

Climate and defence: actions and investments



A report based on an online conference organised by the European External Action Service and the EU Institute for Security Studies (EU ISS) on 6 December 2021.

Report

INTRODUCTION

Climate change is a transformational challenge that will affect Europe and the world for generations to come. It requires security actors and armed forces to adapt their actions and investments. While there is a need to respect the “mission first” principle, this should not impede the defence sector from taking bold steps to reduce its environmental footprint, enhance innovation and address strategic dependencies. Indeed, armed forces and industry can be – and should be – at the forefront of the green transition.

The EU remains committed to ensuring that the Union’s action and investments in the area of security and defence are informed by climate change. The Climate Change and Defence Roadmap (November 2020) and the Concept for an Integrated Approach for Climate Change and Security (October 2021) underline this commitment.

The EU is increasingly engaged in addressing the climate-relevant drivers of conflict and instability through its missions and operations, while stepping up its monitoring of its environmental footprint. The defence sector more broadly should adapt to climate change and the sector has a key role to play in stimulating innovation and to curb greenhouse emissions. Finally, climate and defence requires effective partnership between the EU, United Nations and NATO.

This second annual conference on climate change and defence brought together approximately 70 government officials, institutional representatives and the think tank community to discuss how best to advance EU efforts in the areas of operational action and capability investments.

CLIMATE-INFORMED ACTIONS

The discussions on climate-informed actions focused on ways to develop climate resilience, engaging with local communities and climate risk assessments. During international civilian and military deployments, for example, it is important that the link between conflict dynamics and drivers and climate-related risks is taken into account. Climate-change poses a threat in its own right, but it also exacerbates pre-existing social, political and economic tensions, instability and conflict.

This means that it is imperative to integrate climate change in conflict analysis, to better understand the root causes of conflicts and bridge between local, regional and global security dynamics. In many respects, the EU and UN can build on the progress they have made in this regard. Missions in Mali, the Democratic Republic of Congo, Central African Republic and South Sudan already seek to work with local stakeholders by supporting

communal infrastructure, peaceful dispute resolution and sustainability awareness raising.

Nevertheless, more attention is needed to assess the significant overlap between climate vulnerability and conflict zones. As opposed to reacting to climate risks, there is a need to develop regenerative strategies that can contribute to better managing ecosystems and avoiding climate-related conflict triggers. In particular, local actors and communities are the custodians of context-specific best practices and so international bodies should seek to learn from such climate adaptation practices.

Furthermore, we must recognise that climate and conflict are linked up with global geopolitical and geo-economic considerations. For example, while the world is trying to decarbonise and digitalise there is an increased demand for raw materials, but these materials are located in conflict and fragile zones. There is, therefore, a tension between climate and economic needs and a risk that any “race” for materials for geopolitical ends may cause or aggravate crises in climate vulnerable countries and regions or add to our strategic dependencies.

Gathering the right data from the field and being able to analyse and interpret it in a coherent manner are key challenges. For example, more needs to be done to assess how much diesel fuel is used during operations. Collecting in-depth data and making sure it reaches planners and decision-makers is vitally important. Indeed, any effective approach to integrating climate considerations into operational planning and conduct requires a long-term commitment to data collection and analysis, as well as a strategy for identifying context-specific local entry points for cooperation and lessons learned.

A good example of the importance of data collection and processing is the work of the EU Satellite Centre. The Centre has long-used its geospatial intelligence products and services to highlight how climate risks can effect vulnerable populations. Organisations such as the United Nations are also investing in data collection during mission deployments, as this is a key way of understanding how UN peacekeepers might be contributing the ecological footprint in the countries where they are deployed.

In time, the exchange of data and best practices should become the norm during EU civilian and military deployments, not least because the plan is to set up a network of environmental advisors from across EU missions and operations. Another option could be to establish an EU Competence Centre on Defence, Energy and Climate in order to allow the EU to draw together existing resources and stakeholders. NATO has already established a Centre of Excellence in climate and security, and this can greatly facilitate cooperation with the EU on climate and defence.

Despite such efforts, there are a number of challenges that need to be addressed. There is a clear a need to boost capacity and resources in order to be able to perform data collection and avoid environmental damage during deployments. Having climate, security and environmental advisors embedded in missions is increasingly important, as this is way of building awareness raising and mainstreaming climate into training. Another key

challenge is enhancing cooperation between partners and learn from different international organisations who may have different approaches to climate and security.

CLIMATE-INFORMED INVESTMENTS

The reflections on climate-informed investments centred on innovation in the areas of capability development and defence infrastructure, as well as the management of data and development of climate and defence targets. Organisations such as the EU, NATO and UN are increasingly investing in defence sustainability and innovation strategies. NATO has gone from an organisation mainly interested in energy efficiency, to one now focusing on how climate might affect collective defence and crisis management. NATO's recently agreed Climate and Security Action Plan states that the Alliance should pursue awareness, adaptation and mitigation efforts.

Likewise, the European Defence Agency is undertaking sustainable energy and circular economy initiatives in defence. Through the Consultation Forum for Sustainable Energy in the Defence and Security Sector (CF SEDSS), the Agency is able to bring together key government, institutional and industrial stakeholders to pioneer new technologies and processes that can assist armed forces transform their infrastructure and capabilities in a more sustainable manner.

The European Commission is also committed to seeking solutions that can contribute to the green transition in defence. It believes that there are strategic as well as climate dividends to be had from investment in energy efficient technologies and capabilities. For example, the European Defence Fund contains dedicated call categories for energy resilience and environmental transition including energy efficient military camps, next generation electrical storage units for forward operating bases and advanced propulsion and energy systems for next generation air combat systems.

The UN is also engaged in ensuring adequate investments are made in the energy efficiency of mission infrastructure. The UN has made investments to ensure that power generation capacities in the field contribute to efficiency and sustainability. In this respect, the UN has developed a performance and risk management framework to assess the efficiency of over 400 sites used during UN missions, and the aim is to use this data to encourage a scaling-up of investments in renewable infrastructure.

Individual governments are also investing in climate adaptation strategies in defence. For example, the Ministry of Defence of the Netherlands has recently adopted a 'Defence Energy Transition Plan of Action', which stresses the need for the Dutch armed forces to enhance the sustainability of the defence estate and to invest in energy efficient capabilities. In this regard, the Netherlands is investing in capabilities that deliver on price, performance and autonomy, with the overall aim to reduce dependencies on fossil fuel by 70% by 2050.

The Ministry of Defence of Slovenia is also pioneering new public-private partnerships (e.g. the SiEnE or RESHUB projects) to ensure that SMEs can

develop technological solutions for the armed forces. Slovenia has stressed the importance of supporting SMEs and innovation, as can be seen by Slovenia's efforts to create energy efficient and sustainable military barracks.

Innovation in the defence sector is changing rapidly and civil innovators are developing solutions for the climate crisis. While the civil sector is rapidly developing climate-relevant technologies, we should not forget that armed forces attach a great deal of importance to procuring high performance and robust capabilities. There is, therefore, not only a need to keep the end-user in mind but to also ensure that military requirements are considered during the development of capabilities.

Another key aspect to ensuring the development of sustainable capabilities and infrastructure is standards setting. NATO has experience in setting military standards and there are existing standards related to energy efficiency. The EU has an important role to play too. A range of civil standards can be applied to the defence sector and there is scope for the Union to help identify and develop standards that can be of use to the defence sector and its sustainability efforts.

Finally, another consideration relates to sustainability targets. However, the defence sector largely follows the time-horizons set by broader climate change processes. In this respect, the current time horizons are set to 2030 or 2050. Nevertheless, this means that substantial investments in green technologies and innovation are required now. Not only should national budgets be increased, therefore, but there is a need to fully exploit EU-level funding opportunities to develop energy efficient technologies and capabilities.