



## NATO in the Face of Climate Change: Expectations and Opportunities

Wojciech Lorenz

Climate change exacerbates security threats to NATO states such as natural disasters, irregular migration, and local conflicts. It is also increasingly perceived by Alliance publics as one of the biggest civilisational challenges. Therefore, NATO's commitment to combating the causes and effects of climate change will be an important element of strengthening public support for the Alliance and its political cohesion.

NATO Secretary General Jens Stoltenberg points to the need to engage the Alliance in the fight against climate change because it can affect the security of the allies. He suggested that NATO should introduce a system for measuring carbon output by the armed forces and member states should adopt voluntary targets for reducing such emissions. Discussion on this topic increases pressure on the allies to include climate protection in the strategic reflection on the future of the Alliance (NATO 2030), which the Alliance announced at the London summit in December 2019.

**Threats to the Alliance.** The 2010 Strategic Concept, the most important document defining NATO's policy, indicates that climate change will affect the Alliance's security environment and its ability to conduct joint missions. Climate change primarily leads to an increase in the frequency and scale of natural disasters (droughts, floods), lack of drinking water, and hunger. These, in turn, increase economic, social, and political tensions, which contribute to irregular migration, terrorism, and local conflicts. Warming of the climate and melting ice in the Arctic are intensifying competition for access to raw materials and transport routes. NATO forces, while conducting joint operations, will have to be prepared for logistical problems resulting from extreme temperatures and difficult weather conditions. The increased frequency of non-military crises will put pressure on NATO nations to engage their armed forces in dealing with the effects of natural disasters and to use Alliance structures and forces to conduct crisis-response missions. The pressure to reduce greenhouse gas (GHG) emissions by the armed forces will also increase. On the one hand, it can

stimulate their modernisation, but on the other, it will increase its costs, and delay investments in new equipment and weapons.

Climate change also creates political challenges for the Alliance. Societies that see climate change as an increasing threat may question NATO's usefulness. Perception of the armed forces as a source of pollution, and NATO as an organisation that is not trying to curb the emissions, can diminish the sentiment towards the Alliance, weakening its political cohesion and ability to perform its main tasks.

**NATO's Contribution to Mitigation.** While NATO's primary mission is collective defence, the Alliance also provides its members with the ability to jointly respond to crises that may arise from climate change. NATO members made a political commitment that they will provide the necessary capabilities to conduct one major collective defence mission (MJO+) or several smaller military missions (SMO) simultaneously. The Alliance is also pursuing a policy aimed at strengthening the resilience of its members to crises caused by a military attack or natural disaster. To this end, it offers guidelines and promotes standards in several areas, including security of energy supplies or the civil transport system. In the case of non-military crises, NATO also has structures that can facilitate mutual aid among member states and NATO partners in the Euro-Atlantic area on a bilateral basis. The Alliance's Euro-Atlantic Disaster Response Coordination Centre (EADRCC) can coordinate such assistance, and NATO commands and logistics can facilitate its delivery. In recent years, these mechanisms have been used several times, including the coordination of

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support in response to fires, floods, hurricanes, and the COVID-19 pandemic. The decision about which tools to use is always based on an assessment of, among others, threats to Alliance interests and the political calculations of the costs and benefits associated with the use of NATO structures and capabilities.

**NATO's Contribution to Fighting Climate Change.** NATO countries are under increasing societal and political pressure to reduce the GHG emissions contributing to climate change. Some of them (including Canada, France, and the United Kingdom) have obliged defence ministries to bear part of the burden of reducing emissions. The allies also recognise the need to involve NATO in the fight against the causes of climate change. Since 2014, NATO has been implementing its Green Defence Framework aimed at reducing emissions from the armed forces and infrastructure during joint missions. NATO members, however, are reluctant to set binding targets that could limit the operational capabilities of the armed forces and the ability to conduct collective defence missions. Alliance activities are limited to testing energy-efficient technological solutions (solar panels, wind turbines) during logistic exercises (*Capable Logistician*) and promoting new technologies. NATO is also developing common techniques for measuring emissions by various infrastructure components, but their implementation would require a political decision.

At the same time, the Alliance has untapped potential to reduce emissions, which not only would not undermine its collective defence capabilities, but could even strengthen them. For several decades, NATO has been implementing a "single-fuel concept" (SFC), which is to reduce the number of fuel shipments during missions. According to this concept, land-based military aircraft, vehicles, and equipment should be adapted to the use of one type of aviation kerosene (F34). Not only is this fuel less polluting than diesel, it is cheaper and can be used at much lower temperatures, making it easier to carry out missions in winter and in the Arctic regions. Despite this, the allied forces are often more willing to use diesel during missions due to its widespread availability.

The Alliance also manages the Central Europe Pipeline System (CEPS), which was to supply fuel to troops defending France, Germany, and the Benelux countries, reducing the number of fuel shipments. After the NATO enlargement, this

system has not been adapted to the requirements of the collective defence of the Eastern Flank, where NATO activities are growing. With CEPS potential not exploited, some of the pipelines have been sold to private entities in recent years.

**Conclusions and Recommendations.** NATO's commitment to combating the causes and effects of climate change will play a crucial role in strengthening public support for the Alliance in the long term. Therefore, it is in the interest of NATO members to ensure adequate visibility of the Alliance's efforts, including by highlighting them in the annual report of the NATO Secretary General.

However, the Alliance should also strengthen its Green Defence Framework to further encourage states to reduce emissions used by military forces and infrastructure participating in NATO missions. The development and implementation of an emission measurement system will be of key importance. Initially, it should only include permanent infrastructure (buildings, barracks, headquarters, equipment and armaments depots). This would create an incentive for countries who own the infrastructure to reduce its emissions through voluntary commitments. It would also make it possible for individual states and NATO as a whole to demonstrate a verifiable contribution to the fight with the climate change.

NATO should also consider the inclusion of the single-fuel concept in the Green Defence Framework and explore the possibility of its wider application in its daily activities, including during exercises. NATO can also exploit the synergy between the resilience of civil transport and its efforts to increase energy efficiency of infrastructure. Even 90% of military logistics is based on civilian assets, so promoting energy efficiency in this area could bring significant benefits.

Poland could use the experiences of other countries to develop its own emission-reduction targets for the armed forces. Taking such actions may increase Poland's influence on the directions of NATO's Green Defence Framework. It would be in Polish interest to extend this concept to the CEPS pipeline system, which could be expanded and adapted to the requirements of the collective defence mission. Poland and other countries on the Eastern Flank could also analyse the possibility of including this project in NATO-EU cooperation on military mobility.