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A Threatening Heat for the European Defence:

How the EU Shaped its Defence Policy to Adapt to Climate Change: Assessing the Recent Defence Policies

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This Food for Thought paper is a document that gives an initial reflection on the theme. The content is not reflecting the positions of the member states but consists of elements that can initiate and feed the discussions and analyses in the domain of the theme. All our studies are available on www.finabel.org

DIRECTOR'S EDITORIAL

In the ever-evolving landscape of global security, climate change has emerged as a defining challenge for the European Union. The recently released Strategic Compass underscores the recognition that climate-related threats are not just environmental concerns but pose significant risks to stability and security worldwide. As we confront the stark realities outlined in the State of the European Climate in 2022, it's evident that Europe is grappling with unprecedented shifts—2022 being the hottest year on record, widespread droughts, and alarming ice loss in the Alps. These climatic changes are not just statistics; they translate into tangible security risks, as highlighted by leaders like Frans Timmermans and Joseph Borrell. This is not a new conversation for the EU. The 2008 paper on climate change and security laid the groundwork, and recent strategies like the Climate Change and Defence Roadmap, Integrated Approach, and the Strategic Compass build on this foundation. These frameworks recognise not only the indirect impacts of climate on conflict but also the direct effects on military infrastructure. The armed forces are not immune to climate change. From damaged bases to challenges in personnel deployment, the military faces real operational threats. Adaptation is not a choice; it is a necessity. Yet, the military itself is a contributor to climate change, a reality addressed by initiatives like the Climate Change and the Armed Forces. The commitment to 'greenify' armed forces aligns sustainability with strategic imperatives for long-term security. Recent progress, outlined in the Joint Communication by the EU Commission, demonstrates a commitment to leveraging data and international cooperation. Initiatives like the Climate and Environment Security Data Hub and the Defence Energy Suite reflect a dedication to informed decision-making. While commendable strides have been made, challenges persist, as highlighted by the 'action gap' identified in recent research. Bridging this gap between policy proposals and operational implementation is crucial for tangible impact. In conclusion, the EU stands at a pivotal moment, recognising that defending nations is inseparable from protecting the planet. The journey ahead demands continued collaboration, innovation, and a steadfast commitment to a future where security is synonymous with sustainability. Europe faces a storm, but with strategic foresight and collective action, it can navigate towards a climate-secure future.



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ABSTRACT

As stated by the European Environment Agency (EEA) in 2020, our environment is disastrous and immediate action is required. In an environment where individuals have to flee uninhabitable areas and conflicts arise over key natural resources, the question raises how the EU intends to prepare the military to enable a green transition and how European defence policies adapted the militaries for the challenges caused by climate change.

To answer this question, I first analyse the current challenges for Europe's armed forces

and how the European armies are part of the climate change problem due to their carbon footprint. Afterwards, I start with analysing the Current EU Defence Policy by having a closer look at the 2020 Climate Change and Defence Roadmap, The Concept for An Integrated Approach to Climate Change and Security, and the 2022 Strategic Compass for Security and Defence. Subsequently, I examine the Joint Communication shared by the EU Commission. I will end my paper with a conclusion on the recent European progress.

Current State of Affairs

In March 2022, the EU Council published a Strategic Compass regarding climate change and defence in the European Union. In this document, the EU speaks of climate change posing a greater risk of global instability and resource scarcity. This instability leads to frequent natural disasters, such as earthquakes and forest fires, which will require military assistance. In the future, military adaptations will also be needed, given the changing environment where armies operate. For example, more extreme temperatures occur, or increased sea levels arise. Investing in the military is also necessary for greening the technologies and available infrastructure (EEAS, 2022). This strategy is still possible. Indeed, the European continent has already witnessed the effects of climate change.

In a State of the European Climate 2022 report issued by the World Meteorological Organization, figures indicate that time is running out for European policymakers. Besides Europe being the fastest-warming continent, many unwanted records were broken, with 2022 being the hottest year ever recorded for many European countries. The driest months were recorded for Belgium, the United Kingdom and France, and the Alps lost the most ice mass they ever did this year (WMO, 2022). These changes have not gone unnoticed by some top EU officers. Ex-vice-president of the EU, Frans Timmermans, spoke at a pressconference on 28 June 2023 about the growing impact of climate change on our

environment and how it creates instability. There is an increased risk of conflict due to the scarcity of resources and individuals seeking to gain power on this basis. The indirect effects of climate change can lead to socio-economic and political changes that pose a security threat because of destabilised states and regions. Timmermans stressed the need to incorporate these challenges into our policies and the work with partners in the future. Joseph Borrell, High Representative of the European Union for Foreign Affairs and Security, talks about the fact that climate change is a source of insecurity and that security policies must take climate constraints into account (European Commission, 2022). NATO Secretary-General Jens Stoltenberg also shared concerns about the impact of climate on defence and the importance of achieving a military green transition. He confirmed the climate-security nexus by stating that dependence on Russian gas puts pressure on energy security, which is exacerbated by climate change (NATO Secretary General Jens Stoltenberg, 2023).

At the 2023 NATO Summit in Vilnius, the topic of ‘climate security’ was raised, with NATO pledging to assess the risks that climate change might have for our future operations and on its infrastructures, and to conduct more research on the negative effects it might have on the operability of armies (Climate Diplomacy, 2023).

No New Issue

In 2008, the High Representative and the European Commission came up with the publication of a paper addressed to the European Council on the topic of climate change and security. This is a clear indication that this topic is not a new subject.

In the first paragraph, the paper stated that the security risks created by climate change are real, and the consequences are already visible. Climate change is a multiplier of threats, especially in areas prone to conflict, which may further increase the risk of unrest. The paper examined seven forms of conflict that could arise caused by the effects of climate change. The first conflict is over resources because the paper predicts that droughts will lead to food insecurity, creating further tension in densely populated areas. It is also cited that coastal areas, which often constitute important economic centres, will be threatened by rising seawater levels. The disappearance of these areas places high economic and humanitarian pressures on affected countries and donor states. At the same time, due to climate warming, rising seawater reduces land resources, and this scarcity can lead to increased conflicts over territories and border disputes. Climate warming will create areas that are no longer habitable, causing many people to flee in search of better liveable places, thus triggering migration. Dealing with these environmentally induced migratory flows will challenge the European continent. Weak governments and failing states currently struggling to cope with challenges will be further tested with climate-related challenges. When populations are no longer satisfied with their

governments' approach, it can lead to frustrations and uprisings, eventually destabilising entire regions and countries. As early as 2008, the report cites the potential for conflicts and competition over energy sources and tensions over energy supply. Many of these sources are in areas vulnerable to climate change, which can create additional energy uncertainties.

It could also be a possible impetus to make greater use of nuclear energy that carries safety risks. As a final point, the report cited the potential pressure on the international community and its cooperation that could be harmed by resentment from countries most responsible for the current state of the environment and those most adversely affected. Creating an international policy for the good of the environment puts pressure on cooperation and economic linkages. In a subsequent section, the paper discussed the different continents and the potential impacts by region. It concluded with a few recommendations to mitigate negative impacts. For example, it suggested strengthening preparedness for conflicts and natural disasters and avoiding them by increasing the EU's capacities regarding analysis and monitoring. The European use of crisis management and disaster response instruments should be further developed. Since climate change is a global problem, a multilateral response within the framework of global governance should be advocated. Existing partnerships such as the G8 and the UN should be encouraged to focus more on security risks related to climate change and both new international and regional partnerships. Cooperation with third countries and regional strategies must be developed to closely monitor hot spots (European Commission,

High Representative, 2008).

Since the publication of the paper 15 years ago, the EU has taken a few actions in line with the recommendations made to counter the security risks of climate change. That same year, the Global Climate Change Alliance was established to support constructive cooperation between European Union member states and countries with less financial capacity to guard against the adverse effects of climate change. Specific projects include combating deforestation, engaging in disaster risk reduction, climate change adaptation and mainstreaming climate change considerations in policies, strategies, budgetary systems, and mitigation (Climate Funds Update, 2015).

The Climate Change-Related Challenges for the Armed Forces

Apart from the indirect negative effect that climate change has on defence, such as being a catalyst of conflict (because of creating scarcity of resources, for example (United Nations Climate Change, 2022)), it is also worth considering the extent to which climate change directly affects defence. There is greater awareness of the impact on the efficiency of the military affected by the changing climate (KPMG, 2023). For instance, military infrastructure often falls victim to extreme weather phenomena in recent years, damaging buildings and vehicles. For example, several Air Force bases in the United States have been damaged by hurricanes, resulting in millions in damage to the facilities (Hauptman, 2022). The existence of dozens of naval bases is threatened by rising sea levels (Union of Concerned Scientists, 2016). Runways at mil-

itary air bases in warmer regions may suffer from heat and melt due to high temperatures, making it impossible for planes to land and take off (Maclellan & Muvija, 2022). Military equipment and vehicles are also experiencing the adverse effects of the changing climate. Helicopters are facing difficulty taking off in warmer climates due to the hot, dense air causing reduced air lift (KPMG, 2023). A problem is also the overheating of engine blocks of military vehicles due to excessive external temperatures (Beale, 2017). There is also an increased risk for military personnel to carry out missions in more extreme temperatures, both in extremely hot environments where the risk of overheating and dehydration is a threat and cold areas where hypothermia can occur (EDA, 2023). Given all these situations, the demand for equipment adapted to climate conditions is high, both in terms of temperatures and weather phenomena (Army Technology, 2022).

The Military Contribution to Climate Pollution and How to Lower its Impact

Despite facing major hurdles due to climate change, the military also contributes to its cause and is a huge polluting branch on a global level. The so-called “greenification” of armed forces is necessary to decrease military emissions. The environmental group “The Conflict and Environment Observatory” estimated that the carbon footprint of EU military spending was the equivalent of 23 million tonnes of CO₂. This gigantic footprint is equal to the emissions of 14 million cars (Euronews Green, 2023). This is mainly because armies operate in polluting sectors such as

maritime and aviation. Many of the vehicles and equipment are outdated and, therefore, not adapted to everyday ecological standards (Barry, 2022).

In 2021, 22 Defence Ministers of nations worldwide came together to discuss possible proposals to jointly work towards making armies more climate-neutral and sustainable and created the “Climate Change and the Armed Forces” initiative (Paris Peace Forum, 2021). With this declaration, the ministers encouraged an energy transition for the entire defence sector to defossilise and build renewable energy installations. They also advised to work more on standardisation of materials and equipment to make it more interoperable, increase carbon capture by military actors, and create more resource-efficient weapons systems (Paris Peace Forum, 2021). In

2021, €133 million was released through the European Defence Fund, which served for the environmental transition of technologies and products linked to defence (EEAS, 2022).

There are several possible ways in which the defence sector can reduce its impact on the environment and commit to a more sustainable approach. For example, in terms of mobility, alternative forms of fuel could be opted for or more commitment to electric and hybrid vehicles. Training the troops could be done through simulations with zero emissions or vehicles with lower average emissions. The army could put more effort into building infrastructure to generate renewable energy, such as windmills or solar panels. Awareness and behavioural change can be stimulated to make sustainability more important (Barry, 2022).

ANALYSING RECENT DEVELOPMENTS IN EU DEFENCE POLICY

When we want to analyse what the European Union’s defence policy contains, it is necessary to examine The Common Security and Defence Policy (CSDP) implemented by the European External Action Service (EEAS). This policy makes the Union prominent in peacekeeping missions, preventing conflicts and enhancing global security. This policy is a fundamental component of the EU’s holistic strategy for managing crises utilising civilian and military resources (EEAS, 2021). Over the past three years, several initiatives have been launched, of which the EEAS was the (co-)author and shaped Defence policy on Climate and Security. These include the 2020

Climate Change and Defence Roadmap, the 2021 Concept for an Integrated Approach to Climate Change and Security, and the 2022 Strategic Compass for Security and Defence.

The 2020 Climate Change and Defence Roadmap

Integrating climate-related aspects into the CSDP was done thoroughly for the first time through the 2020 Climate Change and Defence Roadmap (Meyer, Simon, Vantaggiato & Youngs, 2021). The EEAS, the Commission and the European Defence Agency joined hands to draft this document. The Defence

Roadmap covers the Operational Dimension, Capability Development, and Strengthening Multilateralism/Partnerships.

Operational Dimension

The first action point, 'Operational Dimension', emphasises that political decision-makers must realise that our climate will have a major impact on future missions. Security issues need to be considered, so some action points have been developed to anticipate these issues. For instance, the EEAS will strengthen links between current instruments. These tools include the early warning system, conflict analysis, weather forecasting and climate prediction models, along with the civilian CSDP Missions Analysis Capability. This improvement aims to raise awareness and form a correlation between early warning, strengthening analysis, and actions. Developing strategic forecasts of climate and environmental impacts on CSDP should be made possible. Operational Guidelines and Standard Operational Procedures, containing duty of care and carbon footprint management, will be developed to cover climate aspects and raise awareness. In the medium term, EEAS will further develop Standard Operational Procedures and employ an environment advisor to oversee the correct application of these procedures. The EEAS also asks member states to cooperate and share studies and analyses linked to climate change and maintain strong links with all security actors (EEAS, 2020).

Capability Development

The EEAS recognises that the military is an energy-intensive sector and that reducing energy demand is essential for increasing efficiency.

Actions on capability development include the addition of climate change mitigation in EU training and making proposals that take climate change risks into account. The EEAS encourages Member States to help develop new technologies to increase operational efficiency. In line with the upcoming European Defence Fund (EDF) Regulation, funding can be assigned to research and development aimed at defence-specific energy generation, storage, efficiency, and management solutions. These funds also support applications designed for extreme operating conditions. The same framework includes the exploration of advanced resource efficiency solutions that integrate circular economy principles. All these efforts can lead to defence activities with reduced carbon impact. The EDA is set to initiate and oversee an Incubation Forum on Circular Economy in European Defence (IF CEED). This platform aims to identify collaborative initiatives involving Member States, the defence industry, and Research and Technology Organisations (RTOs). These initiatives tackle various concerns such as waste management, chemical safety, component tracking, environmental preservation, water management, and resource utilisation. Member states are also encouraged to stimulate human factors linked to energy management and efficiency and enhance the understanding of national defence as significant stakeholders regarding energy consumption. Member states should also keep in mind environmental considerations when renovating or building military infrastructure (EEAS, 2020).

Strengthening Multilateralism and Partnerships

Finally, the EEAS recognises that cooperation with international actors is essential in Security and Defence. The existence of the climate-security nexus will be promoted to third countries, and a partnership will be built with the African Union, the United Nations and NATO. Such partnership stimulates the exchange of experiences, organisation of awareness training, and construction of new networks. The EEAS states are committed to integrating climate change and environmental considerations into the updated priorities for reinforcing the UN-EU partnership on peace operations and crisis management. Additionally, the EEAS expresses that it will incorporate climate and environmental elements into its security and defence policy dialogues with third countries. Furthermore, the EEAS says it will persist in expanding its network of research institutions and humanitarian organisations to enhance comprehension of the diverse impacts of climate change and environmental deterioration on the defence sector (EEAS, 2020).

2021 Concept for an Integrated Approach to Climate Change and Security

On 16 September 2021, the EEAS created a Concept for an Integrated Approach to Climate Change and Security (the Integrated Approach). It mentions the risks associated with climate change at the expense of peace and security. The Integrated Approach mentions the example of water scarcity caused by climate change in the warming Sahel region

that contributes to instability and competition by local actors. The Integrated Approach aims to amplify the impact of the EU's external initiatives on peace and security. This is achieved by making sure that the connection between climate and security, which encompasses concerns about environmental decline, is considered across all EU undertakings in this domain (EEAS, 2021).

The Integration of Climate and Security Nexus in EU Instruments and Policies *Conflict Prevention*

The first mentioned initiative is the prevention of conflict. This can be achieved by enhancing the influence of the EU's external efforts on peace and security through conflict prevention by focusing on conflict analyses, conflict sensitivity assessments, and early warning/early action recommendations. These systems will generate a lot of data, which will be processed by specially trained staff. Further analysis of this data can be done in cooperation with external actors such as think tanks and civil society organisations. Moreover, translating heightened situational awareness, early caution, and analysis into tangible steps will be of great importance. The updated Early Warning System now facilitates monitoring initial actions over 2.5 years. Emphasis will be placed on monitoring the progress of early actions pertaining to climate and environmental considerations. The European Union will also strive for a more synchronised and methodical interdisciplinary approach to analysis and conflict prevention responses. The alignment between the Early Warning System, the conflict analysis tool, and the civilian CSDP Missions Analysis Capability

(MAC) will be strengthened, as outlined in the Climate Change and Defence Roadmap. This strengthening aims to reinforce the connections between early warning, analysis, and actions concerning the impacts of climate and environment on the Common Security and Defence Policy (CSDP) (EEAS, 2021).

Crisis Response

Responding to crises efficiently requires considering how CSDP missions can respond more appropriately to security threats. Integrating climate and environmental factors into the mission's routine strategic and operational planning process will be pursued as suitable. The document distinguishes between guidelines for including environmental aspects for military and civilian CSDP missions. For civilian missions, there will be an emphasis on raising awareness of climate-related issues, carbon footprint management, and supporting the rule of law on climate-related capacity building. For military missions, the focus will be on collecting data on their own emissions released during missions and creating baselines around this, supporting local authorities in fighting environmental crime and complying with environmental legislation, and strengthening environmental governance (EEAS, 2021).

Conflict Resolution, Stabilisation and Security Strategies

To address conflict prevention, the EEAS refers to its 2020 Peace Mediation Guidelines, which included a chapter specifically focused on climate and environmental change conflicts. The document proposed the establishment of a body in the form of an EU me-

diator to investigate the cause of a particular conflict. Environmental stakeholders should be involved in discussions with technical experts to find solutions to conflicts. The end goal should be a peace agreement that should be adapted to change because climate problems do not remain stable (EEAS, 2020). Future disaster risk management policies will include climate-related risks. Disarmament, Demobilisation and Reintegration (DDR) processes will consider the challenges behind climate change, such as increasing competition for natural resources (EEAS, 2021).

External Action on Development, Climate Change Mitigation & Adaptation and Humanitarian Aid

The Integrated Approach refers to the NDCI-Global Europe framework established in June 2021, consolidating multiple previous EU external funding instruments. Its objective is to aid the most vulnerable countries in addressing persistent developmental hurdles, while also playing a role in fulfilling the Union's international targets, like the Sustainable Development Goals (European Commission, 2021). A budget was allocated to invest in climate change mitigation and adaptation measures. This enables financing initiatives that bolster effective governance and enhance preparedness for disaster risks. These actions benefit the intersection of climate and security, fostering resilience through their efforts. Humanitarian aid to areas prone to the negative effects of climate change is also highlighted as a priority (EEAS, 2021).

Supporting Context-Specific Approaches and Local Ownership

To respond to security risks, the EEAS recognises that insights from local actors and their local knowledge systems can contribute to the identification of more complete policy responses. Climate-change strategies resulting in resilience should be supported by local communities and their awareness (EEAS, 2021).

Supporting Multilateralism and Partnerships

Besides ensuring a coherent and coordinated approach at the EU level, further and closer international cooperation should also be established. Many multilateral agreements already address global environmental challenges, such as the Paris Agreement, and strong collaborations exist between member states and international organisations with the EU. These partnerships should be further expanded and strengthened so that full operational engagement can be achieved (EEAS, 2021).

Enhancing Expertise and Monitoring Progress on Climate Change and Security

According to the strategy, together with its partners, the EU should put more effort into

data collection and mutual sharing to better understand the contextual factors and their interlinkages. The follow-up of the actions and initiatives coming out of this approach and related to climate change and security will be monitored on a regular basis by the EEAS (EEAS, 2021).

The 2022 Strategic Compass for Security and Defence

The EEAS' strategic Compass consists of four verbs: Act, Secure, Invest and Partner. The Compass covers multiple risks and fields of action, such as countering terrorism, disarmament and cyber threats. Under the 'Secure' Chapter, the EEAS confirms the aims of enacting the Climate Change and Defence Roadmap. It formulates that member states will create national strategies to ready their armed forces for the effects of climate change and will play an important role in supporting civilian authorities in emergencies. An environmental advisor and a report to monitor the environmental impact shall be provided for each CSDP mission. The EEAS Crisis Response Structures will be strengthened so that rescue and evacuation operations can be conducted more safely and efficiently (EEAS, 2021).



A Threatening Heat for the European Defence:

The EEAS Progress Report

On 11 October 2022, a report was published by the EEAS, EU Commission and EDA summarising the progress on the Defence Roadmap and Integrated Approach, considering the guidelines of the Strategic Roadmap. This joint Progress Report on Climate, Defence and Security analyses the 2020-2022 period and reviews the measures taken that were proposed by the policy proposals (EEAS, 2022). An examination of the status regarding the suggestions set by the Roadmap and the Integrated Approach is examined. Some key action points were already fulfilled. The plan to develop Operational Guidelines was successfully implemented as proposed in the roadmap and already provides a framework for current and future CSDP missions. An Environmental Management System will be established to collect, measure, and analyse quantitative data on the environmental footprint during CSDP missions. Active efforts are being made to develop Standard Operational Procedures aiming to improve the missions' environmental performance. The deployment of environmental advisors has already been done for several civilian missions, and by 2025, every mission will have such an advisor. Data on energy use was collected and analysed by the EEAS during active missions. Based on this analysis, concrete plans were already made that will reduce emissions for some missions, for example, with the use of biodiesel (EEAS, 2022). The Integrated Approach focused on conducting screenings re-

lated to climate-enhanced conflicts. Sixty-six were planned in the period from 2020-2023. Climate-relevant indicators were also updated in the EU Early warning system. Certain goals still need to be achieved, such as integrating climate change mitigation and environmental protection into EU training and exercises at the member state level. However, this will be included in the future curriculum of the European Security and Defence College at an operational level. Other action points identified in the roadmap and approach need further development before concrete action can be taken.

Evaluation of the Recent Defence Policies

Recent developments in EU defence policy are a good step forward in seeking an appropriate response to the pressing issue of climate change affecting the security and defence of European member states. Even though only some of the objectives of the complementary Roadmap and Integrated Approach have been achieved, some successes were made, and some plans were implemented. Operational Guidelines and Standard Operational Procedures have been created, and environmental advisers are operating. International cooperation with other international organisations and local actors has increased, which was necessary, given the transnational and global nature of the problem. Despite this progress, recent research has revealed the prominent existence of an 'action gap' where there is a

deficit in the implementation and operationalisation of proposed actions. This gap occurs because many of the initiatives are spread over a period of time but need to address the current challenges of closing the gap between action and policy. The efforts of the member states need to be more coordinated by further building on existing policies and implementing projects. Member states resources must be pooled to achieve a greater knowledge exchange, and a stronger coordinating role

must be given to the EEAS (Bunse, Remling, Barnhoorn, Du Bus de Warneffe, Meijer & Rehbaum, 2022). Closer cooperation and better alignment between the EEAS and the relevant EU Commission directorate generals would increase policy effectiveness. Aligning tools and resources between the EEAS and the Commission could ensure a more qualitative and proactive approach (Bremberg & Bunse, 2023).

THE 2023 JOINT COMMUNICATION BY THE EU COMMISSION

A couple of months after the publication of the roadmap and the Integrated approach, the EU Commission published a Joint Communication offering a new outlook on the climate-security nexus. The EU Communication builds on existing frameworks such as the Roadmap and the Integrated Approach. It aims to strengthen informed planning and decision-making related to climate, put into practice the climate nexus with security in external action, involve member states more in climate adaptation and mitigation and reinforce partnerships. The collection of data related to climate was already targeted before, but the Commission now wants to strive for dissemination and accessibility of joint analysis. To achieve this goal, work is underway to create The Climate and Environment Security Data and Analysis Hub, an entity that will offer a resource for climate-related security risk assessments. A comprehensive trend analysis will be conducted annually to get a better picture of the consequences of climate change and environmen-

tal degradation on conflicts, competition for natural resources, and migration (European Commission, 2023). A Defence Energy Suite will be created to collect defence energy data from member states and monitor this information (Euromil, 2023). EU Rapid Deployment Capacity will be supplemented by climate and environmental factors. An EU Climate Security and Defence Training Platform will relieve fragmentation and provide one focal point that centralises expertise and offers training for different purposes. To help member states identify gaps, develop green standards, and share and conduct studies, the Climate and Defence Support Mechanism is being established. Regarding international cooperation, the strategic relationship with the United Nations will reflect the climate-security nexus. Both the Commission and the EEAS are looking at the option of setting up a structured dialogue with NATO in terms of cooperation, particularly regarding data collection, training, resilience building, and raising awareness (European Commission, 2023).

CONCLUSION

The intersection of climate change, environmental degradation, and defence policies has become an imperative issue for the EU. The urgency of addressing these complex challenges is evident from the alarming state of the environment and the growing recognition of climate-related threats to security. The EU acknowledges that climate change is not merely an environmental concern but also a major driver of global instability. The evidence of this can be seen in the increasing frequency of natural disasters, such as earthquakes and forest fires, which often demand military assistance. Additionally, the changing climate affects the operational environment of armed forces, with extreme temperatures and rising sea levels posing new challenges. The EU's response to these challenges is multifaceted. It involves adapting the military to a greener future and mitigating the environmental impact of defence activities.

The EU has taken concrete steps to address these issues. The Climate Change and Defence Roadmap, the Integrated Approach to Climate Change and Security, and the Strategic Compass for Security and Defence lay out comprehensive strategies to integrate climate considerations into defence policies. The importance of an early warning system, analysing

conflicts and incorporating climate and environmental factors into military planning and operations is emphasised in these documents. Furthermore, the EU is committed to reducing its defence sector's carbon footprint by transitioning to renewable energy, standardising materials and equipment, and promoting resource-efficient weapons systems. It seeks to build partnerships and collaborations with international actors, such as the United Nations and NATO, and to address climate-security challenges collectively. Some goals are yet to be fully realised, requiring continued efforts and cooperation.

The EU Commission's Joint Communication outlines additional measures, such as the creation of data hubs, energy monitoring systems, training platforms, and support mechanisms, to enhance climate-security integration and collaboration with international partners. In summary, the EU recognises the urgency of addressing climate-related challenges in the defence sector and has formulated a comprehensive framework to adapt and mitigate the impacts of climate change and environmental degradation on security. By prioritising sustainability, cooperation, and data-driven decision-making, the EU aims to strengthen its defence policies for a greener and more secure future.

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Created in 1953, the Finabel committee is the oldest military organisation for cooperation between European Armies: it was conceived as a forum for reflections, exchange studies, and proposals on common interest topics for the future of its members. Finabel, the only organisation at this level, strives at:

- Promoting interoperability and cooperation of armies, while seeking to bring together concepts, doctrines and procedures;
- Contributing to a common European understanding of land defence issues. Finabel focuses on doctrines, trainings, and the joint environment.

Finabel aims to be a multinational-, independent-, and apolitical actor for the European Armies of the EU Member States. The Finabel informal forum is based on consensus and equality of member states. Finabel favours fruitful contact among member states' officers and Chiefs of Staff in a spirit of open and mutual understanding via annual meetings.

Finabel contributes to reinforce interoperability among its member states in the framework of the North Atlantic Treaty Organisation (NATO), the EU, and *ad hoc* coalition; Finabel neither competes nor duplicates NATO or EU military structures but contributes to these organisations in its unique way. Initially focused on cooperation in armament's programmes, Finabel quickly shifted to the harmonisation of land doctrines. Consequently, before hoping to reach a shared capability approach and common equipment, a shared vision of force-engagement on the terrain should be obtained.

In the current setting, Finabel allows its member states to form Expert Task Groups for situations that require short-term solutions. In addition, Finabel is also a think tank that elaborates on current events concerning the operations of the land forces and provides comments by creating "Food for Thought papers" to address the topics. Finabel studies and Food for Thoughts are recommendations freely applied by its member, whose aim is to facilitate interoperability and improve the daily tasks of preparation, training, exercises, and engagement.



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