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"Green" Security: NATO's Climate Change Adaptation Strategy

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Abstract. At the Brussels Summit in 2021, North Atlantic Treaty Organization (NATO) heads of state and government endorsed the Climate Change and Security Action Plan, which, according to experts, sets an ambitious goal of transforming the alliance into a leading environmental security organization capable of developing adequate adaptation measures to reduce the security impacts of climate change. The article examines the main challenges that the alliance faces in implementing the two tracks of its climate policy. Despite the significant role of the alliance's member countries in shaping the international climate agenda, the organization's contribution to the global climate discourse has long remained limited. The article questions the effectiveness of the bloc's actions in combating climate change; since they are they are aimed at adapting to climate change rather than mitigating its effects. Studying the potential for the use of renewable energy sources in NATO, the article concludes that the development of innovative technologies is inadequate, as are the infrastructural and logistical problems associated with their implementation. The alliance countries have expressed their intention to transition to sustainable energy and to cease their reliance on energy resources from Russia, which could potentially lead to an even greater dependence on supplies of rare earth metals from China. Based on the methods of qualitative and quantitative analysis, the article substantiates that the climate agenda does not correspond to the real actions of the bloc, as evidenced by the increase in military spending and arms supplies to Ukraine. New member countries of the alliance, Sweden and Finland, which are leading the implementation of the United Nations sustainable development goals, are also ready to increase their national greenhouse gas emissions through participation in NATO and increase defense spending in accordance with the requirements of the alliance. The author concludes that although NATO wants to become the first international military-political organization whose policy is aimed at reducing the impact of climate change on security, the actions and goals of the alliance continue to be controversial. The author further predicts an escalating call from international non-state actors for greater climate action within the alliance.

Key words: US, European countries, climate change, CO_2 emissions

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«Зеленая» безопасность: стратегия адаптации НАТО к изменению климата

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Аннотация. На саммите 2021 г. в Брюсселе главы государств и правительств стран Организации Североатлантического договора (НАТО) одобрили План действий по изменению климата и обеспечению безопасности, поставив амбициозную, по мнению экспертов, цель — сделать Альянс ведущей организацией в сфере экологической безопасности, способной разрабатывать адекватные адаптационные меры, чтобы снизить влияние климатических изменений на безопасность. Исследование посвящено рассмотрению основных проблем, с которыми сталкивается Альянс при реализации двух треков своей климатической политики. Несмотря на значительную роль стран — членов НАТО в формировании международной климатической повестки, вклад организации в глобальный климатический дискурс долгое время оставался ограниченным. Автор подвергает сомнению эффективность действий блока в борьбе с изменением климата, поскольку они направлены не на смягчение последствий изменения климата, а на адаптацию к нему. Изучив потенциал применения возобновляемых источников энергии в НАТО, автор приходит к выводу о недостаточной разработанности инновационных технологий, а также об инфраструктурных и логистических проблемах их внедрения. Страны Альянса намерены перейти к устойчивой энергетике и отказаться от энергоносителей из России, что потенциально может привести к еще большей зависимости от поставок редкоземельных металлов из Китая. На основе методов качественного и количественного анализа обосновано, что климатическая повестка не соответствует реальным действиям блока, который увеличивает военные расходы и поставки вооружений на Украину. Новые страны — члены Альянса, Швеция и Финляндия, которые лидируют в реализации целей устойчивого развития ООН, также готовы увеличить национальные показатели выбросов парниковых газов за счет участия в НАТО и наращивать расходы на оборонную сферу в соответствии с требованиями Альянса. Таким образом, хотя НАТО хочет стать первой международной военно-политической организацией, политика которой направлена на снижение влияния климатических изменений именно на безопасность, действия и цели Альянса остаются дискуссионными. По мнению автора, международные негосударственные экологические акторы будут усиливать давление на НАТО, призывая к более существенным климатическим действиям.

Ключевые слова: США, страны Европы, климатическая повестка, выбросы CO_2

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Introduction

In the 21st century, the concept of "climate security" has assumed a more prominent position in the national security systems of most countries worldwide. The North Atlantic Treaty Organization (NATO) defines climate security as the state of protection from the profound consequences of climate change. Extreme weather conditions, climatic disasters, and global temperature rise have made the issue of climate change one of the most debated topics of our time, including on the sidelines of international organizations[1]. Justifying the relevance of adapting the field of security to climate change, the alliance characterizes this

[1] Van Schaik L., Zandee D., von Lossow T., Dekker B., Van der Maas Z., Halima A. Military Responses to Climate Change // Clingendael Report. March 2020. URL: https://www.clingendael.org/sites/default/files/2020-03/Report_Military_Responses_to_Climate_Change_March_2020.pdf (accessed: 30.01.2024).

challenge as a systemic risk and a "threat multiplier"[2] — climate change is expected to significantly shape the strategic security environment, influencing NATO's operations and missions, as well as the overall security of the bloc, both in the Euro-Atlantic region and in the broader surroundings of the North Atlantic Alliance. Climate change issues were included in NATO's new Strategic Concept, adopted at the Madrid Summit in 2022[3], where member states decided to integrate climate change considerations into their core missions.

NATO has set itself the ambitious goal of becoming the leading international security organization in adapting to climate change. In 2021, NATO published its first conceptual document outlining the fundamental principles of the bloc's policy in this area — the Climate Change and Security Action Plan.[4] Concurrently NATO announced another task, which the bloc's strategists consider revolutionary: to become the first international security actor to reduce CO_2 emissions by at least 45% by 2030 and to achieve net-zero emissions by 2050.

Two fundamental tracks of the Alliance's climate policy can be outlined as climate security and climate protection. In NATO policy, climate security can so far be summarized as the adjustment of planning, weapons systems, and military equipment usage in the context of anticipated climate change, as well as the development of advanced technologies utilizing renewable energy sources (RES) (Milburn, 2023). Climate protection issues are part of NATO's general policy. The standards and regulations developed by the organization define the acceptable level of environmental impact of military operations. NATO's new initiative to reduce its carbon footprint is also part of this policy vector.

There is no consensus in the Western expert community on the role and place of the climate agenda in the Alliance's strategy.[5] Until now, NATO's contribution as an organization to the international climate agenda and issues of climate security has remained relatively modest.

The article examines the main challenges faced by the Alliance in implementing the two tracks of its climate policy. The methodological framework includes methods of qualitative and quantitative analysis. The analysis of relevant sources and official documents addressing NATO's climate strategy allows for identifying the key directions of the Alliance's policy. Statistical data analysis enables an assessment of the extent to which the Alliance has achieved its emission reduction targets and integrated RES into the defense sector. A comparative analysis of international approaches to climate security is conducted through a review of key scholarly studies on the topic. This examination of the corpus of texts supports the hypothesis that there is a discrepancy between NATO's stated goals and its actual actions in combating climate change.

Factor of Military Activity in the International Climate Agenda

In international relations theory, the climate factor in the security sphere is approached from fundamentally opposing perspectives. As

[2] Climate Change & Security Impact Assessment: The Secretary General's Report // NATO. 2022. URL: https://www.nato.int/nato_static_fl2014/assets/pdf/2022/6/pdf/280622-climate-impact-assessment.pdf (accessed: 30.01.2024).

[3] NATO 2022 Strategic Concept // NATO. June 29, 2022. URL: https://www.nato.int/nato_static_fl2014/assets/pdf/2022/6/pdf/290622-strategic-concept.pdf (accessed: 30.01.2024).

[4] NATO Climate Change and Security Action Plan // NATO. June 14, 2021. URL: https://www.nato.int/cps/en/natohq/official_texts_185174.htm (accessed: 30.01.2024).

[5] Rico L. G. NATO and Climate Change: A Climatized Perspective on Security // Belfer Center for Science and International Affairs. August 18, 2022. URL: https://www.belfercenter.org/publication/nato-and-climate-change-climatized-perspective-security (accessed: 30.01.2024). See also: (Kertysova, 2023).

a result, there are numerous approaches to defining and conceptualizing climate security.

Among the numerous classical and non-classical schools and theories, several stand out as particularly relevant to the topic under study. After the end of the Cold War, the prevailing perspective was that of the traditional national security approach (Lippert, 2019; Black et al., 2022): this perspective focused on resource scarcity and the potential for regional and international conflicts arising from the struggles to control these resources (Homer-Dixon, 1994; Mach et al., 2019). Similarly, researchers examining the concept of the "resource curse" argued that it could also lead to instability in various regions of the world (Badeeb, Lean & Clark, 2017). According to the Green Theory of international relations (Barnett, 2001), climate security and justice are considered key aspects of human security. Another innovative approach is the constructivist securitization theory developed by the Copenhagen School of Security Studies (Buzan, Wæver & de Wilde, 1998), which allows for the analysis of climate threats through the lens of national security concerns.

Climate policy issues occupy a significant place in both public and professional discourse within NATO member states. According to a 2022 public opinion survey of citizens in NATO countries,[6] more than one-third of respondents indicated that climate change was a greater threat to them than the risk of war, political instability, terrorism, or cyberattacks.

While most member states agree that climate change will shape the security environment in the Euro-Atlantic region, allies differ in their views on the extent of the NATO's involvement in combating it. Addressing the interrelation between climate change and security requires active measures in areas of public life that extend beyond NATO's traditional responsibilities. Conversely, this aligns with the logic of the Alliance's transformation since the end of the Cold War, which has systematically expanded the list of challenges, threats, and their underlying causes.

At the same time, there is a widespread view that the Alliance should not alter its approach to fulfilling its core tasks in accordance with global sustainability trends, and that the sphere of national security should not be subordinated to the demands of reducing CO_2 emissions (Jalili, 2022).

At the organizational level, the link between climate and security was first articulated in NATO's 1991 Strategic Concept. Nevertheless, no programs or projects directly related to climate adaptation or mitigation were initiated during this period. Some researchers attribute the slow development of a unified climate policy within the Alliance to the fact that such issues have traditionally been the prerogative of national governments (Causevic, 2017).

It was only in the 2010 Strategic Concept that the climate agenda and the issue of climate change were elevated to the level of a security challenge for the Alliance. Specifically, the link between climate change and security was linked to NATO's second core task — crisis management. The Lisbon Summit Declaration highlighted that key environmental and resource constraints, including health risks, climate change, water scarcity, and increasing energy demands, would continue shaping the future security environment in areas of concern to NATO. These factors were identified as having the potential to significantly influence NATO's planning and operations.[7]

An important milestone in the development of NATO's climate policy was the adoption

[6] NATO Annual Tracking Research 2022 // NATO Public Diplomacy Division. 2023. URL: https://www.nato.int/nato_static_fl2014/assets/pdf/2023/3/pdf/230320-annual_tracker_report.pdf (accessed: 30.01.2024).

[7] Lisbon Summit Declaration // NATO. November 20, 2010. URL: https://www.nato.int/cps/en/natohq/official_texts_68828.htm (accessed: 30.01.2024).

of the Green Defence Framework at the 2014 Wales Summit. This comprehensive and systematic plan encompasses a wide range of initiatives, including maintaining operational capabilities, protecting the environment, and improving energy efficiency.[8] The program's central theme was ensuring the secure use of energy resources and promoting energy-saving technologies within the military sector. This objective was formalized in the summit declaration, in which member states committed to "further developing the Alliance's capabilities in supporting the protection of critical energy infrastructure and working towards significantly enhancing the energy efficiency of [NATO's] armed forces."[9]

During the development phase of NATO's new Strategic Concept, the comprehensive "NATO 2030" report was published in 2019, outlining the Alliance's key threats and challenges for the coming decade. The climate agenda was included among the bloc's priorities.[10]

A significant step forward in institutionalizing NATO's climate policy was achieved at the Brussels Summit in 2021, where the Climate Change and Security Action Plan was adopted. This plan outlines four main areas of NATO's climate policy:

— increasing awareness among member states about the security implications of climate change,

— promoting adaptation to climate change in all areas of NATO's activities,

— mitigating its effects by reducing military emissions,

— expanding cooperation with other actors actively engaged in climate security.[11]

The international community has made attempts to identify the interactions between climate change and the activities of military actors, but several obstacles have hindered progress. Institutionally, armed forces do not consistently report the carbon footprint of their activities, or they do so voluntarily and on a limited scale.[12] Emissions from military activities were excluded from carbon reporting requirements during the signing of the Kyoto Protocol in 1997. The stated reason for this was the potential vulnerabilities to national security that could arise from disclosing energy consumption information. A significant role in this decision was played by the U.S. Department of Defense (Depledge, 2023). Analysts have stresses that detailed emissions data could be used for intelligence purposes and to gauge a country's combat readiness.[13] In the 2015 Paris Agreement, it was agreed that a mechanism to contribute to the mitigation of greenhouse gas emissions, established under the document for use by parties on a voluntary basis.[14]

Currently, an international system of three categories has been developed to account for CO_2 emissions in the military sector. Category 1 includes direct emissions from military equipment and vehicles. Category 2 covers emissions from heating or electricity that are the indirect results of military activities, such as emissions from the burning of gas to produce electricity for lighting or heating military

[8] NATO and Its Partners Become Smarter on Energy // NATO. April 7, 2015. URL: https://www.nato.int/cps/en/natohq/news_118657.htm (accessed: 30.01.2024).

[9] Wales Summit Declaration // NATO. September 5, 2014. URL: https://www.nato.int/cps/cn/natohq/official_texts_112964.htm (accessed: 30.01.2024).

[10] NATO 2030: United for a New Era // NATO. November 25, 2020. URL: https://www.nato.int/nato_static_fl2014/assets/pdf/2020/12/pdf/201201-Reflection-Group-Final-Report-Uni.pdf (accessed: 30.01.2024).

[11] NATO Climate Change and Security Action Plan // NATO. June 14, 2021. URL: https://www.nato.int/cps/en/natohq/official_texts_185174.htm (accessed: 30.01.2024).

[12] The West's Armies Are Getting More Serious About Climate Change // The Economist. April 27, 2021. URL: https://www.economist.com/international/2021/04/27/the-wests-armies-are-getting-more-serious-about-climate-change (accessed: 28.01.2024).

[13] Ibid.

[14] Paris Agreement // United Nations. 2015. URL: https://unfccc.int/sites/default/files/english_paris_agreement.pdf (accessed: 28.01.2024).

barracks. Category 3 encompasses the reporting of the indirect or "hidden" emissions. This category encompasses the entire military supply chain system and takes into account all emissions, from those generated during weapons production to those associated with military logistics.[15]

According to the accounting methodology of the Intergovernmental Panel on Climate Change (IPCC), military carbon emissions fall under Category 1.A.5.[16] This category corresponds to the characteristics of the aforementioned Categories 1 and 2.

Several major studies argue that military activities are among the most substantial "polluters." In the absence of reliable data, estimates vary. According to an article published in Nature, military activities could account for up to 5% of global carbon emissions (Fennell et al., 2022). By comparison, aviation and maritime shipping are estimated to contribute 2% each. The Conflict and Environment Observatory (CEOBS), an international analytical center based in the UK that focuses on climate security issues, reported in its 2022 study that the global military carbon footprint is approximately 5.5%.[17]

International non-governmental organizations (INGOs) have proposed expanding Category 3 to Category 3+, which would include the carbon footprint of damage — both material and social — directly caused during armed crises and post-conflict recovery efforts.[18] Such an interpretation of the carbon footprint could significantly increase the final emissions estimates. Moreover, NATO member states are seen by INGOs as having indirect responsibility for wider climate security issues in the developing countries. Euro-Atlantic nations supply arms to 39 of the 40 most climate-vulnerable countries worldwide, 17 of which are currently experiencing armed conflicts.[19]

Implementation of Innovative Technologies within NATO's Climate Policy

The Alliance is taking various measures to mitigate the impact of climate risks on its activities. NATO's reliance on fossil fuels has become a vulnerability in terms of both security and financial efficiency. Alliance planners have calculated that by the time a gallon of gasoline reached International Security Assistance Force (ISAF) units in Helmand or Kunduz (Afghanistan), its cost exceeded 100 USD, although it initially amounted to 2 USD (Lovins, 2010). Further, a detailed analysis of NATO countries' operations in Afghanistan revealed that in certain camps, over 70% of the fuel consumed was used for heating or cooling buildings and water. It is important to note that in camps located in milder climates, not subject to extreme conditions, this figure did not decrease significantly — 60% of all energy is still spent on heating or cooling buildings and water.[20]

[15] A Framework for Military Greenhouse Gas Emissions Reporting // Conflict and Environment Observatory. June 2022. URL: https://ceobs.org/report-a-framework-for-military-greenhouse-gas-emissions-reporting/ (accessed: 30.01.2024).

[16] The Military Emissions Gap. URL: https://militaryemissions.org/ (accessed: 29.01.2024).

[17] Parkinson S., Cottrell L. Estimating the Military's Global Greenhouse Gas Emissions // Conflict and Environment Observatory. November 2022. URL: https://ceobs.org/wp-content/uploads/2022/11/SGRCEOBS-Estimating_Global_MIlitary_GHG_Emissions_Nov22_rev.pdf (accessed: 30.01.2024).

[18] Neimark B. How to Assess the Carbon Footprint of a War // The Conversation. December 12, 2023. URL: https://theconversation.com/how-to-assess-the-carbon-footprint-of-a-war-215575 (accessed: 28.01.2024).

[19] Chandler N., Martini J., Sudkamp K. M., Habib M., Sacks B. J., Tariq Z. H. Pathways from Climate Change to Conflict in U.S. Central Command // RAND Corporation. 2023. URL: https://www.rand.org/content/dam/rand/pubs/research_reports/RRA2300/RRA2338-2/RAND_RRA2338-2.pdf (accessed: 28.01.2024).

[20] Grey E. Put to the Test: Smart Energy Solutions for The Military // Army Technology. February 17, 2016. URL: https://www.army-technology.com/features/

The development of sustainable technologies is regarded by NATO not only through the lens of reducing fuel and energy costs, but also as a means of mitigating security risks to its personnel and stuff.[21] NATO forces suffered significant losses while ensuring supply deliveries in Afghanistan — between 2003 and 2007, statistics show that 3,000 soldiers were harmed in attacks on energy supply logistics routes.[22]

However, the implementation of innovative technologies in NATO's climate agenda face numerous challenges, as many of today's advanced technologies are not yet sufficiently refined for large-scale application in the military sphere.[23] Researchers consider hydrogen, nuclear, and bioenergy to be the most promising areas. The issues already identified include the fact that these technologies remain costly and lack energy efficiency.

According to a 2022 study by the Royal United Services Institute (RUSI), there is also a significant issue in military planning: military equipment and technologies currently in the final stages of design will not be delivered to the armed forces until the 2030s, and they will remain likely in service through the 2080s — by which time fossil fuels are unlikely to remain affordable.[24]

In the medium term, the armed forces of NATO countries will largely remain dependent on hydrocarbons. However, the prevailing trend indicates that economic sectors will continue to decarbonize.[25] As a result of these processes, the military sector may become the sole consumer of hydrocarbons.

Prospects for Reducing NATO's Carbon Footprint

NATO became the first international military organization to commit to reducing its environmental impact by setting a voluntary target for reducing its carbon footprint. However, after announcing this ambitious goal, the Alliance did not release any information for the reporting period for several years, nor did it provide a methodology for calculations or data on the objects of measurement.[26] Meanwhile, from 2019 to 2023, NATO's estimated emissions increased by 30 million tons — from 196 million tons to 226 million tons.[27]

Researchers remain concerned about NATO leadership's frequent demands to increase defense spending to 2% of GDP. According to calculations based on United Nations (UN) data, if this requirement were met, the additional funds spent by NATO

featuresmart-energy-solutions-put-to-the-test-4809549/ (accessed: 29.01.2024).

[21] 2022 Global Impact Report // Deloitte. 2022. URL: https://www.deloitte.com/be/en/about/governance/global-impact-report.html (accessed: 31.01.2024).

[22] Birnbaum M., Root T. The U.S. Army Has Released Its First-Ever Climate Strategy. Here's What That Means // The Washington Post. February 10, 2022. URL: https://www.washingtonpost.com/climate-solutions/2022/02/10/army-military-green-climate-strategy/ (accessed: 30.01.2024).

[23] Barry B. Green Defence: The Defence and Military Implications of Climate Change for Europe // International Institute for Strategic Studies. February 2022. URL: https://www.iiss.org/globalassets/media-library---content--migration/files/research-papers/2022/green-defence---the-defence-and-military-implications-of-climate-change-for-europe.pdf (accessed: 28.01.2024).

[24] Ashbridge S., Beard A. Episode 6: Readying the Royal Navy for Climate Change-Affected Seas // RUSI. October 20, 2022. URL: https://rusi.org/podcasts/greening-defence/episode-6-readying-royal-navy-climate-change-affected-seas (accessed: 31.01.2024).

[25] Dimitrova D., Lyons M., Losada P., Mester M., Zuzek-Arden T., Baudin-Sarlet M., Schmitt M. The Growing Climate Stakes for the Defense Industry // Boston Consulting Group. September 10, 2021. URL: https://www.bcg.com/publications/2021/growing-climate-stakes-for-the-defense-industry (accessed: 30.01.2024).

[26] Keating D. NATO Disappoints with Tepid Climate Action // Energy Monitor. July 18, 2022. URL: https://www.energymonitor.ai/policy/nato-disappoints-with-tepid-climate-action/ (accessed: 30.01.2024).

[27] Lin H.-C., Buxton N., Akkerman M., Burton D., de Vries W. Climate Crossfire: How NATO's 2% Military Spending Targets Contribute to Climate Breakdown // Transnational Institute. October 17, 2023. URL: https://www.tni.org/en/publication/climate-crossfire (accessed: 30.01.2024).

countries could cover the costs of most developing nations to transition to a "green economy" for up to seven years. According to these estimates, Finland, after joining NATO, would need to quadruple its military's carbon footprint by 2030. Poland would triple its footprint, and Luxembourg would see a fivefold increase.[28] The European Parliament has reported that EU armies emitted nearly 25 million tons of carbon dioxide in 2019, equivalent to the emissions of 14 million cars.[29] Increasing defense spending to the required 2% of GDP would necessitate around 1 trillion EUR — the same amount needed to implement the EU's Green Deal.[30]

In 2023, NATO published a document outlining the methodology for calculating the emissions, which were to be reduced based on the commitments made by the Alliance. It was announced that the reference point for emissions reduction would be set at 2019. The emissions reductions target will include NATO's headquarters in Brussels, military bases in Europe, and military equipment owned by the organization, such as AWACS aircraft and drones. It is important to note that NATO's own equipment constitutes a small percentage of the total equipment used. The remainder remains under the national control of member states, and therefore, is not included in the accounting system.[31]

The methodology does not take into account missions and operations organized by NATO or conducted with the participation of Alliance forces. This includes all types of NATO training programs and exercises. Furthermore, the document also states that NATO does not possess the data required to report on the environmental footprint falling under Category 3.[32]

Finally, according to the published document, the accounting methodology will only consider the units of the organization itself, but not those of the member states.[33]

The expansion of NATO's engagement in global climate policy will require close cooperation with a vast network of non-state actors that shape the international sustainable development agenda. Many of these actors are highly critical of the Alliance's activities.[34] As early as 2022, they accused NATO of greenwashing, declaring that the Alliance's policies undermine international efforts to combat climate change.[35] It was highlighted that exemptions to the voluntary nature of emissions reporting in the military sector, coupled with the proliferation of vague discourse on climate

[28] Noor D. Divert Military Spending to Fund Climate Aid, Activists Urge Cop28 // The Guardian. December 2, 2023. URL: https://www.theguardian.com/environment/2023/dec/02/cop28-climate-change-military-funds (accessed: 31.01.2024).

[29] Under the Radar: Europe's Military Sectors Dodge Scrutiny Under European Green Deal // The Left in the European Parliament. February 23, 2021. URL: https://left.eu/issues/publications/under-the-radar-europes-military-sectors-dodge-scrutiny-under-european-green-deal/ (accessed: 28.01.2024).

[30] Akkerman M., Burton D., Lin H.-C., Al-Kashef M., de Vries W. Climate Collateral: How Military Spending Accelerates Climate Breakdown // Transnational Institute. November 2022. URL: https://www.tni.org/en/publication/climate-collateral (accessed: 30.01.2024).

[31] The NATO Greenhouse Gases Emission Mapping and Analytical Methodology // NATO. 2023. URL: https://www.nato.int/nato_static_fl2014/assets/pdf/2023/7/pdf/230710-NATO-GHG-Methodology.pdf (accessed: 29.01.2024).

[32] Ibid.

[33] Ibid.

[34] "Always Money for War," Reflecting on COP28 // Conflict and Environment Observatory. December 21, 2023. URL: https://ceobs.org/always-money-for-war-reflecting-on-cop28/ (accessed: 30.01.2024).

[35] See: The Military Emissions Gap. URL: https://militaryemissions.org/ (accessed: 29.01.2024); Keating D. NATO Disappoints with Tepid Climate Action // Energy Monitor. July 18, 2022. URL: https://www.energymonitor.ai/policy/nato-disappoints-with-tepid-climate-action/ (accessed: 30.01.2024); NATO Won't Say How It Will Count Its Carbon Emissions // Conflict and Environment Observatory. June 29, 2022. URL: https://ceobs.org/nato-wont-say-how-it-will-count-its-carbon-emissions/ (accessed: 30.01.2024).

commitments that contradicts the warnings issued by the scientific community and lacks a verification mechanism, appear more akin to greenwashing practices employed by large corporations than to strategies that are commensurate with the severity of the climate crisis.[36] It can also be emphasized that security policies, which treat countries affected by climate change as sources of threats to global stability, only serve as a justification for increased militarization and social control (Turner & Bailey, 2022).

At present, NATO has not established close ties with non-state actors in the climate sphere. Events involving NATO officials and military representatives from member states at recent climate summits remain closed to the public. Non-governmental environmental organizations were not invited to these events.[37] However, they are trying to put pressure on the Alliance. During the 27th annual Conference of the Parties to the UN Framework Convention on Climate Change (COP 27) in Egypt in 2022, representatives of the Canadian delegation asked NATO Secretary General Jens Stoltenberg whether the Alliance was considering the carbon footprint of weapon supplies to Ukraine. Stoltenberg chose not to answer the question, stating only that sustainable development is only possible in a state of security.[38] The NATO Secretary General later confirmed that no energy transition would be implemented until the Alliance's energy security is guaranteed,[39] which directly highlights the prioritization of the organization's goals.

Non-governmental organizations intend to closely examine NATO's methodology and reporting. While NATO's overall emissions calculation methodology has been published, it is expected that the annual reports will remain non-transparent — international observers will not be able to access details of the nuances of the calculations and the specifics of emissions volume determination. As a result, independent experts will not be able to monitor or verify the accuracy of the data.[40] Consequently, international non-state actors and the public in NATO member states will be unable to assess the credibility of the published results regarding emissions reduction.

Questions are also being raised regarding the approach to be adopted in addressing NATO's carbon footprint during military missions and operations, which are excluded from the accounting methodology, will be addressed. Currently, NATO documents lack not only references to emissions generated by such activities, but also the relevant terminology. For example, during the campaign in Iraq, the U.S. military constructed hundreds of kilometers of concrete barriers (Neimark et al., 2024). According to climate experts, the construction sector has one of the largest carbon footprints — accounting for up to 7% of all global emissions (Fennell et al., 2022). The estimated damage from such activities by NATO countries alone equals the annual emissions from all cars in the United Kingdom.

[36] NATO, Building Global Insecurity / coord. by G. Serra // Centre Delàs Report. 2022 (June 23). No. 53. URL: https://demilitarize.org/wp-content/uploads/2022/07/informe53_eng_comp.pdf (accessed: 30.01.2024).

[37] "Always Money for War," Reflecting on COP28 // Conflict and Environment Observatory. December 21, 2023. URL: https://ceobs.org/always-money-for-war-reflecting-on-cop28/ (accessed: 30.01.2024).

[38] High-Level Discussion on Climate Security with the NATO Secretary General Jens Stoltenberg at This Year's United Nations Climate Change Conference (COP27) // NATO. November 8, 2022. URL: https://www.nato.int/cps/en/natohq/opinions_208773.htm?selectedLocale=en (accessed: 29.01.2024).

[39] Secretary General at COP28: Climate Change Matters for Our Security, And Therefore It Matters to NATO // NATO. December 1, 2023. URL: https://www.nato.int/cps/en/natohq/news_220668.htm?selectedLocale=en (accessed: 30.01.2024).

[40] NATO Won't Say How It Will Count Its Carbon Emissions // Conflict and Environment Observatory. June 29, 2022. URL: https://ceobs.org/nato-wont-say-how-it-will-count-its-carbon-emissions/ (accessed: 30.01.2024).

Conclusion

An assessment of NATO's climate and environmental activities indicates that the Alliance has accepted climate change as an established fact and is adjusting its policies primarily to adapt to future conditions rather than to prevent them. NATO's approach to the climate agenda is highly securitized and is not aimed at achieving climate justice. The measures developed by NATO to ensure climate security are always secondary to its political and military objectives. Therefore, NATO's participation in this agenda is largely declarative.

The stated goal of reducing CO_2 emissions by at least 45% by 2030 and achieving net-zero emissions by 2050 seems ambitious. However, in practice, it affects a very limited number of structures and activities, as it only covers NATO-owned facilities and equipment, not those of its member states.

At the conceptual level, the plans for emissions reductions face a more stringent requirement for increased defense spending by member states. Immediately after the start of arms supplies to Ukraine in 2022 and the renewed demands for member states to increase defense spending, the climate agenda only nominally remains on NATO's list of priorities. Specifically, leading countries in the sustainable agenda — Sweden and Finland — as new members of the Alliance are significantly increasing their spending on traditional weapons systems, thereby drastically raising their own carbon footprint.

In the future, there is also the potential for a reverse effect on the Alliance — as the volume of data on NATO's carbon footprint increases, there is a high likelihood of intensified pressure from non-state actors and "green" parties in member states to reduce the full spectrum of the Alliance's military activities, including large-scale exercises and military operations.

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