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Climate of Change

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Reshaping
Military
Emissions
Reporting

**FRIEDRICH
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Introduction

OSCE participating states produce approximately a third of the world's carbon emissions and two-thirds of the world's military spending.¹ This puts the OSCE in a unique position to impact both climate and military policy significantly.

When discussing military impact, the debate often focuses on civilian deaths and material damage, paying less attention to the military sector's environmental impact. This is less visible but equally damaging for current and future populations. The military sector conducts resource-intensive, highly emitting activities, including weapons manufacturing, transport, training resources and bases, and communications technology usage, all of which have a substantial impact on the environment. Military operations also cause vast environmental destruction.

Our paper recommends standardising and increasing the transparency of military emissions reporting to prompt broader discussion of the military sector's environmental impact. **Emissions figures are not just numbers, they have a real impact on people and our planet.** Accurate and clear reporting is not just a retrospective 'box ticking' exercise, but should inform strategy and planning.

Up to 6% of the world's land is owned by militaries²; this is equivalent to the whole of the United States.

Therefore, in addition to the impact militaries have during operations in other territories, they can have a significant impact on the global climate response through their activities on their own land.

As the world's largest regional security organisation, the OSCE should use its influence to encourage states to engage with these ideas. Environmental problems directly affect the interests of every OSCE participating state. In an interconnected world, we must act collectively to prevent further environmental damage and the risks it brings. We believe that the OSCE is the ideal facilitator of a standardised, transparent emissions reporting system. With its strong network, the organisation could directly influence states and policymakers.

¹ Barnhoorn, A. (2022) Taking climate security forward in the OSCE. Available at: <https://www.sipri.org/commentary/blog/2022/taking-climate-security-forward-osce> (Accessed: 14/07/2022).

² Conflict and Environment Observatory (2020) How does war damage the environment? Available at: <https://ceobs.org/how-does-war-damage-the-environment/> (Accessed: 14/07/2022)

The Current Situation

The United Nations Framework Convention on Climate Change (UNFCCC) obliges 45 states to report their greenhouse gas emissions annually.³ For other states, however, reporting military emissions is voluntary, leading to a 'military emissions gap'. This has serious consequences as militaries are major emitters during both peacetime and conflict. Transparent reporting is therefore essential to combat the climate crisis facing OSCE states and the world.

Just as nation-states have uneven environmental impacts, so do the various military sectors. The Conflict and Environment Observatory⁴ estimates that the US military emitted more in 2018 than 53 other countries combined and that the UK Ministry of Defence is responsible for at least 50% of the UK government's emissions. Other states also have poor records.

Despite this, information on the military sector's role in the climate crisis is scarce. Some reports suggest that military emissions account for 5–6% of global emissions⁵, which is greater than civil aviation and shipping combined. States are often vague in reporting emissions, however, and the fact that reporting is voluntary allows the true environmental impact to be masked from civil society and the public.

For example, at the Madrid 2022 Summit, NATO committed to reducing greenhouse gas emissions by at least 45% by 2030, and net zero by 2050. This involves a new methodology for member states, which covers NATO's military and civilian emissions and 'sets out what to count and how to count it'.⁶ It was not guaranteed that this methodology would be made public, however. Without greater transparency, governments and militaries cannot be held accountable and the public will continue to be excluded from the conversation.

We believe that participating states and the OSCE have a responsibility to protect our planet and increase public trust through open discourse.

³ United Nations (2022) Greenhouse Gas Inventory Data - Global Map - Annex 1. Available at: https://di.unfccc.int/global_map (Accessed: 17/07/2022)

⁴ Conflict and Environment Observatory (2022a) Tracking military greenhouse gas emissions in war and peace. Available at: <https://ceobs.org/tracking-military-greenhouse-gas-emissions-in-war-and-peace/> (Accessed: 16/07/2022)

⁵ Oberlink, A. (2022) Military Organizations Produce Significant Amounts of Unreported Greenhouse Gases. Available at: <https://www.pbs.org/wnet/peril-and-promise/2022/01/militaries-produce-6-of-ghgs-but-theyre-not-required-to-report-it/> (Accessed: 14/07/2022)

⁶ Conflict and Environment Observatory (2022b) NATO won't say how it will count its carbon emissions. Available at: <https://ceobs.org/nato-wont-say-how-it-will-count-its-carbon-emissions/> (Accessed: 14/07/2022)



What should be done?

We believe that standardised military emissions reporting is a key starting point to a more environmentally-conscious military sector. Without transparency, objective analysis and strategy are difficult. A clearer, standardised system is essential as we move deeper into an era of climate chaos and unpredictability. We need to know where we stand before we can take the next steps.

Militaries exchange some information in a spirit of transparency, but they should do more, specifically in relation to climate impact. A balance must be struck by making emissions categories specific enough that analysts and the public can gain a clear picture of a military's impact, but obscure enough to ensure that sensitive details are not compromised. We propose that transparency should be sacrificed only when unredacted reporting would compromise national security.

Impact can be measured after military exercises for the purpose of informing internal strategy and combined to produce an annual report shared with other states that highlights statistics and good case examples of effective impact reduction. Objective reporting is key to making environmental impact a more central consideration in military planning rather than solely a retrospective activity or 'box ticking'. The environment is not acceptable collateral damage. As we enter a new era dominated by the climate-security nexus, we must recognise this and adapt accordingly.

Greater transparency and standardised reporting could also be used in new ways. For example, quantifying the environmental impact of destruction and reconstruction could lead to this being a key part of an aggressor's reparations. Awareness is the first step towards a larger dialogue around change.

Emissions figures risk being too remote and impersonal, making them too easy to ignore. Therefore, here are three case studies of how military activities tangibly affect the environment during peacetime, wartime, and after conflict:

During Peacetime – Deep Sea Species:

Some marine experts argue that the military use of strong underwater sonar may cause irregular behaviour in marine animals, including scaring them into surfacing too quickly, causing decompression sickness.⁷ This may have caused a number of irregular whale beachings. Furthermore, the noise from one deep sea mine can travel over 500km in calm weather conditions, potentially impacting deep-sea species that use vibrations and sound to communicate and navigate.⁸

During Wartime – Ukraine:

Hanni Moora highlights the devastating environmental impacts of Russia's invasion of Ukraine.⁹ The targeting of key infrastructure, industrial plants (including Zaporizhzhia nuclear plant), and civilian settlements (including Mariupol) has caused widespread destruction, which may pollute Ukraine and its neighbours. Dust and combustion gases have caused air pollution and poisoned people, and the burning of natural reserves will irreversibly damage habitats.

Furthermore, it is unclear whether the current drive for decoupling from Russian gas supplies will disrupt Europe's decarbonisation. Governments are trying to balance energy budgets with higher defence spending. An accelerated green transition is key to long-term energy independence from Russia.

⁷ Hoare, P. (2020). 'Beached whale increase may be due to military sonar exercises, say experts', The Guardian, 24th August. Available at: <https://www.theguardian.com/environment/2020/aug/24/beached-whale-increase-may-be-due-to-military-sonar-exercises-say-experts> (Accessed: 14/07/2022).

⁸ McVeigh, K. (2022). 'One deep sea mine could send noise 500km across the ocean – report', The Guardian, 8th July. Available at: <https://www.theguardian.com/environment/2022/jul/08/nowhere-is-free-from-noise-deep-sea-mining-threat-to-marine-mammals> (Accessed: 14/07/2022).

⁹ Parksepp, A. (2022). Q&A with SEI's Harri Moora: Russia's attack against Ukraine has already caused irreparable damage to the environment. Available at: <https://www.sei.org/featured/russia-has-caused-irreparable-damage-to-the-environment/> (Accessed: 14/07/2022).

After War – Dumped Munitions in the Baltic Sea:

After WWII, approximately 40,000 tonnes of chemical munitions were dumped in the Baltic Sea.¹⁰ Since then, munitions dumping has continued, with Russia being the main actor. Over time, munitions containers can degrade, leading to chemical leaks that contaminate flora and fauna, including species that are consumed by humans, such as fish.

These cases demonstrate the importance of a stronger focus on the military sector's environmental impact. This is a large, complex topic involving many actors and priorities. We believe that transparent, standardised reporting is the essential first step towards a broader dialogue around military environmental impact.

Next Steps

Greater transparency and standardisation of military emissions is vital for building trust between citizens and their governments. There is a tidal wave of active protests against those in power making decisions that are damaging for the environment. Emissions can seem a somewhat abstract issue, but military activities have real impact and raising awareness through emissions reporting could mark the start of addressing other issues. This requires the active involvement of multiple actors.

The OSCE is in a unique position to act as a facilitator due to its wide network and the involvement of many states. The OSCE should include this issue in its mandate to promote action; this could also be prioritised via Poland's current and North Macedonia's upcoming role as OSCE Chair. The OSCE can strengthen dialogue and expert involvement is needed to detail exactly how reporting standardisation should work. Furthermore, the OSCE can provide practical assistance to participating states, including resources and training, with the support of external experts. This could lead to the establishment of a new platform for clear, accessible statistics for external parties.

Conclusion

The unprecedented climate crisis introduces new requirements for institutions to build trust and dialogue with the public. Making available clear, standardised emissions statistics is a key part of that. The ability to clearly assess and analyse the current situation is vital to determining the next steps as we move further into an era of increasing uncertainty.

As OSCE participating states produce approximately a third of global carbon emissions, the OSCE must explore new ideas at the nexus of climate and security. In an era of increasing insecurity, we believe that states and the OSCE have a duty to act to protect our planet and increase public trust through accountability. We need to know the damage we have caused and are causing in order to repair it.

¹⁰ HELCOM (2022). Sea-Dumped Chemical Munitions. Available at: <https://helcom.fi/baltic-sea-trends/hazardous-substances/sea-dumped-chemical-munitions/> (Accessed: 14/07/2022).



References

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This initiative aims to present the contributions that young people are making to the OSCE's efforts to advance peace and security, as well as to increase the visibility of the OSCE's work among young people. The authors of this paper are part of the 'Environment and Energy' working group.

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Organization for Security and Co-operation in Europe (OSCE)

With 57 participating States in North America, Europe and Asia, the OSCE – the Organization for Security and Co-operation in Europe – is the world's largest regional security organization. The OSCE works to build and sustain stability, peace and democracy for more than one billion people, through political dialogue and projects on the ground. The OSCE is a forum for political dialogue on a wide range of security issues and a platform for joint action to improve the lives of individuals and communities. The Organization helps to bridge differences, build trust and foster co-operation within and between states. With its expert units, institutions and network of field operations, the OSCE addresses issues that have an impact on our common security such as arms control, terrorism, good governance, energy security, human trafficking, democratization, media freedom and national minorities.

The Secretariat, which includes the Conflict Prevention Centre, assists the OSCE Chair in its activities, provides operational and administrative support to field operations and, as appropriate, to other institutions.

The Office for Democratic Institutions and Human Rights in Warsaw promotes democratic elections, respect for human rights, the rule of law, tolerance and non-discrimination, and the rights of Roma and Sinti communities.

The OSCE Academy in Bishkek provides a regional and international public forum for professionals and students in the spirit of co-operation in the fields of international relations, comprehensive security, democratization, the rule of law and human rights.

In cooperation with



Organization for Security and
Co-operation in Europe

FES ROCPE in Vienna

The goal of the FES Regional Office for Cooperation and Peace in Europe (FES ROCPE) of the Friedrich-Ebert-Stiftung in Vienna is to come to terms with the challenges to peace and security in Europe since the collapse of the Soviet Union. These issues should be discussed primarily with the countries of Eastern Europe – Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine – and with Russia, as well as with the countries of the EU and with the US. The security order of Europe, based until recently on the Helsinki Final Act (1975) and the Paris Charter (1990), is under threat. This is, among others, a result of different perceptions of the development of international relations and threats over the last 25 years, resulting in divergent interests among the various states.

For these reasons, FES ROCPE supports the revival of a peace and security dialogue and the development of new concepts in the spirit of a solution-oriented policy. The aim is to bring scholars and politicians from Eastern Europe, Russia, the EU and the US together to develop a common approach to tackle these challenges, to reduce tensions and to aim towards conflict resolution. It is our belief that organizations such as the FES have the responsibility to come up with new ideas and to integrate them into the political process in Europe.

We support the following activities:

- Regional and international meetings for developing new concepts on cooperation and peace in Europe;
- A regional network of young professionals in the field of cooperation and peace in Europe;
- Cooperation with the OSCE in the three dimensions: the politico-military, the economic and the human.

Executive Summary

The military sector emits significant quantities of greenhouse gases, which profoundly impact our current and future world. We believe that transparent, standardised emissions reporting is key to overcoming the current 'military emissions gap' and prompting wider public dialogue. We call on the OSCE to immediately consider adding emissions reporting to its mandate.

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