco' and 'sustainable', can influence how a country's brand is perceived and contribute to building its competitive advantage.

Swisstainable – the Swiss Approach to Climate Communication

However, in order to understand the Swiss approach to climate communication, it is worth considering at length the aforementioned tourism, which plays a huge role in Switzerland at a global level. As early as the 18th and 19th centuries, it was recognised that tourism in particular could become a huge opportunity for mountain regions. Tourism began to develop first in the Bernese region, then in Wallis, Ticino and Grisons. As Jerzy Wojtowicz acknowledges, Lord Byron's trip to visit Madame de Stael in Coppet contributed to the enormous popularisation of the Bernese Alps among English tourists (Wojtowicz, 1989).

Tourism remains to this day the symbol of this small country and is also one of its most important industries. It brings in huge revenues, thanks to foreign tourists as well as the Swiss themselves, who regard their surroundings with great affection. This is one element of local patriotism. As Ulrich Schwendimann, of the Polish-Swiss Chamber of Commerce, admitted:

> (...) the Swiss concern for the environment is linked to local patriotism. Switzerland is a relatively small, but really naturally beautiful country. Another aspect is the so-called long-term economic viability. In the long term, it is more profitable to invest in the environment and sustainability than to spend a great deal of money on restoration at a later date. The Swiss realise that in some situations, due to the irreversibility of certain processes in the future, this may simply not be possible.
>
> (Alpy i konsultacje społeczne to dobro narodowe Szwajcarii, 2021)

However, it is important to note that the authorities are aware of the risks caused by tourism, hence they are preparing many pieces of legislation to protect the environment. One of the key ones is the Conception 'Paysage

Swiss' of 1997, introduced by the Swiss government, which states that natural, scenic and architectural values constitute Switzerland's heritage and are covered by the state's pro-environmental policy (Klimek, 2010).

For many years, there has been a debate in public discourse relating to the extent to which certain developments pose a threat to the environment, clean air and water. As early as the late 1980s, attention began to be drawn to the so-called waste of land. This involved a significant expansion of smaller flats, both by Swiss and foreigners, at the expense of building large hotels. As was pointed out, the construction of holiday flats takes up five times more space than the construction of a hotel. Katarzyna Klimek also draws attention to the overdevelopment of transport infrastructure. Switzerland has a great deal of experience in mountain transport and is at the same time the country with the best-developed network of different railways transporting tourists: rack and pinion, cable, cabin, chair and T-bar lifts. They constitute the densest network of this type in the world (Klimek, 2010). The author cites a study from a dozen years ago, giving as an example Zermatt, where significant pollution was caused by snow groomers, especially in the perpetual snow area. In the Zermatt region, it was discovered that engine oil or fuel used by snow grooming machines had penetrated the glacier ice beneath the ski slopes, raising concerns about local environmental impacts (Klimek, 2010).

For several years, the Swiss have also recognised the threats posed by pollution of lakes and rivers and sources of drinking water. This is why in 2010 Switzerland launched a global initiative, Blue Peace, which engages with multiple actors in various water-stressed regions to transform competition over shared fresh water sources into collaboration for stability and sustainable development. Switzerland promotes water as an instrument for peace. Through Blue Peace Initiative, Switzerland 'supports both cross-border cooperation and national platform for dialogue on water management and shares its long experience in transboundary water management of six rivers and four lakes shared with its neighbours' (*Environment | House of Switzerland*, n.d.).

In the context of the dilemmas discussed above, 2017 proved to be a particularly important year. The Swiss called this year, rather symbolically, a return to nature. First, Switzerland took advantage of an initiative by the WTO, the World Tourism Organisation, which declared 2017 the International Year of Sustainable Tourism for Development. Second, Switzerland celebrated its centenary of promoting the country's tourist attractions that year. Indeed, in 1917, the SVZ – Schweizerische Verkehrszentrale (Swiss National Tourist Office) – was founded in Bern. In the following years, certain activities have been strengthened, above all at the level of individual cantons. One example is the canton of Valais, which is the most active tourism region next to Grisons and introduced a cantonal tourism policy

as early as 2003. Still noteworthy today is the Valais Excellent project, which aims to ensure the quality of tourism services, but also to protect the environment (*Valais Excellence*, n.d.). Also worth noting is the Swiss Parks Network initiative (www.parks.swiss, n.d.). It is formed by nineteen park areas with local traditions. The parks in the network are involved in numerous initiatives, and which form the basis of efforts to build local identity and economy in the regions (*Tourism Close to Nature and Culture in Swiss Parks – Tourism for SDGs*, 2019). Among the projects carried out within this framework, it is important to note the 'Schweizer Pärke für alle', which aims to raise awareness of tourism offers, including the inclusion of people with disabilities and the opportunity to travel more often. Importantly, the project also planned transport solutions ('Fahrtziel Natur'), i.e., the possibility to travel by public transport or rent electric bicycles and visit the parks. Certification of local products has also been introduced to encourage sustainable agriculture in the region. The 'Swiss Park' label can be awarded not only to natural areas, but also to products and services ('Swiss Park Label', currently 1,700 products and services from 14 parks). Among other activities, it is worth mentioning the 'Mission B' campaign aiming to restore biodiversity in the areas by involving the local community, through the distribution of seeds of local plants, growing and planting plants together in public spaces and building and installing bird feeders (Niezgoda et al., 2020).

It can therefore be seen that for the Swiss, tourism promotion activities centred around a sustainable tourism strategy are taking on a new importance. 'I Need Swisstainable' is a slogan promoting sustainable tourism in Switzerland, but also nature and lifestyle. It is important that when communicating about the qualities of nature, the Swiss pay special attention to their surroundings and how they function in them. They emphasise the great importance of recycling – 94% of old glass and 81% of PET are handed over to special collection points instead of being thrown into household bins. Attention is paid to woodlands, including parks of national importance, which account for almost 15% of the country. Green spaces are also conserved – an agreement from 125 years ago mandates the maintenance of 30% wooded areas (this area is currently being expanded). Schweiz Mobil promotes hiking, mountain biking, cycling and skating. Letizia Elia and Martin Nedegger, authors of the Schweiz Tourismus strategy on sustainable tourism, point out that this is not a new phenomenon for Switzerland. Measures to protect the environment, taking care of clean air and water, proper communication and waste segregation have been part of the sustainable development policy set by the UN for years. The strategy introduced in 2021 envisages, for a start, a decidedly greater involvement of Swiss tourist destinations. The slogan 'I Need Swisstainable' was mainly aimed at the Swiss themselves in 2021 and was part of an internal

campaign. As of 2022, it is already part of a broader message to foreign audiences (Nydegger & Grobet, 2022).

Adianna Czupryn, director of the Swiss Tourist Organisation in Poland, and Joanna Lampa, translator and author of books about Switzerland, point out that Switzerland is a place that lives its life with local and foreign tourists. Drinking water from the tap, as well as from numerous fountains and watering holes, was already the case there before; well-organised public transport was already the case there before. Now, however, Switzerland has introduced the label Swisstainable – a compound of the English words *Swiss* and *sustainable* – to promote environmental sustainability trends that were already taking place (Czupryn & Lampka, 2021).

When writing about sustainability policies in Swiss tourism, the wider context of the phenomenon cannot be overlooked. For years, the Swiss government has consistently and coherently communicated the values on which the Swiss brand and image of the country is built. The Ministry of Foreign Affairs, the Eidgenoessisches Department fur Auswartige Angelengenheiten (EDA), is responsible for the conduct of Swiss foreign policy. Within its structures is the department responsible for promoting the country, building the brand and conducting public diplomacy – Präsenz Schweiz. In 2016, Präsenz Schweiz's communication strategy for foreign audiences included more than a dozen priority areas. As Peter Frankhauser, deputy director of Präsenz Schweiz noted,

> Switzerland also uses positive stereotypes, such as the Alps, in building its image. Studies show that mountains, winter sports, beautiful landscapes are strongly associated with the image of Switzerland. But at the same time, we want to draw on other, often little-known values not previously associated with Switzerland.
>
> (P. Frankhauser, personal communication, 1 March 2018)

In Lieu of an Ending, a Swiss Oxymoron – i.e., Brilliance Sometimes Fades

However, in the context of the communication strategy described above, it is impossible to ignore two very important initiatives in the international dimension.

The first is the activism of Swiss senior women who are dissatisfied with the actions of politicians on climate issues. We are referring to a group of almost 2,500 women who are active in a group called Klima Seniorinen. As they maintain, since 2016 they have been calling on Swiss politicians to increase mobilisation against climate change. They have been drawing attention to how the negative effects of the heat are felt the most by the elderly, persons over 65 years of age, and – above all – by women. They

decided to turn to the European Court of Human Rights, bringing a case against the Swiss government. In April 2024, the European Court of Human Rights ruled that the Swiss government had significantly violated women's life and family rights by ignoring the fight against climate change. This primarily concerns greenhouse gas emissions. It is worth adding that this is a historic judgement that is not being appealed and is also significant in terms of the perception of human rights.

This made the results of the referendum in June 2021 and February 2025, in which the Swiss voted against a reduction in carbon emissions and a ban on pesticides, all the more surprising. At the same time, it should be added that government representatives, despite their dissatisfaction with the results of the referendum, indicated that citizens were not against climate protection, but against this particular law. Opponents of the carbon vote pointed to the real economic impact – higher petrol and airline ticket prices, with little connection between these changes and the real environmental impact. At the same time, it was emphasised that Switzerland emits only 0.1% of global carbon dioxide emissions. In the vote, 51.6% of participants voted against reducing carbon emissions. In contrast, more than 61% opposed a ban on pesticides. Urs Furrer, director of the Swiss Chocolate Association Chocosuisse, admitted that he 'agrees with the proposal to ban synthetic pesticides, but then the price of Swiss chocolate would increase' (Bełdowicz, 2021). In a referendum in 2025, the Swiss rejected the introduction of a provision in the constitution to respect the planet's natural resources. Almost 70% of participants were against (News, 2025).

These referenda are of great interest to the international public as well, as they create a certain dissonance among the public. For the Swiss, it has once again become a reason to increase the messaging and strengthen the campaign to promote Swiss sustainability. It can certainly be said that the Swiss are using branding to sensitise, to emphasise the need to protect the environment, which is becoming crucial for them in promoting their image, so they are introducing 'green branding' not only to attract tourists, but also to pursue an educational policy. Sustainable tourism is now an important indicator of success for almost every country, but the balance between the desire to attract the attention of visitors and at the same time the need to protect the environment and ensure the protection of local communities is very difficult to achieve. The Swiss seem to see a kind of obligation here, noting that tourism also has negative effects. They understand national branding not only as a communication tool, but also as a management process that intervenes in the country's development strategies and determines the direction of the country's development, and decisions are not taken only on the advice of marketing experts but are the result of ongoing political and public discourses, as demonstrated by the referendum mentioned above.

It is also worth remembering that national branding strategies aim to attract tourists or investors, but also to enhance quality of life and support sustainable development. Indeed, there is a link between this idea, branding, competitiveness and the reputation of a place. All the more so as the lack of environmental measures threaten the image of countries and undermine the essence of tourism activities. It should be added, following Joanna Kowalczyk-Anioł and Robert Palusinski, who analysed the issue of the tourism sphere under COVID-19 conditions that paradoxically we are dealing with a potential change in a more desirable direction. Indeed, changes in global tourism policy are being called for in order to make it more consistent with sustainable development goals (Persson-Fischer & Liu, 2021; Sigala, 2020).

At the same time, we would like to emphasise that Switzerland has been ranked very high in many rankings assessing the position, the brand of the country, for years. In most of them, the system of governance, the health of the economy, but also the quality of education and the importance of innovation and new technologies, are the foci of the ratings, and the Swiss are rated very highly. Switzerland has not left the top ten in the Global Soft Power Index for many years, ranking 8th in 2024. Switzerland was ranked 16th in the Good Countries Index in 2024. However, it is worth mentioning that it was ranked 1st in the Planet & Climate category and 4th in Health & Wellbeing. This ranking should be interpreted as the result of effective environmental policies at the national level, but also as evidence of Switzerland's growing awareness of global climate challenges.

In view of the worsening effects of climate change – both environmentally and socially – the involvement of internationally powerful countries in climate protection efforts is of particular importance. Switzerland, with its consistent approach to climate policy, its extensive research and development infrastructure and its tradition of neutrality and diplomacy, can also play a leadership role in promoting global sustainability standards. The high ranking in climate and health-related categories can be interpreted as the result of a strategic approach that combines environmental responsibility with foreign and development policy. Thus, Switzerland has the potential to combine national interests with responsibility for the common good on a global level. Swiss initiatives such as 'Swisstainable' testify to the desire to reconcile tourism attractiveness with the need to reduce the carbon footprint and protect mountain ecosystems particularly vulnerable to climate change. Furthermore, Blue Peace draws attention to transnational cooperation in water resource management as a tool for peacebuilding and global conflict prevention. Switzerland is actively shaping the debate on the links between water security, peace and climate, which further strengthens its position as a promoter of responsible, value-based international cooperation. Such an approach can undoubtedly build Switzerland's image as a responsible and innovative country committed to the global challenges of civilisation. By consistently combining environmental action with foreign

policy, Switzerland is effectively building its international brand based on the values of sustainability and global solidarity.

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8 Environmental Crisis Communication in Wartime

Bartłomiej Łódzki

Introduction

A full-scale war in Ukraine began on 24 February 2022. As of May 2025, the UN Human Rights Monitoring Mission in Ukraine (HRMMU) confirmed that the conflict has resulted in 13,134 civilian deaths and 31,867 injuries (UN Human Rights Monitoring Mission in Ukraine, 2025). The war between Russia and Ukraine has not only had devastating effects on human lives and infrastructure but also on the environment and natural resources. The enormous destruction was visible within the first months of the conflict and required a response from appropriate institutions (Anthes, 2022; Gallo-Cajiao et al., 2023; IUCN, 2022; Nuget, 2023). The Ministry of Environmental Protection and Natural Resources reported that within only seven months of military conflict, the environmental destruction in Ukraine had amounted to €36 billion. Paranjak et al. (2023) stated that this figure includes an estimated €11.4 billion attributed to soil damage and €24.6 billion related to air pollution. The war has led to the devastation of nearly one-third of Ukraine's forests and 20% of its nature reserve areas and assets. Specific forms of environmental harm are deemed irreversible, causing considerable concern (Paranjak et al., 2023).

The war has inflicted extensive chemical contamination of air, water and soil, as well as the contamination of Ukraine's territory with landmines and unexploded ordnance. The conflict has caused significant landscape degradation through shelling, wildfires, deforestation and pollution. Moreover, Russia's occupation of the Zaporizhzhia Nuclear Power Plant and the destruction of the Nova Kakhovka Dam created the potential for long-term environmental catastrophes (Hryhorczuk et al., 2024).

The environment is a silent victim of conflicts. Military actions, a lack of focus on post-conflict environmental restoration, and the neglect of the connection between humanitarian and environmental factors are key consequences of war. The invisibility of these problems is significant, and their repercussions can be severe (CEOBS, 2023). In the case of Ukraine's

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actions, one could not speak of passivity and forgetting about the environment, but effective environmental communication posed a challenge. Ukraine's Ministry of Environmental Protection and Natural Resources played a pivotal role (Kim, 2023). From the first days of the war, the Ministry consistently monitored and posted information about environmental damage in Ukraine and across Europe (Cynk, 2022). It also effectively leveraged its presence at the COP27 conference, where Ukraine had its first pavilion (Barchielli et al., 2022).

Aim of the Study and Methodology

Since the onset of the full-scale war, Ukraine has undertaken numerous actions to raise awareness among both its citizens and the international community about the extent of environmental destruction. A team of external experts supported the Ministry's efforts, and communication teams actively shaped public opinion (Leal Filho et al., 2024). It is worth emphasising the intensive cooperation with foreign partners who aided Ukraine in monitoring, securing and restoring the damage to green infrastructure (*Environmental Impacts of the War in Ukraine and Prospects for a Green Reconstruction*, 2022).

The study aimed to examine the official articles published on the Ministry's website, which served as a crucial communication channel during the war. Additionally, the content of news articles published in the international media during the COP27 conference was analysed. All that news included the Ukrainian perspective, based on the speeches of delegates and activists.

The data collection comprised a sample of 342 articles published in the 'news' section of the Ministry of Environment and Natural Resources of Ukraine's website (https://mepr.gov.ua/), spanning from February 24, 2022, to February 23, 2023. Additionally, 34 articles covered by international media during or immediately after the COP27 conference (held from November 6 to 18, 2022) were included. Oleg Kirichuk, the former PR manager at the Ministry of Environmental Protection and Natural Resources of Ukraine, provided the official list of articles on his LinkedIn profile.

The study employed quantitative and qualitative content analysis, integrating text mining and natural language processing (NLP) techniques, as well as manual thematic analysis (Chen et al., 2013; Kasson et al., 2021; Koichi, 2004; López & Iva, 2018; Ylä-Anttila et al., 2022). The analytical process was supported by the use of WordStat and MaxQDA software tools (Guetterman & James, 2023; Sihidi et al., 2022).

The research focused on the dominant issues and problems discussed by the Ministry, as well as international media coverage of these topics. The narratives (themes) were analysed, and a comparison was made. Additionally, activities related to the use of new technologies for monitoring

environmental damage and providing information and warnings to the public about the risks and impacts of damage were also analysed.

Three research questions were formulated:

RQ1: What topics and issues dominated the Ministry of the Environment's thematic agenda during the first year of the war?
RQ 2. What topics and issues dominated the international media coverage during the COP27, which focused on the Russian-Ukrainian war?
RQ 3. What technologies and to what extent have been used to communicate environmental losses?

Website Analysis

Analysis of the content on the official website of the Ministry of Environment and Natural Resources of Ukraine revealed a multifaceted strategy for crisis environmental communication during wartime, articulated around ten principal thematic areas identified through natural language processing (NLP) techniques. The discourse of the Ministry prominently featured a narrative centred on 'Nature Reserves and Nature Protection' (43.71% of cases, coherence 0.323). This highlights the importance of intensive communication efforts in preserving and managing protected natural areas, national parks and biodiversity in the face of armed conflict. These communications portray national reserves, biosphere reserves and nature protection funds as key components of Ukraine's ecological resilience.

Equally significant in the Ministry's communication is the theme of 'Atmospheric Air and Dangerous Substances' (36.34%, coherence 0.471). This highlights the prioritisation of informing about critical environmental risks associated with industrial pollution, large-scale fires and the emission of hazardous substances into the atmosphere. This thematic cluster reflected growing concerns about air quality degradation and toxic emissions exacerbated by military operations, including fires in industrial zones and damage to infrastructure. Articles with the thread 'Environmental Crimes Resulting from the Invasion' (32.78%, coherence 0.341) referred to instances of international law violations and ecological destruction caused by military aggression, covering both immediate damages and long-term consequences for ecosystems and civilian infrastructure.

Notably, given the proximity of military operations to nuclear facilities, the theme of 'Exclusion Zones and Nuclear Power' (26.37%, coherence 0.403) was particularly noteworthy. Communications in this area focus on nuclear safety, radiation monitoring, and the protection of exclusion zones surrounding nuclear power plants such as Chernobyl and Zaporizhzhia. This discourse addresses societal fears of radiological contamination and the potential for ecological catastrophe under wartime conditions. The analysis also highlights the regional dimension of ecological disaster in

addressing the topic 'Russian Shelling in the Kharkiv Region' (28.98%, coherence 0.349), which tracks specific instances of shelling-induced fires and resultant ecological degradation in the Kharkiv area, thus emphasising the intersection of military conflict and environmental harm at the local level.

Broadly encompassing environmental management issues, the topic of 'Environmental Protection of Natural Resources' (coherence 0.317, covering an impressive 96.67% of the total word count in the analysed corpus) reflects overarching efforts to protect natural assets, manage resources sustainably and implement comprehensive environmental governance policies amid crises. Complementarily, 'Environmental Damage and Economic Issues' (coherence 0.306, 47.51% relevance) highlights the quantification of damage, including the economic valuation of losses related to environmental degradation across affected territories, linking ecological harm to broader economic and social consequences.

The Ministry's communication also draws attention to threats to the Black Sea ('Pollution of the Black Sea', 16.39% relevance, coherence 0.290), including risks of oil spills, contamination arising from naval clashes and the resulting threat to marine ecosystems and coastal communities. The extensive ecological repercussions of the conflict are synthesised in 'Consequences of Russian Aggression for the Environment' (76.01% relevance, coherence 0.277). This thematic cluster aggregates broad patterns of environmental damage directly attributable to Russian military operations, encompassing habitat destruction, pollution and long-term ecological insecurity.

Finally, the thematic category 'Ruslan Strelts and the European Union' (68.17% relevance, coherence 0.243) indicates a strategic focus on international cooperation and institutional integration. Articles on topic focused on the role of the Ministry, efforts towards EU integration, adapting to EU standards, environmental governance reforms and joint reconstruction projects aimed at enhancing post-conflict environmental recovery and resilience.

The Ministry's efforts in regulating and monitoring environmental issues, as outlined in Ukrainian legislation such as 'On the Basic Principles of the State Environmental Policy of Ukraine', 'On Environmental Impact Assessment' and 'On Strategic Environmental Assessment' (Kalina et al., 2022) were highlighted as crucial in addressing the environmental impacts of the war.

An analysis of the news on the Ministry of Environment and Natural Resources of Ukraine's website revealed two main frames of environmental discourse. The positive frame highlighted issues of cooperation (19.3% of cases), future-oriented activities (18.4%), integration (13.2%) and victory (11.1%). Publications highlighted the dedication of government and forestry workers. Media reports reflected a forward-looking and collaborative approach aimed at building resilience and solidarity in times of crisis. Within these narratives, environmental protection efforts were

presented through the prism of partnership, European integration and, ultimately, the successes achieved despite adverse circumstances. The negative frame was evident in the news through frequent references to ecocide (4.4%), terrorism (3.3%), terrorists (1.4%) and mentions of political figures, such as Putin (0.9%). Typical negative phrases were 'ecological terror', 'sponsor of terrorism', 'Russian terror' and 'nuclear terrorists'. This kind of news constructed a narrative of deliberate environmental destruction and violation perpetrated by the aggressor. The dual framing highlighted the severity of environmental harm caused by the conflict and mobilised public and international support through messages of hope, unity and eventual triumph.

International Media Coverage

During the United Nations Climate Change Conference (COP27) in Sharm el-Sheikh, Egypt, in November 2022, Ukraine had its first opportunity to organise its own space. The pavilion was designed as a grey installation symbolising the devastation caused by Russia's military aggression. The installation featured a missile crater filled with 500 cubes representing 16 types of Ukrainian soil, emphasising Ukraine's critical role in global food security and the environmental impact of war on its fertile lands. It was created as a platform to highlight the environmental consequences of the invasion, including increased greenhouse gas emissions resulting from military activities, and the urgent need for sustainable recovery and green rebuilding efforts, framed within the principles of just transition and gender equality. Ukraine's pavilion hosted over 30 events and attracted roughly 300 visitors daily, presenting an impactful narrative that intertwined the war's effects with broader climate and energy challenges, thereby positioning Ukraine as resilient and committed to international climate goals despite the ongoing conflict. Many international partners, including the European Union and UN agencies, backed the initiative. That place became a significant site of diplomacy and engagement in civil society (*Ukraine Pavilion at the UN Climate Change Conference*, 2022; Zhavzharova, 2022).

Foreign media and journalists enabled Ukraine to amplify its voice, not only by visiting the pavilion but also by publishing statements from Ukrainian politicians, experts and activists. These statements were reported by American, European, Arab, Japanese, African, Indian and other media outlets. The media coverage highlighted the global context of the war in Ukraine primarily through the lens of its environmental and climate impacts, its disruption of international climate efforts and its link to global crises in energy and food supply (Table 8.1).

The main topic widely reported by the international media was the documentation and presentation of direct environmental damage caused by

Table 8.1 Main Topics and Issues Identified from NLP Analysis

Topic	*Keywords*	*Coherence (NPMI)*	*FREQ*	*CASES*	*CASES %*
Climate change and president	President; Policy; Climate; Conference; Nations; Change; Ukrainian; Egypt; Climate change; Climate policy; Ukrainian president; Effective climate policy; United Nations; Climate conference in Egypt; Effective climate policy without peace; Climate change conference; Ukrainian president Volodymyr Zelensky	0.225	334	34	100.00
Climate crisis	Food; Crisis; Global; Countries; World; Climate; Climate change; Climate crisis; Global food; Food security; Energy crisis; Food crisis; War in Ukraine	0.212	300	33	97.06
Environmental damage	Streets; Damage; Environment; Environmental; Minister; Caused; Kyiv; Russia; Environmental damage; Ruslan Strilets; Damage caused; Environment minister; Natural resources; Environmental protection and natural resources; Damage to the environment; Environment minister Ruslan Strilets; Environmental damage caused; Svitlana Grychuk; Deputy minister	0.212	257	3	97.06
Fossil fuels	Fossil; Fuels; Fossil fuel	0.180	73	13	38.24
Greenhouse gas emissions Million tonnes	Greenhouse; Emissions; Gas; Million; Greenhouse gas emissions; Million tonnes; Carbon emissions	0.161	134	26	76.47
Ukrainian Pavilion	Pavilion; Country; Green; Ukraine; Delegation; European; Ukrainian Ukrainian delegation; Ukrainian pavilion; Ukrainian flag; Ukrainian government; Tree trunk; Ukrainian banner	0.126	345	34	100.00
Russian invasion	Russian; Invasion; February; After; Million; Russian; Russian invasion; Million tonnes; Invasion of Ukraine; Million hectares	0.109	120	31	91.18

Authors' own research.

military operations. Ukrainian officials and delegates consistently emphasised the scale and nature of this damage during the conference.

Based on statements by Ukrainian delegates, the media presented estimates of direct emissions resulting from the conflict. They cited research findings indicating that at least eight million tons of CO_2 equivalent were emitted between February and September 2022 as a result of the Russian invasion. Citing Ukrainian Environment Minister Ruslan Strilets, the media reported that the war had directly caused 33 million tons of greenhouse gas emissions. This figure was presented as the equivalent of adding nearly 16 million cars to the roads of the United Kingdom over two years.

The media provided detailed descriptions of the significant impact of fires caused by military operations. During the first seven months of the war, more than 6,215 fires broke out, covering over 486,162 hectares. It is estimated that these fires, caused directly by military operations, were responsible for the emission of 23 million tons of CO_2 equivalent. Ukrainian President Volodymyr Zelensky stated that 5 million acres of forest had been destroyed in Ukraine in less than six months, while other sources report that 3 million hectares (7.4 million acres) of forest had been destroyed and that an estimated 280,000 hectares had been destroyed. Approximately 450,000 hectares of forest are located in areas occupied by the Russian army or whose authorities are hostile to the Ukrainian government.

The media focused on air, water, and soil pollution. The international public became aware of the documented destruction of water infrastructure and the release of toxic gases. It was emphasised that protected areas had been severely affected. By August 2022, 30% of them had been bombed, burned, polluted, or otherwise affected by military operations, and probably even more have been thusly affected since August 2022. It was reported that one-fifth of Ukraine's protected areas were threatened or destroyed. The soil was contaminated, and the damage was estimated to be between EUR 11.4 billion and EUR 11.9 billion. It was noted that the war also threatened the lives of animals and plants, including endangered species. Cases of dolphin deaths in the Black Sea linked to the conflict were documented.

The media reported that the war had destroyed hundreds of thousands of buildings and structures in cities across Ukraine, including industrial infrastructure, leading to leaks of pollutants. Solar panels and wind farms, which are key to renewable energy production, were deliberately destroyed by Russian forces. Half of the green energy capacity of DTEK (Ukraine's largest private energy producer) was located in Russian-occupied territory, and around 90% of wind power and 30% of solar power capacity were lost as a result of the fighting.

Ukrainian delegates and activists did everything in their power to demonstrate the strong and clear link between the world's dependence on

fossil fuels and Russia's ability to finance the war. This was a key narrative thread that ran through their communications during COP27 and was also reflected in media reports. A statement by Ukrainian human rights lawyer Oleksandra Matviichuk was widely quoted, saying that fossil fuels had 'fuelled the Russian war machine for too long' and that Russia had avoided punishment for its previous actions partly because the world was dependent on its oil and gas. Climatologist Svitlana Krakovska argued that fossil fuels, which cause climate change, are also Russia's main export and a source of funding for its invasion. The message was clear: 'Stop financing the war for fossil fuels'.

The media also highlighted the energy crisis that forced countries to resume coal-fired power generation to curb rising energy prices. Journalists saw this as a major setback for global climate efforts. The war shifted attention from energy transition to immediate energy security, prompting some countries to seek new sources of fossil fuels.

Ukrainian delegates quoted in the report argued that dependence on fossil fuels makes countries vulnerable. The war reinforced the need to move away from fossil fuels, prompting calls for energy independence not only from Russia but from fossil fuels as such.

Despite the enormous destruction, Ukraine also used the COP27 platform to present its vision for the future, focusing in particular on green recovery and transformation. Ukrainian officials announced plans to rebuild the country in a more ecological and environmentally friendly way. This included modernising infrastructure and moving towards carbon neutrality. This was seen as an opportunity not only to rebuild, but also to create something new that would make Ukraine an important part of the EU's energy security. Ukraine has expressed its commitment to renewable energy, with a focus on solar, wind and hydrogen energy. Despite the destruction of renewable energy facilities during the war, there were plans to increase renewable capacity significantly by 2030 and to export energy to Europe.

Another topic covered in the international media discourse was the global food crisis and international food security. Ukraine is widely recognised as the 'breadbasket of the world' due to its vast, fertile agricultural land, which accounts for 71.3% of its total area. The country plays a key role in global food supply, contributing to the nutrition of over 400 million people worldwide. Between 2019 and 2021, Ukraine accounted for a significant share of global agricultural production, supplying 10% of the wheat, 15% of the corn, 15% of the barley, and nearly 50% of the sunflower oil. Additionally, Ukraine is among the top five global exporters of cereals, supplying over 45 million tons of cereals to international markets each year. Their agricultural products are often valued for their high quality, including organic products, which they owe to the fertility of the soil.

International media have highlighted serious food shortages around the world. This crisis has particularly affected countries already struggling with

the effects of climate change, such as droughts and floods. The disruptions have caused food prices to skyrocket, disproportionately affecting countries in the Global South. The United Nations World Food Programme (WFP), which provides food assistance also to countries affected by hunger caused or exacerbated by climate change, is itself dependent on food supplies from Ukraine. The WFP has issued warnings that hunger could reach unprecedented levels worldwide.

Journalists have highlighted the mechanisms underlying the war's harmful impact on global food security. The main factor is the disruption of exports, mainly due to the Russian naval blockade preventing Ukraine from exporting agricultural products through its ports. This has effectively cut off Ukrainian grain supplies to the international market. In addition, the conflict has caused significant damage to Ukraine's agricultural resources. Important farmland has been destroyed, and there are reports of fertile black soil turned to stone by white phosphorus incendiary bombs.

This destruction reduces the amount of arable land and limits Ukraine's ability to produce food for both its own population and for the world. The authorities have also accused Russian forces of burning crops, granaries, and agricultural equipment. According to data from June 2022, the area under spring crops decreased by 19.4% compared to the previous year, and a quarter of agricultural producers did not have access to essential plant protection products.

In addition, Ukrainian and Western officials have accused Russia of using food as a weapon since the invasion. This strategy involved exploiting the global rise in food prices caused by the conflict as a means of putting pressure on countries supporting Ukraine and the nations of the Global South. The US Secretary of State stated that Russian armed forces were holding food for millions of people around the world as 'hostages'. Russia has also been accused of exacerbating the food crisis in Africa by blocking grain export routes from Ukraine. The effects extend to related industries, in particular the fertiliser supply chain. The head of EuroChem, a company linked to a Russian oligarch, has been identified as a key player in the global food supply chain, and the UN chief is working to ensure the continuity of international supplies of Russian fertilisers, on which farmers around the world are reportedly dependent.

During COP27, Ukraine also promoted the 'Green Grain Routes' initiative, which aimed to reduce the carbon footprint of grain exports.

The media also focused on Russia, but its presence at COP27 was described as largely invisible or marginal. Russia did not have a pavilion, and its delegation was described as generally avoiding contact with its Ukrainian counterparts.

Russian representatives called for closer international cooperation on climate issues and criticised sanctions targeting green technologies, but largely avoided acknowledging the war. Lobbyists present at the conference included oligarchs and executives of companies subject to sanctions.

One oligarch even suggested focusing on emissions from ecosystems rather than human activity and portrayed global climate policy as a conspiracy against Russia, stating that Russia would only return to climate policy after the end of its 'well-known military operation'.

A specific point of contention was the ongoing discussion on Russia, including emissions from Crimea, in national climate reports submitted to the UNFCCC. Ukraine's negotiator stated that this was Ukraine's main demand at the summit: carbon dioxide emissions from Crimea belong to Ukraine because it is Ukrainian territory. Ukraine consistently opposed all Russian documents, including emissions from Crimea, without referring to the UN General Assembly resolution on illegal annexation, considering this an attempt to legitimise the occupation gradually. This highlights how geopolitical disputes can manifest in even the most technical debates on greenhouse gas emissions accounting.

The Ukrainian narrative from COP27 was visible and supported by media outlets.

Summary

The analysis of the Ukrainian Environment Ministry's communication reveals a bifurcated strategy tailored to different audiences and contexts. Internally, the Ministry's website content primarily addresses Ukrainian society, concentrating on highlighting its activities, legislative changes, adaptation to European standards, monitoring of environmental damage, plans and the role of green transformation and energy. This internal focus also included paying tribute to fallen personnel. Conversely, Ukraine's voice in international media, exemplified during COP27, featured prominent statements from key politicians, supported by input from scientists and activists. A central theme in this international communication was the explicit linkage between the destruction caused by the war and global issues, specifically climate change and the resultant food and energy crises, often conveying a tone marked by negative emotions. This suggests a strategic differentiation in communication efforts, presenting a forward-looking, activity-oriented narrative domestically while focusing on the global ramifications of the conflict and its environmental consequences on the international stage.

An important aspect is the Ministry's proactive approach over time, which is not limited to publishing material but has been extended to organising events and meetings with journalists and taking action in the international arena. Among the Ministry's activities is the EcoZagroza app project, a reliable source of information on the state of the environment, which is particularly valuable in terms of information warfare. The EcoZagroza project collects data on environmental threats caused by the Russian Federation and develops a plan for their mitigation or elimination. In the application, users can view data on the interactive map of Ukraine, including air quality, radiation pollution levels across the country, and information about

various environmental threats. The Ministry of Environment is also working on restoring ecological objects after the occupation. The project is implemented in partnership with the Ministry of Environmental Protection and Natural Resources and the Ministry of Digital Transformation with the support of the USAID/UK aid project 'Transparency and accountability in public administration and services/TAPAS' and the 'Apena2' project financed by the European Union (*EcoZagroza*, 2023).

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Conclusion

Bartłomiej Łódzki and Justyna Arendarska

In the era of globalisation, environmental communication plays an important role not only in the political sphere, but also in the social and cultural spheres. Deepening social inequalities in access to resources, prolonged armed conflicts – from Ukraine to the Middle East – and the competition for natural resources in Africa and South America, along with the advancing anthropogenic climate change, mean that more effective, fair and ethical communication is needed to overcome this multi-crisis. We strongly believe that implementing more effective environmental communication in core sectors could become a catalyst for global transformation. Although environmental issues are often securitised or overshadowed by political conflicts, in our book, we wanted to show that climate and environmental communication can overcome these obstacles and adapt to changing social needs.

Our authors' texts demonstrate that environmental communication can take new forms, engage new actors and use new language to reach local and international audiences. The thematic chapters collected in this book demonstrate that environmental communication can be applied in diverse areas, including investment mechanisms and international treaty negotiations, social media and grassroots activism, as well as actions taken by governments and international organisations. At the same time, the diversity of issues that environmental communication can address demonstrates that this is a current topic and that its subject matter is evolving dynamically in response to changing geopolitical, social, and technological conditions. The range of forms and actors justifies our interdisciplinary approach to analysing environmental communication.

Reading our texts allows us to draw several fundamental conclusions that will serve as a summary of the research conducted by our interdisciplinary group of researchers. First, the climate crisis is a highly complex phenomenon that affects many areas of nature. This poses a challenge that requires a comprehensive approach and more decisive action. For several decades, global efforts have focused on mitigating climate change, as exemplified

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by the establishment of the Intergovernmental Panel on Climate Change (IPCC). However, the same attention and effort have not been devoted to protecting biodiversity. Habitat loss and biodiversity protection should be treated as equally important aspects of this problem when communicating environmental threats.

A key problem in addressing the environmental crisis is the ineffectiveness of scientific communication within the public and media spheres. Our authors' research suggests that the media can distort the public's perception of environmental issues by giving equal attention to conflicting narratives, including those of marginal voices. Journalists may also struggle to communicate complex climate issues responsibly, as these are long-term processes that, unlike short-lived events, are more challenging to present in an accessible way to a broad audience. Consequently, this can lead to an increase in disinformation that spreads rapidly through social media and influences the public's perception of these complex phenomena. This can lead to a lack of trust in scientists and scientific methods, as well as reduce the effectiveness of strategies to combat the environmental crisis. Decision-makers and communication practitioners, such as journalists, therefore play a significant role in providing reliable and responsible information on climate change and environmental challenges.

Scientists themselves play a key role as sources of knowledge in public discourse on environmental issues. However, scientific research is often biased by corporate ties, which undermines its objectivity in the eyes of the public. Thus, we are faced with a paradox: the more we need reliable knowledge, the more its authority is either undermined or harnessed by political or corporate interests. This raises the question of how to build trust in environmental communication, which requires not only the communication of facts, but also transparency, consideration of diverse sources and respect for the complexity of contemporary issues.

In response to growing protests by environmental activists, states are resorting to increasingly restrictive methods to silence and criminalise these defenders. These methods include bringing unfounded charges, such as terrorism or disturbing public order; introducing controversial new laws that criminalise activist activities and abusing preventive measures, such as detention and arrest. These actions are often accompanied by dehumanisation, smear campaigns and hate speech in the public sphere. These tactics undermine the credibility of civil society representatives and divert public attention from the essence of environmental problems. Consequently, social and political polarisation is growing, and a 'chilling effect' is emerging that threatens democracy and open, inclusive debate.

The book also emphasises the increasing importance of environmental justice as a framework for understanding and evaluating environmental communication. Our researchers discuss the criminalisation of climate activists, the communication dilemmas faced by Indigenous peoples and

the impact of feminist strategies. Their work demonstrates that environmental communication cannot be presented separately from human rights, equality, representation and issues of structural violence. In our opinion, this indicates that contemporary environmental communication is not merely an area of 'green education', but rather, a space for the struggle for recognition, participation and a democratic voice. This shift towards a politics of recognition is one of the most significant developments in environmental communication research and practice.

The book includes a case study of Switzerland that showcases new communication practices. The study demonstrates that communication can serve as a diplomatic and branding tool, supporting the development of an image as a responsible international actor. Switzerland's case demonstrates that the country is a leader in strategically utilising branding and integrating environmental communication to promote sustainable tourism, lifestyles, education and pro-environmental attitudes both domestically and internationally.

The actions taken by the Sámi community to protect their land and human rights exemplify how local interests can effectively align with the global need for solidarity and recognition of environmental rights as essential to the existence of local communities. The case study of the Indigenous peoples of Sweden and Norway demonstrates how effective framing and celebrity support in communicating environmental issues can mobilise broader public support. It proves that consistent and coherent communication which references universal human rights, can effectively influence discourse and lead to deeper changes.

When discussing armed conflicts, the impact on the natural environment is often overlooked, even though it is clear that armed conflicts have disastrous consequences for the environment. In our work, we addressed this issue in a text devoted to the case of Ukraine. The enormous challenges posed by millions of tons of CO2 emissions, the devastation of forests and nature reserves, soil and water pollution and nuclear threats require innovative communication strategies to raise international awareness of the importance and scale of the problem. Ukraine has implemented a two-pronged strategy for communicating environmental threats. It directs its message both internally and externally using a strategic narrative that links war destruction to global climate and food crises. This text illustrates the evolving landscape of global environmental communication and emphasises the importance of addressing complex issues such as armed conflicts in the future.

Despite the prevailing sense of impending environmental disaster, we believe that in times of multiple crises, environmental communication should not only be about communicating threats, but should also become a space for hope. This book does not provide ready-made solutions, but offers a map of directions worth pursuing. It shows that effective environmental

communication must be multi-voiced, intersectional, contextual, and ready to face uncomfortable questions. On behalf of the entire team of authors, we therefore express our hope that the reflections contained in this publication will not only help to understand the mechanisms of climate communication better, but also inspire the creation of practices and policies based on justice, solidarity and shared responsibility for the planet.

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