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# EUROMIL BOOKLET

## FIRST EDITION: WORLD ENVIRONMENT DAY



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# FOREWORD

The European Organisation for Military Associations and Trade Unions (EUROMIL) is the only European umbrella organisation representing military personnel in Europe. It aims to address a wide range of issues facing the armed forces and defence sector, and climate change has been high on our agenda for quite some time. EUROMIL has been continuously advocating for the inclusion of climate change into military education and training programs to ensure that personnel of all ranks are well prepared and equipped to respond to climate-related emergencies as well as reducing their environmental footprint.

By promoting sustainable practices, advocating for climate-conscious policies, and ensuring military readiness for climate-related security threats, EUROMIL's goal is to contribute into building a more resilient and prepared defence sector in the face of global climate change. Raising awareness and fostering a comprehensive understanding of climate-related security risks positively affects policies that have a direct impact on enhancing the preparedness, readiness and operational capacities of the military and the safety and health of military personnel.

Hence, we would like to extend our gratitude to all those who contributed to this booklet edition for the World Environment Day. Additionally, we thank all those who engage themselves daily for a climate-friendly defence force on both national and international levels. Your dedication and hard work are invaluable in our collective efforts towards a sustainable future.

Emmanuel Jacob  
President of EUROMIL



# CLIMATE CHANGE, SECURITY AND GREEN DEFENCE – THE STRATEGIC ROLE OF ARMED FORCES

**Armed forces may act as technological leaders and enablers of climate friendly or even climate neutral societies**

Climate change has been debated controversially amongst various groups for at least thirty years. Although international efforts to fight climate change have been negotiated (UNFCCC 1992, UNFCCC 1997 “Kyoto-Protocol”, UNFCCC 2015 “Paris Agreement”) overall success is still lacking. And while we observe a rough stabilization of Greenhouse Gas (GHG) emissions in OECD-countries, the world-wide GHG-emissions have nevertheless tremendously increased in the last 30 years.



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The two basic climate policy options available are straightforward: You either try to prevent climate change (mitigation) or else you must live with the consequences (adaptation). The two approaches are interrelated: The more adverse effects of climate change are prevented; the less adaptation measures must be taken and vice versa. This implies that although we all wish to mitigate the severest impacts of climate change, we must politically consider scenarios where climate change takes place differently. The longer the international community fails to make use of preventive options, the more drastic the adaptation measures will have to be. Two main reasons for these political failures can be identified: The first reason can be labelled a fundamental ‘error of construction’ which was committed in Rio de Janeiro 1992 (see UNFCCC 1992), when developing countries were granted an unconditioned status that exempted them from any preventive responsibility (“common but differentiated responsibilities”). The second reason for the slow implementation or lack of global preventive measures is, from an economic point of view, non-internalised social cost. If they exist, the emitter of GHG-emissions may charge third parties with the cost of the related climate changes – this is the case both geographically (for example when emissions from Germany’s mobility sector intensify climate change in Southeast Asia) and temporally (today’s emissions from air travel will result in a sea level rise in 30 years from now).

# CLIMATE CHANGE, SECURITY AND GREEN DEFENCE – THE STRATEGIC ROLE OF ARMED FORCES

The dimensions of space and time may, of course, blend into one another, which makes the problem extremely difficult to manage for today's actors. The ignorance of climate-related social cost in today's production decisions induces an economic situation where excessive production quantities are produced too cheaply and an inefficient overall outcome. Additionally, because human beings behave myopic as well as impatient, effects in the far future seem to be less important than effects today; discounting on a political scale implies a "dictatorship of currently living generations against future living ones".

Thus, an unpleasant and not yet intensively discussed internalization of social cost is simply that people in the developed countries as the main emitters must bear all climate change induced cost by adapting to future climate change. Climate-induced migration is an example of one kind of internalisation of these external cost. Additional examples of security threats due to climate change are given as follows (see German Advisory Council on Global Change (WBGU), pp. 5):

1. Increase in the number of weak and fragile states because of climate change,
2. Risks for global economic development,
3. Risks of growing international distributional conflicts between the main drivers of climate change and those most affected,
4. The risk to human rights and the industrialized countries' legitimacy as global governance actors,
5. Overstretching of classic security policy.

Before turning to adaptation let us shortly concentrate on how the armed forces can contribute to mitigation as Green Defence may be an interesting environmental protection programme. A younger publication estimated (see Rajaeifar 2022) that armed forces emit approx. 5 to 6 % of global emissions – and in times of war, these emissions even increase. Thus, mitigation would make sense due to the pure quantities of overall emissions. However, the main problem is that a well-defined international regime to measure and track military emissions does not exist – military GHG-inventories are completely voluntary.

Therefore, adapting to climate change would be a more interesting option for armed forces in four different dimensions:

1. Military infrastructure and personnel: climate-induced changes to ground conditions have various adverse consequences for military personnel – since they often cause damage to the surfaces of buildings, roads, and runways (see US DoD 2019).

# CLIMATE CHANGE, SECURITY AND GREEN DEFENCE – THE STRATEGIC ROLE OF ARMED FORCES

Changing military missions and profiles: (a) New and more types of missions for armed forces (e.g. North-Eastern-Passage). (b) Humanitarian missions due to climate change (e.g. in 2006 Spain established the Unidad Militar de Emergencias (UME) which is responsible in the fields of disaster management and humanitarian relief. 1. These Spanish military units are also projected to deal with climate-related disasters. The approximately 4,000 soldiers of the UME can be employed both at home and abroad (see Spanish Institute for Strategic Studies 2018)). (c) Disaster relief management – possibly a future role for NATO, however bearing in mind that the NATO military strategy that was finalized in 2019 explicitly excludes this type of military mission on the strategic level. Therefore, it could be a good idea to position the EU in the context of climate change and taking responsibility: Why not procure hospital ships on an EU-level to help people who suffer from climate-induced catastrophes (see Boehmann 2022)?

2. Procurement will be possibly affected by climate-induced political legislations. Multiple-uses-goods can be a solution, as put into practice in general by the Canadian Forces' preference for dual-use-vehicles.

3. Not yet realized: Compensating climate-induced economic losses by at least temporal employment of unemployed people in the armed forces?

As described, there are numerous climate-induced necessities for additional missions of armed forces in times of climate change. However, armed forces are currently highly dependent on fossil fuels to manage adaptation measures.

Let us conclude:

(1) From a strategic perspective armed forces may gain social reputation trying to find a silver bullet: When adapting to climate change leads to the strategic decision to purchase military equipment on a fossil-free base, then military action can be ensured even if there is no access to fossil fuel in the future. As a by-product, GHG-emissions today will be reduced. In any case, military investments in Green Defence today promote a greening process. Armed forces may act as technological leaders and enablers of climate friendly or even climate neutral societies. Finally, it is self-evident that being operationally better than today must be considered as an absolute prerequisite for the armed force.

(2) The political dimension of international climate protection is a multilateral task, where we are on our way to utmost failure, which will threaten cooperative international policy.

# CLIMATE CHANGE, SECURITY AND GREEN DEFENCE – THE STRATEGIC ROLE OF ARMED FORCES

Adaptation to climate change mostly is a national task, which I fear will cause international conflicts when countries that follow their isolated national policies need to adapt to impacts of climate change. Armed forces must be effective to protect nations against these threats, but it is unnecessary to emphasize that preventing climate change is necessary. Not only do we have to seriously consider the impacts of climate change from a security perspective, but we also need to act. A strict separation of security within national borders on the one hand and international aspects of security on the other hand cannot be maintained whenever we try to find constructive solutions in a world where climate change takes place.

There is a significant risk to both failing in mitigating climate change as well as not being prepared to adapt to its worst consequences. This would be a centennial mistake of human beings with dramatic consequences for people all over the world, starting with even lower living conditions in the developing world, but in consequence also affecting the industrialized countries. Green Defence can provide promising answers in managing these doomsday scenarios and taking responsibility.

# CLIMATE CHANGE, SECURITY AND GREEN DEFENCE – THE STRATEGIC ROLE OF ARMED FORCES

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# CUTTING MILITARY GREENHOUSE GASES EMISSIONS

**Although there has been some progress in developing mitigation plans, decarbonisation of the military will require proactive policy and faces many challenges, especially in terms of military operations.**



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## **The military's contribution**

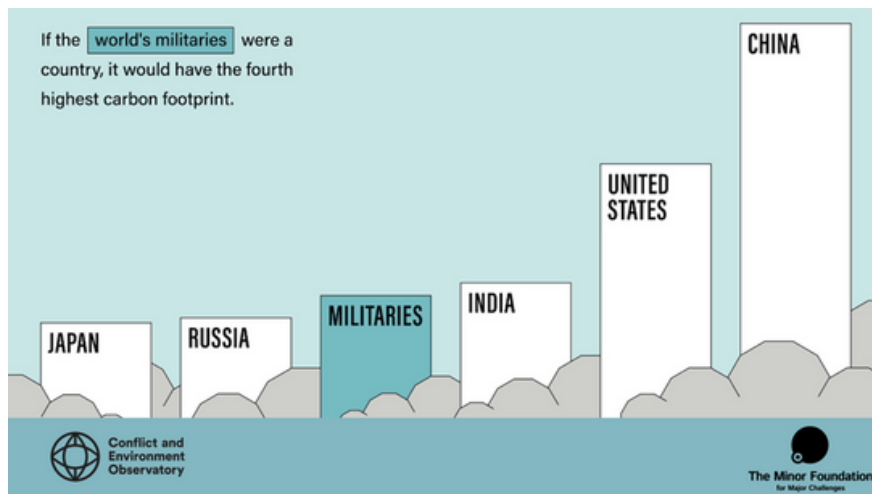
There is [unequivocal evidence](#) that the Earth is warming at an unprecedented rate, with human activity the main cause of the temperature rise which has already occurred. The effects of climate change are already [happening](#), but there's uncertainty over the [rate](#) at which the climate will change over the next few years.

Many factors are involved in this uncertainty, including future emission trajectories of greenhouse gases (GHG), their interaction with natural climate systems and the limitation of climate modelling. There is also uncertainty on how multiple drivers – such as climate change, biodiversity loss and pollution - could destabilise [global tipping points](#), but these could become so severe as to cause [irreversible changes](#) to the natural world. However, what remains certain is the need to cut GHG emissions across all sectors to limit global warming to below 1.5 degrees Celsius. Unless governments do much more than has been already promised, current projections [indicate failure](#) to meet the targets set by the Paris Agreement and global temperatures are predicted to increase to around 2.9 degree Celsius.[1]

Militaries are huge consumers of fossil fuels, with large and complex supply chains. As stated by the European Defence Agency Deputy Chief Executive in [April 2024](#), the goal of the EU to become climate neutral by 2050 “cannot be achieved without the engagement of the defence sector”. It is estimated that the military are responsible for [around 5.5%](#) of global total GHG emissions, and if the world's militaries were a single country, it would have the fourth highest carbon footprint.

[1] Full implementation of the commitments set out by countries in their unconditional Nationally Determined Contributions (NDCs) would limit global temperature rise to 2.9 degrees Celsius above pre-industrial levels this century

# CUTTING MILITARY GREENHOUSE GAS EMISSIONS



The UNEP's 2023 [Emissions Gap](#) report noted that military emissions 'remain insufficiently accounted under UN Framework Convention on Climate Change (UNFCCC) reporting conventions.' This is because reporting military emissions is voluntary, and very few states provide disaggregated data to the [UNFCCC](#). When countries do report their military GHG emissions, there are often gaps and the overall datasets are poor. This makes accurately predicting the global military contribution to emissions difficult, and significant improvements are needed.

## Challenges to progress

Several countries acknowledge the need to reduce their military's contribution to climate change, and some have developed military climate mitigation plans. [2] Although there has been some progress in developing mitigation plans, decarbonisation of the military will require proactive policy and faces many [challenges](#), especially in terms of military operations. The [EU Strategic Compass](#), outlines a commitment to substantially increase EU military and security spending, but also highlights the need to embed climate change and environmental considerations. However, with some governments [pledging](#) to increase military budgets, military GHG emissions are also forecast to increase. In 2023, global military expenditure [surged](#) and reached a high of around US\$2.43 trillion. The United States, China and Russia account for 53.5 percent of total expenditure in 2023,[3] and the combined expenditure of the top military spending EU countries account for around 11.5 percent.[4]

[2] Examples include: [Canada](#), [Estonia](#), [France](#), [Germany](#), [Japan](#), [Luxembourg](#), [Netherlands](#), [New Zealand](#), [Spain](#), [United Arab Emirates](#), [United Kingdom](#) and [United States](#).

[3] The share of global military spending for the United States is 37%, for China is 12% (estimated) and for Russia is 4.5 % (estimated)

[4] This includes the following 12 EU countries: Germany, France, Italy, Poland, Spain, Netherlands, Sweden, Denmark, Greece, Belgium, Finland, and Romania. The estimated military expenditure for China (12%) and the top 12 EU countries (11.5%) are similar.

# CUTTING MILITARY GREENHOUSE GASES EMISSIONS

The EU Strategic Compass requires Member States to develop national defence strategies on climate change and the 2023 [Joint Communication](#) sets out the need for better data on energy consumption and GHG emissions. The [latest data](#) provided by the European Defence Agency (EDA) shows an overall fall in military energy demand of the 26 EDA participating Member States between 2016 to 2020, but militaries stay heavily reliant on fossil-fuels and only a small percentage of energy is from renewable sources. The energy data covers electricity use and heating sources, but not fuel use for mobile sources including aviation and naval vessels. The Covid-19 pandemic is also likely to have impacted overall energy consumption between these dates.

In November 2023, the European Parliament's [resolution for COP28](#) highlighted the need for accelerated decarbonisation in the defence sector, target setting and transparency by its Member States. Progress however will depend on political will, as well as budgetary resources and operational priorities. It is vital that military GHG emissions are measured and reported to track progress made and identify where focus is needed.

## **Wars and conflict emissions**

There is no agreed international methodology or comprehensive reporting requirements under the UNFCCC for military or conflict-related emissions. In 2023, NATO published their [methodology](#) for mapping GHG emissions, but this explicitly [excludes](#) emissions from NATO-led operations and missions, and other activities such as training and exercises. There is also no mention of emissions from warfighting itself,[5] which can be [highly destructive](#) to the environment.

Russia's invasion of Ukraine, and the war in Gaza have highlighted the significant climate impacts, as well the huge humanitarian and societal impacts. Estimates of GHG emissions attributed to the first 18 months of the war in [Ukraine](#) are 150 million tonnes of CO<sub>2</sub>e,[6] similar to the annual emissions of an industrialised country like Belgium. In [Gaza](#), the enormous rebuilding needs will dominate the GHG emissions from the conflict, with [over 58%](#) of all buildings estimated as damaged or destroyed. Conflict-related emissions need to be properly addressed by the UNFCCC to highlight the scale of these otherwise hidden emissions and ultimately, accountability for the climate damage caused.

[5] The 5.5% estimate of military global emissions does not include emissions from fighting wars  
[6] carbon dioxide equivalent

# CUTTING MILITARY GREENHOUSE GASES EMISSIONS

## **The improvements needed**

Whilst there are countries which already provide some annual military GHG emissions data, there is also [reluctance](#). In some cases, national security or confidentiality are given by governments as a reason to not provide disaggregated data. Greater transparency in military GHG reporting is needed, and is vital to drive global attention on the policies and technologies needed to reduce the military's contribution to the climate crisis.

In 2025, countries must submit new [Nationally Determined Contributions](#) (NDCs) which outline a country's commitment to tackling climate change. As a minimum, all countries with military climate mitigation strategies must integrate these into NDCs to demonstrate their commitment.

# LEADING THE WAY: EDA'S COMMITMENT TO A GREENER FUTURE

**A well-managed green transition that takes the operational effectiveness of armed forces as its starting point can help the defence ecosystem maintain its competitive edge while contributing to the EU's climate neutrality goals.**



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## **Introduction**

As we celebrate World Environment Day on June 5th, which is dedicated to promoting environmental awareness and action, it is also appropriate to highlight the European Defence Agency's (EDA) role in contributing towards a more sustainable future.

The Agency has made significant strides in advancing the defence energy transition and climate change adaptation, demonstrating its commitment to green defence. Amid an unstable geopolitical environment, climate concerns, and technological shifts, this commitment is about contributing to the ongoing green transition while ensuring Europe's operational superiority and resilience. A well-managed green transition that takes the operational effectiveness of armed forces as its starting point can help the defence ecosystem maintain its competitive edge while contributing to the EU's climate neutrality goals.

## **Sustainable Energy Challenges in Defence**

The European Union's (EU) limited access to critical raw materials, combined with intensifying conflicts and contested maritime routes, underscores the pressing need to reduce reliance on external energy sources. This urgency is further heightened by rapid digitalisation and technological advancements that disrupt traditional markets, creating new dependencies. Meanwhile, climate change exacerbates environmental pressures and global crises, revealing new vulnerabilities. These fluctuations impact the armed forces, restricting operational flexibility and decision-making.

Given these challenges, reliable energy supplies are crucial; their absence can lead to significant interruptions, undermining sustainability. As considerable energy consumers predominantly rely on fossil fuels, the armed forces could enhance their resilience by introducing more sustainable sources into their energy mix.

# LEADING THE WAY: EDA'S COMMITMENT TO A GREENER FUTURE

This shift involves expanding renewable energy use, integrating sustainability into operations, and designing resilient infrastructure for climate change. Funding, mindset change, and investment in upskilling and reskilling are also paramount. These measures are essential to prepare defence personnel for the post-2030 landscape, ensuring they are equipped to manage evolving challenges. Furthermore, given their sizable contributions to global greenhouse gas emissions, the armed forces can take steps to reduce their environmental impact.

## **Defence Green Agenda: Collaborative Path to Sustainability**

Achieving a green defence transition requires comprehensive engagement and action. EDA collaborates with the European Commission, the Council of the EU, the European External Action Service, EU Member States' Ministries of Defence, the private and public sectors, small and medium-sized enterprises (SMEs), research and technology organisations (RTOs), academia, and international partners. These partnerships facilitate the defence sector's transformation into a modern, resilient, and energy-efficient actor. Inspired by the European Green Deal, the EU has developed a structured pathway to ensure defence transformation.



The EU's Climate Change and Defence Roadmap[1], published in November 2020, addresses the links between climate change and security at three levels: operational, capability development and partnerships. In March 2022, EU member states committed to developing national defence strategies to prepare armed forces for climate change[2]. In June 2023, the EU outlined 28 actions[3] to address the climate-security nexus, with EDA involved in over a third of these actions. These concerted efforts underscore the strategic importance of the green transition within the defence sector and highlight a well-defined roadmap to advance this vital agenda.

[1] Climate Change and Defence Roadmap, [EUROPEAN EXTERNAL ACTION SERVICE \(europa.eu\)](https://www.europa.eu).

[2] A Strategic Compass for Security and Defence - For a European Union that protects its citizens, values and interests and contributes to international peace and security, [pdf \(europa.eu\)](#).

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# LEADING THE WAY: EDA'S COMMITMENT TO A GREENER FUTURE

## EDA's Comprehensive Approach for Sustainable Defence

EDA's commitment to advancing sustainable, clean, circular, and resilient models within the defence sector is demonstrated through interrelated activities aligned with the European Green Deal[4] goals. These initiatives include raising awareness, sharing best practices, encouraging joint projects, and stimulating collaborative research and innovation.

For example, the Energy and Environment Capability Technology Group[5] addresses military capability requirements focusing on environmentally friendly technologies, such as advanced water management models. The Incubation Forum for Circular Economy in European Defence[6] aims to promote eco-design, green public procurement, and sustainable materials.

One of EDA's key sustainability initiatives is the Consultation Forum for Sustainable Energy in Defence and Security (CF SEDSS),[7] Europe's largest defence energy community, which includes over 30 European countries. This project has been pivotal in advancing the defence energy transition and climate change adaptation, securing nearly €10 million in energy-related funding from the European Commission. It has generated over 50 innovative project ideas and 15 research studies[8], significantly influencing policies and practices to reduce energy consumption and address climate change challenges[9].



[4] [The European Green Deal - European Commission \(europa.eu\)](https://european-council.europa.eu/media/en/press-operations/infographic-116366/image001.jpg)

[5] CAPTECH Energy and Environment, [Activities Search \(europa.eu\)](https://captech.europa.eu/)

[6] [IF CEED \(europa.eu\)](https://ifceed.europa.eu/)

[7] [Consultation Forum Sustainable Energy \(europa.eu\)](https://cf-sedss.europa.eu/)

[8] [EDEN Deliverables Phase III \(europa.eu\)](https://eden.europa.eu/)

[9] [climate-report.pdf \(europa.eu\)](https://climate-report.pdf (europa.eu))

# LEADING THE WAY: EDA'S COMMITMENT TO A GREENER FUTURE

Noteworthy initiatives include programmes to improve energy efficiency, increase renewable energy use, encourage behavioural changes among military personnel, and pilot projects leveraging artificial intelligence to optimise energy use and promote green public procurement principles. Efforts to electrify transport within defence facilities and integrate hydrogen fuel technology in logistics vehicles are also underway. Additionally, there is a focus on developing unified energy performance assessments across European defence and incentivising the renovation of defence buildings to nearly zero energy standards.



To better address real-time challenges, EDA also organised the first CF SEDSS table-top exercise[10] to assess and mitigate vulnerabilities in critical energy infrastructure related to defence in the face of hybrid threats, emphasising the cascading effects of climate change and pressing environmental challenges. These efforts are further enhanced by the development of the Symbiosis project,[11] designed to enhance energy resilience by promoting the symbiotic coexistence between defence activities and renewable energy initiatives.

## Conclusion

The EU's goal to cut greenhouse gas emissions by 55% by 2030 is ambitious. However, achieving it calls for the engagement of all governmental and societal sectors. The defence sector can contribute to this change, especially with its strategic focus on greater energy resilience. The active participation of defence experts in EU sustainability initiatives, coupled with policies that integrate climate change and security, highlights a strong commitment to this cause. Moreover, the energy and environment category under the European Defence Fund and the prospect of a dedicated EU-led Competence Centre on Climate Change, Security, and Defence underscores this dedication. World Environment Day reminds us of our collective responsibility to protect our planet. Without compromising operational effectiveness, the defence sector can also contribute towards a more sustainable and resilient future.

[1] [Tabletop exercise and new study focus on protecting critical energy infrastructure \(europa.eu\)](#) and [fortifying-defence.pdf \(europa.eu\)](#).

[2] [Symbiosis \(europa.eu\)](#).



# CIVIL-MILITARY COOPERATION IN CLIMATE RELATED EMERGENCIES

**Maintaining and enhancing civil-military cooperation is of paramount importance—especially in the face of increasingly complex and compounding climate crises.**

2024's World Environment Day arrives at a truly pivotal time. 2023 was the warmest year on record, and each passing month sets new terrifying new [benchmarks](#) which demonstrate the profound consequences that climate change continues to have on individuals, communities, and societies around the globe.

With even more [extreme weather](#) predicted for this summer and the risk of compounding and cascading climate crisis growing, disaster preparedness and emergency response capabilities will continue to be tested in complex ways.

Fortunately, defense and security professionals have been conceptualizing climate and the environment as a security issue for more than 20 years. The landmark 2007 CNA report, "[National Security and the Threat of Climate Change](#)" galvanized the U.S. national security enterprise to think more robustly about the myriad of ways climate hazards and risks impact military forces, missions, and operating environments. Since then, climate as an element of defense and security has grown exponentially.

For example, the U.S. Department of Defense issued the first [Climate Change Adaptation Roadmap](#) in 2014, and over the past five years, the U.S. DoD and each of its service branches have developed specific [climate plans](#) to address both the impacts of defense forces to the environment (primarily via greenhouse gas (GHG) emissions reduction targets), as well as facilitating an understanding of how climate change is altering the way in which militaries train and operate. Several other countries, like [Germany](#) and [Canada](#), and institutions like [NATO](#), have developed specific strategies which further institutionalize climate change as a security issue.



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# CIVIL-MILITARY COOPERATION IN CLIMATE RELATED EMERGENCIES

Even so, defense and security institutions are facing a multitude of challenges related to climate change. From sea-level rise and coastal degradation around military installations, to an increase in “black flag” days (days where the Wet Bulb Globe Temperature exceeds 90 degrees Fahrenheit / 32 degrees Celsius and the heat index makes outdoor activities too dangerous), climate is also impacting training and readiness. But perhaps even more concerningly, militaries are increasingly being asked to support emergency response and humanitarian assistance/disaster relief (HA/DR) as climate change continues to fuel extreme weather events around the globe.

Though not a primary mission set, defense and military assets have been leveraged for HA/DR operations for decades. From medical assistance to aid delivery and engineers—the unique capabilities that militaries bring post-disaster can provide critical life-saving resources to areas in dire need. They can also be a hugely impactful diplomatic tool to foster goodwill and enhance relationships. But any military relief efforts typically need to be coordinated with civilian institutions on the ground. As such, maintaining and enhancing civil-military cooperation is of paramount importance—especially in the face of increasingly complex and compounding climate crises.

Fortunately, a group of experts have identified the need to better understand civil-military relations within the context of climate related emergencies. The [Global Military Advisory Council on Climate Change](#) (GMACCC) has been working diligently with a cadre of climate and environmental experts from around the world on [Project CASA](#), an in-depth research project designed to collect and analyze data on civil-military cooperation in climate-related emergencies. Based on the knowledge that climate change is increasing the frequency and intensity of severe weather, GMACCC members identified the need to collate and better understand data on how militaries and civilian institutions interact during emergencies and HA/DR operations. Though the work is ongoing, the Project CASA team has already identified several important data points, including varied approaches to civil protection and the complex legal and policy frameworks across countries. Initial findings were presented at the [Climate Security Association of Canada conference](#) this past April, and while the work continues, later this year, the team will publish its final report with additional key findings, including a cross-national dataset on military involvement in climate emergencies to help illuminate some of the ways in which climate is changing the dynamics between civilian and military institutions. Participation is ongoing, so if you or your organization are interested in learning more about the project, provide additional data, or want to get involved with the Expert Group, please [contact us](#) via the project website.

# CLIMATE READINESS: HOW WELL CAN MILITARY PERSONNEL DEAL WITH CLIMATE THREATS?

**Establishing a specialized tool akin to “Frontex” for defence and climate could provide various strategic advantages.**

Climate Change considerations are being incorporated into every facet of policy-making, influencing areas as diverse as sustainable finance, the energy sector, and defence, with the aim to foster resilience and sustainability across all sectors. On defence, international organisations as NATO or the EU are focusing into dealing with the challenges posed by climate change and assist the military sector to adapt to the changing environmental conditions.

For instance, NATO has been focusing into enhancing the energy efficiency of military operations and integrating environmental considerations into NATO’s collective defence and crisis management. Similarly, the EU with its [Strategic Compass](#) and the [European Commission’s climate-security nexus joint communication](#) is strengthening the link between the Common Security and Defence Policy (CSDP) and climate change.

The changed geopolitical environment and the increased defence spending alongside the strengthening of the European defence industry represent various opportunities to move towards the green transition in defence, but it is crucial to recognize that policies often overlook the significance of military personnel and the real challenges they face due to climate change. Therefore, EUROMIL has conducted an internal survey entitled: “[Climate Change: Security and Defence](#)”, to better understand what military associations think about the main challenges that military personnel face amid climate change, what the next steps should be for the Armed Forces to be better prepared for the future. Besides, the survey aims to detect the potential roles that military associations and trade unions can assume in fostering environmental awareness, advocating for mitigation and adaptation measures, and consequently facilitating the transition toward sustainability.

Addressing climate change challenges in the defence sector requires a multifaceted approach centred on three essential elements: education, training, and cooperation.



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# CLIMATE READINESS: HOW WELL CAN MILITARY PERSONNEL DEAL WITH CLIMATE THREATS?

To begin with, military personnel are in most cases not properly educated, trained nor equipped to respond under severe climatic conditions or during natural disasters. According to EUROMIL's survey, the majority of European states provide a partial understanding of climate related risks and threats during military educational modules. Hence, an overall awareness is built but concrete knowledge is lacking. On the other hand, more than 80% replied that the Armed Forces are assisting the state during natural disasters and humanitarian crisis.

To continue, today military personnel need to develop multiple capabilities to effectively face a plethora of emerging and disruptive threats and operate in a multi-domain battlefield. Hence, in order for the European Armed Forces to effectively operate under a plethora of diverse circumstances, specialised training and proper equipment is needed. To elaborate more, military personnel require tools for disaster response during extreme weather events, equipment for environmental monitoring and the subsequent effects on infrastructure. Special equipment is also needed to safeguard the well-being of personnel and ensure their effectiveness, resilience and readiness.

Thirdly, cooperation is essential, since no state can today respond to the various threats of the complex geopolitical environment. Thus, to respond more effectively to climate change threats and challenges, it is of high importance to enhance collaboration between EU Member States, NATO Allies and likeminded partners to avoid duplication and fragmentation. To provide an example, establishing a specialized tool akin to "Frontex" for defence and climate could provide various strategic advantages. Such entity would focus on coordination efforts across Member States and facilitate rapid respond to climate-related emergencies, thereby enhancing security and preparedness.

Increasing synergies between NATO and the EU should also be one of the main priorities and various opportunities are present. For instance, the NATO Climate Change and Security Centre of Excellence (CCASCOE) is expected to become fully operational by the end of this year, while the EU is also considering - according to the Climate-Security Nexus Joint Communication - setting up an EU-led Competence Centre on Climate Change, Security and Defence. Through coordination, cooperation and exchange of information a common understanding of the threats posed by climate change will foster a common strategic culture that will allow the various policies and initiatives to flourish. But, to be able to do that, the necessary human resources are required and [recruitment and retention](#) represent a main issue for all European states.

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The decades of underinvestment in defence did not only affect the industrial part but also manpower. Consequently, we need to ensure that the Armed Forces have the necessary human resources, capabilities and capacities to respond under extreme climatic conditions, something that goes hand in hand with the green transition. EUROMIL's member associations also advocate for increased cooperation between the military sector and the defence industry to meet the needs of the Armed Forces, while taking under consideration sustainability criteria.

Overall, climate readiness could mean having an integrated and multifaceted approach to proactively address the plethora of challenges that climate change and environmental degradation pose to the Armed Forces in an also increasingly unpredictable world.



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