ENVIRONMENTAL SUSTAINABILITY IN THE WESTERN BALKANS – MISMANAGEMENT OF COMMONS COUPLED WITH CLIMATE CHANGE IMPACT



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INTRODUCTION

The intersection of environmental degradation and security risks presents a complex challenge that requires urgent attention with comprehensive solutions. The impacts of climate change, biodiversity loss, pollution, and other environmental issues exacerbate existing vulnerabilities, especially in regions already facing socio-political instability and conflict. Addressing these challenges necessitates a multidimensional approach that integrates environmental sustainability, conflict prevention, and peacebuilding efforts. Institutions of authority, such as governments, international organizations, and civil society groups, must collaborate and implement proactive measures to mitigate the drivers of insecurity and environmental decline. The spillover effects of environmental degradation on conflicts are highlighted by the strong correlation between countries with high levels of violence, as measured by the Global Peace Index (GPI), and those with severe environmental degradation.

Against this backdrop, Balkan Peace Index acknowledges environmental sustainability not as a stable background to the dramas emanating from sovereign states and their international relations, but as a distinctive and active agency in the issues of survival, peace, and prosperity. We argue that environmental sustainability, as a driver of all-life support systems, preconditions both positive and negative peace. Environmental sustainability is one of the seven BPI's domains that measure peace in the region, providing insight into the relative abilities of Western Balkan countries to sustain their life support systems which enable human and non-human "potential to flourish". Structured as a composite domain, environmental sustainability focuses on the three interlinked indicators: natural resources resilience, air quality, and energy system performance. Given that the region includes many intertwined habitats that do not adhere to geopolitical borders, the weak capacity of one country to protect its life support system can have ripple effects that extend beyond its borders, affecting neighbouring countries and the broader Balkans. Considering this, our region is seriously threatened in terms of environmental sustainability, and we have rated this BPI domain as poor, both overall and for each indicator in 2023.

COMPARATIVE PERSPECTIVE

The summer of 2023 certainly left a permanent mark on global climate records, with temperatures soaring to unprecedented heights. The heat wave dubbed Cerberus, particularly devastating in South Europe, highlighted the vulnerabilities of nations illprepared to face such extreme weather events. In the Western Balkans region, Cerberus



brought about one of the most intense and prolonged periods of extreme temperatures, laying bare the inadequacies in resilience and preparedness measures. From flash floods to extended dry spells, the erratic weather patterns exacerbated challenges for natural resources in Serbia, Bosnia and Herzegovina, Albania, North Macedonia, and Montenegro, particularly in the realm of wastewater treatment. Lake Prespa, a symbol of Europe's natural heritage, bore the brunt of these dire dynamics in 2023. As one of the continent's oldest lakes, it serves as a stark reminder of the urgent need for sustainable practices and robust infrastructure to mitigate the impacts of climate change. While international indices may recognize efforts in species protection, the mismanagement of old-growth forests, for instance through wood logging activities in Croatia and Serbia, poses a severe threat to biodiversity levels in the region. Despite the presence of robust legal protections, ecosystems across the region continue to deteriorate, facing threats not only from the unsustainable extraction of timber and firewood but also from inappropriate urbanization. The resistance against various projects in the region reflects a growing awareness of the need to protect natural resources and sensitive ecosystems from harmful development activities. In Montenegro, opposition to undersea exploration for gas fuels highlights concerns about the potential environmental impacts, such as marine pollution and habitat destruction, as well as the contribution to climate change through continued reliance on fossil fuels. Similarly, in North Macedonia, Bosnia and Herzegovina, and Serbia, protests against small hydroelectric power plants (HPPs) stem from concerns about the destruction of river ecosystems, disruption of aquatic habitats, and threats to freshwater biodiversity. Despite being promoted as a renewable energy source, the construction of small HPPs can have significant negative consequences on local ecosystems and communities. In Albania, opposition to a luxury project in a highly protected area, reportedly involving former senior adviser to the president of the USA Jared Kushner, underscores the importance of upholding environmental regulations and preserving biodiversity hotspots. Development projects in such areas can lead to irreversible damage to fragile ecosystems, undermining conservation efforts and threatening the long-term resilience of the region's natural resources.

The air quality crisis in the Western Balkans region represents a profound public health challenge, with citizens experiencing dangerously high levels of air pollution, particularly in Serbia, Bosnia and Herzegovina, North Macedonia, and Montenegro. The over-reliance on outdated coal industry infrastructure and inefficient individual combustion plants has led to persistently poor air quality, surpassing levels seen in other parts of Europe. During the last two years pollution increased for all three regulated pollutants - sulphur dioxide, PM particles, and nitrogen oxides. Even though five years have passed since the implementation of air pollution regulation standards (that were put in place in compliance with the Treaty on the Establishment of the Energy Community on



January 1st, 2018), sulphur dioxide emissions from thermal power plants included in the national reduction plans (NERP) of North Macedonia, BiH, Serbia, and Kosovo^{*1} still exceed permitted levels by five to six-fold. Air pollution is often perceived as a visible symbol of governmental neglect or indifference towards public welfare and environmental protection in the region. When authorities fail to address this pressing issue adequately, it can erode trust in institutions and fuel grievances among citizens. As political elites continue to ignore the issue, of all components of the environmental sustainability domain, the air quality indicator has the most considerable potential to provoke mass protests and threaten positive peace.

The tensions surrounding the war in Ukraine have heightened the importance of energy supply sustainability on the political agenda, both within the European Union (EU27) and the Western Balkans region. Given the uncertainties and disruptions in the global energy market, energy supply sufficiency or energy security (as defined by the World Energy Trilemma Index) emerges as the biggest political concern and priority within the environmental sustainability domain, despite being only one component among many. Governments in the Western Balkans have framed energy security as a key strategic concern, linking its critical role to ensuring stability, economic development, and national sovereignty, albeit at the expense of broader environmental sustainability and energy equity. This emphasis on energy security reflects the region's dependence on imported energy resources and vulnerabilities stemming from outdated domestic infrastructure. The overall environmental sustainability performance of energy systems in the Western Balkans region may be characterized as relatively poor. However, within this context, Albania and Croatia stand out as countries with comparatively higher ratings. This can be attributed to several factors, including their diversified industries and a greater proportion of renewable energy sources in their total final energy consumption. This indicates a proactive approach towards transitioning to cleaner and more sustainable energy sources, reducing reliance on fossil fuels, and enhancing energy independence.

CONCLUDING REMARKS AND LESSONS LEARNED

Addressing the interconnected challenges of weakening natural resources resilience, widespread air pollution, and delayed energy transition in the Western Balkans requires a comprehensive and multi-faceted approach. This approach should include both strict enforcement of existing environmental regulations and the implementation of new and improved ones. The ever-growing number of protests regarding dangerous practices of

¹All references to Kosovo in the Balkan Peace Index shall be understood in full compliance with United Nations Security Council resolution 1244 and without prejudice to the status of Kosovo. Status of Kosovo database (https://statusofkosovo.info) provides detailed information on this issue.



environmental mismanagement in protected areas mandate greater transparency, accountability, and public participation in decision-making processes. By prioritizing ecosystem protection and sustainable development practices, policymakers can work towards preserving the invaluable natural heritage of the region for future generations. To tackle the air quality crisis, concerted efforts are needed to transition away from fossil fuel-dependent energy sources towards cleaner and more sustainable alternatives. Here, all indicators and sub-indicators of the domain are connected, as well as intertwined with other BPI domains spanning from socio-economic development, political violence, pluralism, and state capacity to regional and international relations, highlighting the complex interdependencies and holistic nature of peace in the region. Therefore, the lessons learned through our evaluation of the state of environmental sustainability in the countries of the Western Balkans are as follows:

- Pursue only context-appropriate development projects that are informed by nature-based solutions (e.g. destructive practices stemming from small HPPs construction or inappropriate urbanization in protected areas should be avoided at all costs). Smart urban planning strategies that prioritize biodiversity conservation and sustainable development should be a guiding principle.
- Ensure transparent decision-making processes, robust environmental impact assessments, and meaningful engagement with affected communities in the development and implementation of projects.
- Authorities must strengthen enforcement of existing air pollution regulations, ensuring that industries adhere strictly to emission limits and face consequences for non-compliance. Also, they should aim for advanced emission control technologies in TPPs as these can significantly reduce sulphur dioxide emissions and mitigate their adverse impacts on air quality.
- Given that air pollution knows no borders, regional cooperation is essential to address transboundary pollution effectively. Collaborative efforts among neighbouring countries can help harmonize regulations, share best practices, and coordinate emission reduction strategies.
- Decision-makers have to secure just and timely energy transition through comprehensive, long-term strategies for transitioning to sustainable energy systems and reducing reliance on fossil fuels. This includes investing in renewable energy sources and promoting energy efficiency measures as well as engaging the public in discussions about compounding risks of air pollution, climate change and energy system performance. It will be crucial to fostering support for policy interventions and holding decision-makers accountable.



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