

# Climate change, defence and crisis management: from reflection to action

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## EVENT REPORT

On 11 December 2020, the EU Institute for Security Studies (EUISS) and the Security and Defence Policy Division of the European External Action Service (EEAS) co-organised a public conference focusing on the impact of climate change on European Union (EU) security and defence. The online event began with a video message from the High Representative/Vice-President, Josep Borrell, and two panel sessions looked at the operational and technological aspects of how climate change and defence interact. In particular, the event also highlighted the importance of partnerships between the EU and international partners such as the North Atlantic Treaty Organisation (NATO) and the United Nations (UN), as well as between the public and private sectors.

The conference brought together high-level speakers from the EU institutions (EEAS, European Defence Agency (EDA) and the European Commission), NATO, the UN, the French Ministry of the Armed Forces, the Netherlands' Ministry of Defence, the Canadian Ministry of Defence, industry and academia. Over 80 people joined the conference online to learn more about the 'Climate Change and Defence Roadmap' produced by the EU in November 2020. This report outlines the main conclusions based on the event proceedings.

The event is evidence of the EU's broader efforts to address the climate-security nexus and in being proactive with concrete actions in the area of EU crisis management and defence. As outlined in the Climate Change and Defence Roadmap, this conference is the first in what should become an annual event bringing together the EU member states, EU institutions and bodies, international organisations and partner countries, academia and industry.

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## Defence as part of the solution to climate change

Any focus on the nexus between climate change and security and defence has to be analytically multifaceted and involve multiple policy measures. The EU is a world leader on climate change policy, but its own economic and energy transition are having an impact on the defence sector. Europe's armed forces are one of the largest energy consumers, yet climactic changes are forcing the Union to think about how it can best adapt the Common Security and Defence Policy (CSDP) to more intense weather events, natural disasters and humanitarian needs. Climate change also encourages the EU to rethink how it develops defence capabilities and technologies, and enhanced energy sustainability may contribute to the Union's operational autonomy. These focused efforts are part of the wider climate-security nexus and contribute to the objective of carbon neutrality by 2050 under the European Green Deal. Overall, there is a shared understanding that the defence sector is part of the

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solution to the climate crisis, especially given its potential to reduce carbon emissions.

Although climate change and defence initiatives are not new for the EU, a recently published 'Climate Change and Defence Roadmap' is an important step forward in its approach to addressing the climate and defence nexus. The Roadmap offers an integrated and comprehensive vision for the EU that outlines concrete short-, medium- and long-term objectives. The Roadmap offers a pathway for three interlinked areas of action, including: 1) the operational dimension; 2) capability development; and 3) strengthening multilateralism and partnerships. Each one of these three areas implies a 'mission-first' integrated policy approach that includes awareness raising, planning and training, an adaptation of capability development processes, technological innovation and the nurturing of international and public-private partnerships.

### Enhancing the sustainability of CSDP missions and operations

One of the obvious observations is that climate change is both a threat in itself and a threat multiplier. There is clearly a need for the EU to better understand the linkages between climate change and conflict and crisis pressures (e.g. migration, crime and terrorism). This means that the Union has to invest in its strategic foresight, early warning, intelligence and situational awareness capacities. There is also a need to ensure that climate change and environmental protection are mainstreamed across CSDP missions and operations, and that the EU engage with local and international partners to exchange best practices. In particular, mainstreaming climate change and defence for the 5,000 staff already deployed on 11 civilian and 6 military missions and operations is vital. Yet so too is ensuring that environmental concerns and climate change are integrated into the planning and implementation of CSDP mandates, especially with regard to the EU's environmental duty of care during operations and missions (and its duty of care to local populations and its own personnel), while at the same time maintaining a 'mission-first' principle so that a reduction in the carbon and environmental footprint needs to support, not hamper, mission success and help promote the security of EU forces.

The demand for CSDP civilian and military missions and operations is likely to increase because of unpredictable and intense weather events, and this may give rise to increased disaster relief and humanitarian assistance missions and operations. Climate change may also aggravate access to resources, which could in turn prolong or intensify conflicts. What is more, armies are being expected to conduct more frequent in-country disaster relief and humanitarian operations. On top of this, armed forces are being increasingly expected to train for diverse operational environments but there is a challenge when simultaneously training to deploy to diverse conditions such as hot and arid climates and arctic or coastal theatres. Such dynamics will have an impact on CSDP training and exercises, but EU deployments should be planned for and set up to actively contribute to mitigating and managing climate change. More frequent exercises and training for harsh climatic conditions are required and this could open up a fruitful avenue for EU-NATO cooperation.

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In this regard, more focused studies and questionnaires can help policymakers understand how armed forces are affected by climate change and how well they are adapting to environmental challenges in the field. What is also essential is ensuring that local actors can be brought into EU climate mitigation and adaptation strategies given their knowledge of climate and conflict dynamics on the ground. EU civilian and military deployments should be attuned to greater local engagement for its climate-related efforts. In this respect, it is worth reflecting on whether environmental officers could be embedded in missions and operations, as well as implementing climate benchmarks related to energy usage and waste production. Furthermore, in time EU training missions could also pursue capacity building for climate mitigation and resilience, and CSDP civilian missions might focus more on preventing climate-related multiplier threats from emerging in affected countries and regions.

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An alignment of defence objectives with UN goals for sustainable development can help too, but so can adaptation risk management studies to help policymakers better assess how climate-related effects on armed forces can be reduced. Such steps are also a good way of prioritising actions against temporal and substantive benchmarks. Additionally, policymakers could focus on setting specific emission targets for EU military operations and missions as well as studying the vulnerability of military installations and assets. However, there is a need to ensure that any experimentation with binding commitments on energy sustainability for defence does not adversely affect the performance of existing capabilities or operational performance.

#### **Towards a more capable and sustainable EU**

Capability development and technological innovation are other key elements of the climate change and defence agenda, and the European Defence Fund (EDF) and Permanent Structured Cooperation (PESCO) are mechanisms that can support the energy transition of the defence sector. More generally, the defence sector can contribute to the reduction of the carbon and environmental footprint and the Green Deal’s objective of carbon neutrality by 2050. In tandem with EU efforts, member states and partners are already developing new technologies (e.g. ecocamps, batteries, fuels) and they are looking at green procurement and standardisation too.

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Although there is a need to ensure that Europe’s defence capabilities continue to attain high performance rates, it is in the EU’s interest to develop energy efficient capabilities. A key point here is to unlock investment and to ensure that initiatives on sustainable energy in defence, that are being developed by the EDA and European Commission, are built on. However, sometimes it will be necessary to start with modest but important steps such as collecting, processing and analysing reliable defence energy data that is supplied by EU ministries of defence and armed forces.

Yet ensuring coordination on innovation and investments between EU member states is not always easy. There is no consistency to sustainable energy policies at the national level, and in many cases there is a lack of private and public funding for defence energy and sustainability transition measures. This problem is compounded by the fact that any savings made by ministries of defence on energy efficiency are usually clawed-back into national budgets, and this lowers the incentive for ministries of defence to engage in sustainability strategies in the first place. A way of avoiding such situations and investment shortfalls is to make full use of the EDF and PESCO. The EDF has a huge potential to focus on energy-related innovations in defence, and future PESCO projects could also concentrate on energy-related capability programmes. Beyond EU efforts, however, there is also a need to assess existing capability development and procurement processes and to invest in equipment that is better suited to extreme weather conditions.

One key way of ensuring that new technological solutions are brought to the attention of defence planners and governments is through public-private strategic dialogues. In particular, more focus can be given to ensuring that end-user needs related to transportation and logistics can be catered for by technological solutions designed by industry and research institutes. This process not only involves a common public-private understanding of issues such as energy sustainability, but also frequent analysis of the feasibility and performance of certain technologies. For example, the development of hydrogen fuel cells are being rapidly developed to ensure energy independence, fast deployability and sustainability in the field for forward bases and permanent installations such as barracks.

The development of new climate-friendly technologies can also have a strategic payoff because they may reduce energy signatures and noise, which lowers the chances of detection in the field. However, bringing online new climate-friendly technologies in the defence sector is not always so simple. In areas such as logistics it appears to be relatively easy to integrate civil advances quite rapidly, but for many legacy platforms it is not always so easy to ensure that technologies can meet high performance standards, long life cycles or extreme operating environments. Finally, climate change raises certain vulnerabilities when it comes to access to raw materials and this may disrupt security of supply chains for the defence sector.

#### **Leveraging the EU's climate diplomacy power**

The EU is extremely well-placed to help fragile countries build more resilience towards climate change and environmental degradation, especially as climate-specific and climate-related risks are set to increase. The Union has a unique strength to combine its instruments at the EU and member state levels to build resilience and reduce the human security impact of climate change. Therefore, any response to the climate-defence nexus requires an integrated approach that draws on the EU's full range of military, economic, diplomatic, development and humanitarian tools and resources. As well as close cooperation between the EU and international partners such as NATO, the African Union (AU) and UN, the Union can also enhance its partnerships with the private sector, non-Governmental organisations, research centres

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and industry as a way of fostering knowledge networks and identifying cross-sectoral and interdisciplinary solutions.

Key areas for action and partnership with bodies like the UN and NATO include response to natural disasters and ensuring that crime and terrorist networks do not profit from climate vulnerabilities. A core element of the EU's global climate efforts will be to engage with vulnerable countries and regions to help enhance their resilience to climate pressures. Mainstreaming climate change and resilience into its diplomatic engagements with vulnerable partners and regions is an obvious step to take. As far as EU-NATO cooperation is concerned, there is room for closer cooperation in improving climate resilience within and outside Europe.

Furthermore, working alongside the UN and AU would be vital too. In particular, it was recognised that EU-AU relations might be strengthened for climate change mitigation purposes. The Roadmap already refers to the need for the EU to provide training and organise awareness raising exercises to staff of AU-led peace support operations, but there is potentially scope for a bolder engagement with the AU and UN in Africa beyond awareness raising and early warning efforts.

Finally, even though it may seem like an academic point it is important for the EU to ensure a clear understanding of climate change in its global diplomatic engagement. While climate change can be seen as a threat in itself and as a threat multiplier, only viewing climate change as a threat – of any kind - may cause the EU to lose sight of the human security dimension. This is particularly important given that not every human security impact will be considered an international security threat. In this respect, the Union should have clear messaging on how it understands climate change and defence because different partner governments and organisations may have different views due to their own specific experiences of climate change and security.

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