JOINT COMMUNICATION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

A new outlook on the climate and security nexus:
Addressing the impact of climate change and environmental degradation on peace, security and defence
INTRODUCTION

Climate change and environmental degradation pose increasing risks to international peace and security. Extreme weather events, rising temperatures and sea levels, desertification, water scarcity, threats to biodiversity, environmental pollution and contamination and loss of livelihoods threaten the health and well-being of humanity, and can create the potential for greater migratory movements and displacement, pandemics, social unrest, instability and insecurity. Of the 20 countries that are the most vulnerable and least prepared for climate change, 12 were in conflict in 2020.

The EU has been at the forefront in addressing climate change as a threat-multiplier since 2008 and its links to EU crisis management and European defence since 2020. However, the need to include the impact of environmental degradation in the debate as well as current realities and future projections regarding the scale of climate change and the impact of environmental degradation, in the context of intensifying strategic competition and complex security threats, require a new outlook on the climate and security nexus. The term *climate and security nexus* as used in this document, refers to the impacts of both climate change and environmental degradation, including biodiversity loss and pollution, on peace, security and defence.

- Climate change and environmental degradation are intrinsically interlinked and exacerbating each other, and are already affecting food security, reducing the yield of major crops such as maize, rice and wheat, and increasing the risk of simultaneous harvest failures in major producing countries. At the same time, unsustainable food production also drives environmental degradation and water scarcity. By 2050, it is estimated that more than one billion people will have insufficient access to water, that soil degradation could rise to 90%, while demand for food could increase by 60%.

- Climate and environmentally induced instability and resource scarcity can be actively instrumentalised by armed groups and organised crime networks, corrupt or authoritarian regimes, and by other parties, including through environmental crime. The latter has already become the fourth largest and growing global crime sector further accelerating the environmental crisis including through the unsustainable exploitation of natural resources.

- The United Nations High Commissioner for Refugees (UNHCR) estimates that, since 2008, an annual average of 21.5 million people have been forcibly displaced by weather-related events, such as floods and heatwaves. These numbers are expected to increase in

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2. CLIMATE CHANGE AND INTERNATIONAL SECURITY - Paper from the High Representative and the European Commission to the European Council (S113/08, 14 March 2008).
3. In particular through the Climate Change and Defence Roadmap (Doc. 12741/20, 9 November 2020) and Concept for Integrated Approach on Climate Change and Security (Doc. 12537/21, 5 October 2021). The joint progress report sets out the progress made in their implementation (Doc. WK 15770/2022 INIT, 16 November 2022).
the coming decades, exacerbating demographic change and putting stress on cities and urban areas where the demand for housing, food, energy and jobs may rise, thus contributing to increasing social impacts of climate change. In addition, natural disasters or extreme weather can also cause physical damage to critical infrastructure, thereby disrupting access to and flows of essential and emergency services. Moreover, vulnerable populations in distress are at risk of being targeted by smugglers and other organised crime organisations, while armed groups can and do exploit an increased vulnerabilities when recruiting child soldiers and combatants.

- Climate change and environmental degradation negatively impact health in multiple ways. They are also undermining many of the social determinants for good health, such as livelihoods, access to healthcare and social support. These impacts can lead to instability and threaten security.

- Climate change is the most comprehensive threat to the Arctic regions with temperature increasing 3 to 4 times faster than the global average. External interest in resources in Arctic locations is increasing with multifaceted social, environmental and economic consequences. The thawing of the Arctic Sea ice also opens potential shipping routes and access to natural resources which can lead to increased security tensions in the region. Climate change has a growing geopolitical impact in the global maritime domain, both around Europe (e.g. in Baltic and the Black Sea) as well as in the Indo-Pacific.

- Adverse impacts of climate change on the ocean include a shift in composition and distribution of fish stocks that can destabilise fisheries agreements and increase the risk of international disputes. Sea-level rise also presents a security risk due to the scale of potential displacement and migration of people, while it will also affect the measurement of maritime boundaries that determine different economic entitlements, which in turn can raise instability and conflicts.

- Resources and technologies that are essential for the energy transition and the phase out of fossil fuel have become the subject of growing strategic competition, which has further accelerated since Russia’s unprovoked and unjustified military aggression against Ukraine.

- Member States’ security and defence forces are confronted with a changing and increasingly challenging security environment in Europe and beyond, including more

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6 The Institute for Economics and Peace (IEP) estimates that 1.2 billion people could be displaced globally by 2050 due to climate change and natural disasters.

7 Including through death and illness from extreme weather events, more frequent vector-, food- and water-borne and zoonotic diseases, and emergence of viruses due to permafrost melting.

8 Joint Communication on a stronger EU engagement for a peaceful, sustainable and prosperous Arctic (JOIN(2021) 27 final, 13.10.2021).

9 IPCC, 2019: IPCC Special Report on the Ocean and Cryosphere in a Changing Climate: sea level will continue to rise to around 0.3 metre by 2050 and 2 metres by 2100 under the very high greenhouse gas emissions scenario – risking forced human displacement – up to 340 million people by 2050 and 630 million people by 2100.
severe climatic operational conditions. At the same time, they need to reduce their greenhouse gas emissions and fossil fuel dependency, without affecting their operational effectiveness.

The green energy transition is the only way to simultaneously ensure sustainable, secure, and affordable energy worldwide. To be successful, that transition must be socially just and fair, leaving no-one behind. It means not only phasing out fossil fuels and outdated practices, but phasing in green energy, innovative technology, better markets, and circular economy. It requires tackling already now the potential future risks and dependencies.

It is therefore critically important to continue investing in both climate adaptation and mitigation and in protecting and restoring the environment. Nevertheless, and while a lot is being done to advance green transition and manage its challenges, there is an increased risk of instability, insecurity and even conflict. We should prepare ourselves for increased spill over effects on the European Union. These can arise through increased demand for aid, the disruption of supply chains or with people fleeing from uninhabitable areas or severe adverse conditions at home, with the potential of internal displacement and increased irregular migration but also through organised crime, terrorist organisations and the proliferation of weapons.

The security and defence implications of climate change and environmental degradation have thus become more urgent, challenging and multifaceted. This is also consistently highlighted by the Intergovernmental Panel on Climate Change (IPCC)\(^\text{10}\) and multiple other reports and studies. Partner organisations, such as the United Nations and NATO, and bilateral partners are integrating these risks in their policy planning. As reflected in the March 2023 Council conclusions on Climate and Energy Diplomacy\(^\text{11}\), the EU needs to better integrate the climate, peace and security nexus in the EU’s external policy, including Common Security and Defence Policy (CSDP) and international cooperation and partnerships. The role of Member States is essential in taking this work forward.

Defining and implementing this new outlook on the climate and security nexus is critical, in line with the objectives set out in the external dimension of the European Green Deal\(^\text{12}\) and the Strategic Compass on Security and Defence\(^\text{13}\). It is essential to better connect the different policy strands and ensure that external action, policies and capabilities are fit for the future. The EU needs to adopt a more proactive and comprehensive response to the multifaceted challenges. As these are global challenges, the EU will seek further close cooperation with its international partners and stakeholders to promote multilateral solutions.

\(^{10}\) IPCC Sixth Assessment Report, August 2021.
\(^{11}\) Doc. 7248/23, 9 March 2023.
This Joint Communication establishes an enhanced framework and puts forward concrete measures in line with the EU’s Integrated Approach to External Conflicts and Crises with the aim to:

- strengthen climate and environment informed planning, decision-making and implementation, through enhanced evidence-based analysis and foresight;
- operationalise the climate and security nexus in EU external action from policy to implementation;
- enhance climate adaptation and mitigation measures for the development of Member States’ civilian and military capabilities, and related infrastructure; and
- reinforce international partnerships and the EU’s work within multilateral fora, consistent with the EU’s wider multilateral climate change and environment agenda.
1. Evidence-based analysis and foresight as an enabler for action: supporting climate and environment informed planning, decision-making and implementation

The EU’s responses to the security implications of climate change and environmental degradation will continue to rely on evidence-based policies and actions, including new information and developing insights, highlighting the importance of reliable and accessible analytics for all parties involved.

1.1. Data and analytics on climate- and environment-driven security risks

EU data initiatives and analytical frameworks already include a number of climate and environmental factors. For instance, the methodologies for early warning and conflict analysis include a focus on climate, environment and natural resources, leading, where relevant, to recommendations for preventive action, and for conflict-sensitive programming and external actions. This will be further strengthened in future analyses.

In addition, improving the dissemination and accessibility of joint, shared analysis is a key factor in ensuring it can be fully exploited and integrated. Raising awareness of climate and environmental risks at large, and on the analytical products, is part of this endeavour.

To enhance the availability of EU data and analysis for all relevant planning and implementation processes, the European Union Satellite Centre (SatCen) will explore the development of an integrated knowledge hub. The Climate and Environment Security Data and Analysis Hub, to be created within SatCen, will build on existing experience and initiatives and offer a resource for climate-related security risk assessments. The Commission will also continue to enhance access to data and analytics relevant to climate change, environmental degradation and its impact on security and defence through existing platforms such as the Science for Peace portal15.

To facilitate the inclusion of the climate and security nexus into discussions and decision-making at political and strategic levels, the Commission services and the EEAS will start conducting an annual comprehensive trend analysis covering, among other things, the impacts of climate change and environmental degradation on conflicts, displacement and migratory movements and natural resource competition. The Climate and Environment Security Data and Analysis Hub will feed into the trend analysis, and close cooperation with different services, such as the Emergency Response Coordination Centre, and use of Copernicus, the EU Earth Observation programme, will be ensured.

The Global Conflict Risk Index16, developed by the JRC as a quantitative input to the EU’s early warning and conflict analysis methodologies, will be broadened to look beyond droughts to assess, for example, impacts related to amplified migration and displacement, to examine indirect effects of climate change and environmental degradation, for instance on prices of

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commodities such as food, gas and oil prices, and to examine the geopolitical and security implications of decreasing dependence on fossil fuels.

Furthermore, a dynamic, short-term and sub-national conflict risk model, paying particular attention to environment and climate-related variables, will be developed to improve the EU’s early warning and anticipation capacity.

**Further examples of EU initiatives for data and analysis on climate and environment-related risks:**

- **Copernicus’ Emergency Management Service** supports early-warning capacity with components covering droughts\(^{17}\), wildfires and flood risks\(^{18}\) and **Copernicus Land Monitoring Service\(^{19}\)** provides geospatial information on land cover and its changes, land use, vegetation state, water cycle and Earth's surface energy variables\(^{20}\).
- **INFORM**, a multi-stakeholder forum for analysis related to humanitarian crises and disasters. **INFORM Climate Change\(^{21}\)** (released in November 2022) presents quantitative estimations of the impacts of climate change on the future risk of humanitarian crises.
- **European Marine Observation and Data Network** (EMODnet)\(^{22}\) consists of more than 120 organisations working together to observe the sea and process the data in accordance with international standards, to provide interoperable data layers and data products.
- **Destination Earth initiative**\(^{23}\), which aims to develop a highly accurate digital model of the Earth on a global scale, is expected to produce forecasts and simulations of natural phenomena and extremes.

Close cooperation with Member States, partner countries, including their early-warning systems and local knowledge hubs, and international organisations will lead to greater understanding of the climate and security nexus.\(^ {24}\) The EU also promotes the development of analytical capabilities in other regions to forecast and rapidly address emerging and evolving risks related to climate change and environmental degradation. For instance, as a member of the intergovernmental Group on Earth Observations, the EU supports **global initiatives for evidence-based decision-making** related to climate change and environmental degradation, and through the Global Network Against Food Crises, **evidence-based analysis on global food security**.

\(^{19}\) [https://land.copernicus.eu/](https://land.copernicus.eu/).
\(^{20}\) In addition the Copernicus Security Services addresses climate security with new geospatial products and the Copernicus Climate Change Service provides information and tools to enable climate change mitigation and adaptation.
\(^{24}\) Data dialogues envisaged on an annual basis in regional settings, in the framework of the EU-UNEP climate, environment, and security partnership, provide a good example of such cooperation.
1.2. Defence data gathering and analysis

The European Defence Agency (EDA) has already engaged Member States to gather data on the energy consumption and greenhouse gas emissions of their armed forces and is now working to establish a structured methodology, the **Defence Energy Suite**, for collecting and monitoring defence energy data of Member States. Together with the Commission, the EDA is also conducting studies and research into the resilience of defence energy infrastructure. Such data gathering and analytics is needed to improve climate-informed defence planning and investment decisions within the Member States.

1.3. Leveraging research and innovation

For both security and defence purposes, research and studies on climate and environmental risks are essential for informing and guiding policy development, planning and implementation.

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**Research projects on the climate and security nexus**

EU research and innovation framework programmes, such as **Horizon 2020** (2014-2020) and the current **Horizon Europe** (2021-2027), play an important role in bridging knowledge gaps on climate change and environmental degradation as a basis for developing effective policy responses that are anchored in best available scientific evidence. Overall, 35% of Horizon Europe is earmarked to fund climate-related activities. In addition, 7.5% of Horizon Europe in 2024-25, and 10% as of 2026 onwards is earmarked to fund biodiversity-related activities.

Further examples of relevant research studies include the joint EDA and JRC research study assessing climate change impacts on defence-related critical energy infrastructure and military capabilities.

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25 [insert reference to the EDA defence energy data].
27 EU Missions in Horizon Europe.
28 Examples of EU-funded projects that are highly relevant in the climate and security nexus include: HABITABLE (Linking Climate Change, Habitability and Social Tipping Points: Scenarios for Climate Migration); CASCADES (CAScading Climate risks: towards ADaptive and resilient European Societies); RECEIPT (REmote Climate Effects and their Impact on European sustainability, Policy and Trade); CoChCo (Coastal Climate Core Service); CLIMAAX (CLIMAte risk and vulnerability Assessment framework and toolboX); ESPReSSo (Enhancing Synergies for disaster PRevention in the EurOpean Union); CaseXtreme (ChAnges in the Statistics of EXTremes Events in climate); MIRACA (Multi-hazard Infrastructure Risk Assessment for Climate Adaptation); ARCOŚ (Artic Observatory for Copernicus SEA Security Service); CENTAUR (Copernicus Enhanced Tools for Anticipative Response to Climate Change in the Emergency and Security Domain); EGSIEM (European Gravity Service for Improved Emergency Management); GIPP (GEOSS Platform Plus); PLACARD (PLAform for Climate Adaptation and Risk reduction); AD4GD (All Data 4 Green Deal) BIOSEC (Biodiversity and Security: understanding environmental crime, illegal wildlife trade and threat finance) and ConFooBio (Resolving conflicts between food security and biodiversity conservation under uncertainty).
2. Operationalising the climate and security nexus in EU external action

The climate and security nexus needs to be operationalised coherently in all EU external action from policy formulation and decision-making to implementation. The various EU initiatives, ranging from climate action and adaptation to conflict prevention, crisis management and humanitarian action, are most effective when synergies and complementarities are maximised in line with the EU’s Integrated Approach. The aim is also to optimise the resources of the EU and its Member States, including by promoting Team Europe action\textsuperscript{30}.

In line with the NDICI-Global Europe regulation\textsuperscript{31}, which requires a conflict analysis for countries and regions in situations of crisis, post-crisis or fragility and vulnerability, relevant Commission services and the EEAS, including the EU Delegations, will strengthen climate/environment peace and security nexus analysis of its relevant policies and actions, especially in geographical areas vulnerable to these impacts, such as, at regional level, Sahel or Horn of Africa, or Small Island Developing States (SIDS). This analysis will help shape its approaches in these situations and inform future programming, where appropriate. This will

\textsuperscript{30} Team Europe consists of the European Union, its Member States, the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD).

be part of the guidelines to EU Delegations in the context of the mid-term review of NDICI-Global Europe.

In recognition of the differentiated impacts of climate change and environmental degradation on women, children and vulnerable groups, the application of a human rights-based approach, and integration of a gender-responsive perspective and a child protection and youth dimension, is essential when operationalising the climate and security nexus. This goes hand in hand with supporting context-sensitivity, local ownership and do-no-harm approaches.

2.1. Investments in climate and environment as investments in peace and security

As a global leader in the fight against climate change, pollution and biodiversity loss, the EU is at the forefront of collective efforts to scale up climate and biodiversity finance. This translates to building resilience of low-income and vulnerable countries and communities, including food security, while promoting long-term sustainable approaches to the management of key natural resources. By developing alternative livelihoods and supporting good governance, in a gender-responsive manner, these efforts also contribute to conflict prevention and peace.

The Neighbourhood, Development and International Cooperation Instrument - Global Europe (NDICI-Global Europe) plays a key role in this regard. It includes a 30% spending target for climate action focusing on climate change mitigation and adaptation measures, increased by an additional EUR 4 billion as announced by Commission President von der Leyen in September 2021. It will also contribute to the EU objective of achieving a spending target for biodiversity of 7.5% in 2024 and of 10% in 2026 and 2027. The President also announced a doubling of the Commission’s international funding for biodiversity, especially for the most vulnerable countries, to EUR 7 billion for the period 2021-2027.

These funds address some of the links between climate change, environmental degradation and insecurity, while indirectly helping to manage climate displacement and migration. Likewise, through NDICI-Global Europe, and the humanitarian aid budget, the EU also funds actions that are instrumental in strengthening disaster risk reduction, preparedness and anticipatory action. This contributes positively to the climate and security nexus by building resilience. As knowledge and experience regarding this nexus grows, the EU and its Member States should plan engagements accordingly through the Team Europe approach.

The Global Gateway strategy, the EU’s positive offer to partners to tackle the most pressing global challenges, will contribute to the EU’s efforts towards peace and stability. It will promote projects that support partner countries’ efforts to pursue the green and digital transition and human development while narrowing the global investment gap.

For example, as part of the EU-Africa Global Gateway investment package, the Team Europe Initiative on Climate Change Adaptation and Resilience in Africa was introduced to strengthen the resilience of the most vulnerable populations against climate and natural hazard risks by bringing together programmes from the EU and EU MS of more than EUR 1 billion. In Central Asia, the Team Europe Initiative on Water, Energy and Climate Change contributes to
managing water and energy resources sustainably while addressing environmental challenges and tackling climate change, with an initial contribution of EUR 700 million from Team Europe. In Latin America, climate change and deforestation aspects are addressed through Team Europe Initiatives in the Amazon Basin, including a TEI on Tropical Forests in Brazil with an indicative amount of EUR 430 million.

Particular focus should be put on community-level resilience and the resilience of cities and urban areas as they are often the focal point of migration and displacement. This is especially important when it comes to offering resilient, low-carbon, affordable, and accessible homes especially for those in most vulnerable situations, in precarious accommodation, many of whom are women or children. While EU funded actions to this end are on-going, the EU will explore how to engage even closer with the Global Covenant of Mayors for Climate & Energy who are contributing to global campaigns in this area.

Furthermore, economic and investment plans, developed together with EU partners for the Western Balkans, and the Eastern and Southern Neighbourhoods, can contribute to creating or maintaining stability by increasing resilience to the impacts of climate change and environmental degradation, and tackle some of the root causes of migration and displacement.

2.2. Addressing the climate and security nexus in conflict and crisis situations

The EU must make further progress in addressing the linkages throughout the whole conflict cycle between the climate and environmental crises, peace and security, in line with the EU’s Integrated Approach. This challenge is twofold: climate and environment-related policies and practices should be seen to be increasingly conflict-sensitive, and at the same time climate and environmental considerations should continue to be mainstreamed into EU peacebuilding, stabilisation, crisis management and post-conflict recovery.

2.2.1. Peacebuilding and stabilisation

Lack of natural resource management and governance can aggravate existing tensions within and between countries. This is addressed, in particular, through EU peacebuilding initiatives in fragile situations and regions. For instance, EU stabilisation actions\(^{32}\) can serve to mitigate certain climate and environment-related security risks, by addressing the needs of internally displaced persons, especially women and girls, and persons with disabilities, often disproportionately impacted by climate and environmental aspects, and their host communities. Therefore, future EU stabilisation assessments will incorporate climate and environmental considerations in their response options in an inclusive, gender and conflict sensitive approach.

Access to natural resources and other environmental topics can also provide new opportunities for cooperation and reconciliation, for instance through inclusive governance structures, and

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\(^{32}\) See EU Stabilisation Concept, Doc. WK 13776/2022 INIT, 12 October 2022.
can serve as entry points for mediation and dialogue\textsuperscript{33}. Transboundary cooperation on water\textsuperscript{34}, for example, can act as a driver for conflict prevention and peacebuilding. The EU will continue to invest in the training of a pool of mediators while aiming to support capacity development of local mediators to engage on peace and security impacts of climate change and environmental challenges.

2.2.2. Humanitarian action, disaster preparedness and response

Climate and environmental considerations are increasingly integrated in all humanitarian interventions in recognition of how conflict, and climate change and environmental degradation, exacerbate humanitarian needs and vulnerabilities\textsuperscript{35}.

EU humanitarian aid and the Union Civil Protection Mechanism are at the forefront of the EU’s response to extreme weather events and their humanitarian consequences\textsuperscript{36}. Through the Disaster Preparedness Budget Line (EUR 78 million), the EU is supporting targeted preparedness interventions, including anticipatory actions to prepare for and mitigate acute humanitarian impacts before they fully unfold. The EU is also committed to reducing the environmental footprint of EU-funded humanitarian operations and supports and encourages the efforts of its partners in this regard, especially in relation to more sustainable supply chains.

As a result of more frequent and severe weather events, Member States’ security and defence capabilities are likely to be called upon more often to support disaster management and humanitarian relief efforts, both within the EU and beyond its external borders. Further strengthening civil-military coordination and preparedness at EU and national level in accordance with the framework for the use of EU military assets in support of humanitarian assistance and disaster relief\textsuperscript{37} is critical to ensure a timely and effective response compatible with the principled approach of EU Humanitarian assistance, and requires further acceleration.

2.2.3. Crisis management

The EU’s 13 civilian and 9 military missions and operations under the EU Common Security and Defence Policy (CSDP) are often deployed in countries that are particularly vulnerable to climate and environment related security risks. The EU will progressively mainstream and address climate and environmental aspects in the planning, implementation and review of their

\textsuperscript{33} As recognised in the Concept and in the subsequent Council Conclusions on EU Peace Mediation (7 December 2020), and in the EEAS Peace Mediation Guidelines.

\textsuperscript{34} The EU launched Team Europe Initiative on Transboundary Water Management in Africa in the UN Water Conference in March 2023.

\textsuperscript{35} The EU’s humanitarian aid and the Union Civil Protection Mechanism (UCPM) are at the forefront of the EU’s response to extreme weather events and their humanitarian consequences. Part of the EU’s humanitarian budget (EUR 1.7 billion for 2023) is dedicated to respond to the humanitarian needs arising from climate-induced disasters, whose frequency, duration and scale are increasing as a result of climate change.

\textsuperscript{36} Part of the EU’s humanitarian budget (EUR 1.7 billion for 2023) is dedicated to respond to the humanitarian needs arising from climate-induced disasters, whose frequency, duration and scale are increasing as a result of climate change. The European Humanitarian Response Capacity was created in 2022 to support the EU response to crisis, including climate-induced disasters.

\textsuperscript{37} As outlined in the EU Concept on Effective CIVMIL Coordination in Support of Humanitarian Assistance and Disaster Relief.
mandates. The Strategic Compass set the objective for all military and civilian missions and operations to have an environmental adviser, and to report on their environmental footprint, by 2025. In the Civilian CSDP Compact\textsuperscript{38}, Member States committed to mainstream efforts, in external mission activities, to address security challenges linked to climate change and environmental degradation and exploitation.

To enable the CSDP missions and operations to effectively deliver on these climate-related objectives, a set of measures needs to be developed and implemented together with Member States. Such a new CSDP-Climate Package will provide a coherent basis for different interlinked activities, ensuring that resources are used in the most efficient manner, as follows.

− Different profiles for environmental advisors will need to be identified and reflected in training and recruitment needs\textsuperscript{39}, considering the scope of CSDP missions and operations\textsuperscript{40} and possible future developments.
− The decision-making process regarding CSDP mandates should take account of the new annual climate, environment and security trend analyses\textsuperscript{41} and other analytical sources for the planning and periodic review of mission mandates, while promoting the integration of lessons learnt throughout the different work streams. Lessons learnt from our partners operating in the same theatre, most notably the UN\textsuperscript{42}, should be reflected on, also with a view to identifying possible areas of closer cooperation.
− A reporting mechanism on the environmental footprint will be rolled out in all missions and operations, building on lessons from pilot projects, while ensuring synergies and exchange of best practice on these issues with other domains of EU external action, such as humanitarian engagements. An appropriate link to the European Peace Facility with a view to optimisation of climate and environmental performances\textsuperscript{43} should also be established.

Finally, it may also be pertinent to reflect on the integration of climate and environmental factors into the scenarios supporting the operationalisation of the EU Rapid Deployment Capacity.

2.2.4. Impact of armed conflict on the environment and post-conflict recovery

The impact of armed conflicts on the environment is a major element to address within the climate and security nexus. Even though international humanitarian law (IHL) provides for the protection of the natural environment in armed conflicts, violations of IHL are widespread and cause extensive and long-term damage. In post-conflict situations, water, soil and land

\textsuperscript{38} ST 9588 2023 INIT, 22 May 2023.
\textsuperscript{39} See also link to the EU Climate and Security Training Platform set out as a new action in Chapter 3 of this Joint Communication.
\textsuperscript{40} The mandates of the CSDP cover conflict prevention and peacekeeping, crisis management, joint disarmament operations, and military advice and assistance tasks, and also humanitarian and rescue and post-conflict stabilisation tasks.
\textsuperscript{41} See Chapter 1 of this Joint Communication.
\textsuperscript{42} For example, the United Nations Assistance Mission in Somalia (UNSOM) is currently looking into the protection of water resources through peacekeepers to ensure access to emergency and sustainable water supplies and avoid that the terrorist organisation Al-Shabaab gains control.
\textsuperscript{43} The implementation rules of the European Peace Facility include climate and environmental performance as a criterion for procurement procedures under its assistance measures.
contamination from explosive remnants is particularly common, from the destruction of ecosystems to pollution and waste management, due to bombings, landmines and oil and gas leaks. In addition to ongoing EU initiatives on environmental protection, pollution and waste management in this context, including promotion of IHL compliance, complementary targeted actions will be considered on post-conflict environmental assessments, including in the context of the Incubation Forum for Circular Economy in European Defence.

Examples of EU action on the climate and security nexus in various policy dimensions:

- **Displacement and migration**: The EU addresses displacement and migration related to disasters, climate change and environmental degradation, in particular through humanitarian, development and peace actions. The EU is also launching a **new global EU action (EUR 8 million) with the Internal Displacement Monitoring Centre** to deepen knowledge on the drivers, vulnerabilities and risks that lead to internal displacement and to improve capacities for affected partner countries to address these risks.

- **Environmental crime**: Environmental crime is one of the 10 priorities within the European Multidisciplinary Platform against Criminal Threats (EMPACT) which enables EU law enforcement cooperation with relevant authorities from third countries on operational actions to tackle environmental crimes. CSDP missions can also contribute to helping national authorities fight environmental crime.

- **Maritime security**: The recently updated EU maritime security strategy highlights the significant impacts of climate change and environmental degradation on the marine environment and maritime security, and it proposes various actions. Other work strands aim at facilitating **coexistence of offshore renewable energy with defence operations and systems**.

- **Space**: The EU Space Programme supports the protection of the environment, helps to monitor and mitigate the effects of climate change and ensures safety and civil security across Europe.

Key actions at EU level:

- Relevant Commission services and the EEAS, including the EU Delegations, will strengthen climate/environment peace and security nexus analysis of relevant policies and actions, especially in geographical areas vulnerable to these impacts, such as, at regional level, Sahel or Horn of Africa, or Small Island Developing States (SIDS).
- The EEAS, in cooperation with relevant Commission services, will ensure that future EU stabilisation assessments will incorporate climate and environmental

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44 See also Commission Staff Working Document addressing displacement and migration related to disasters, climate change and environmental degradation.
45 See Mini-concept on possible civilian CSDP support to fight environmental crime and to reduce the host State’s internal security forces’ environmental footprint, EEAS(2022) 2086, December 2022.
considerations with respect to the local populations’ livelihoods when examining
response options.

• The EEAS will train and equip the EU pool of mediators and other EU mediation
actors, to engage on peace and security impacts of climate change and environmental
challenges.

• Relevant Commission services and the EEAS, including the EU Military Staff, will
continue to strengthen and improve civil-military coordination in the context of EU
humanitarian assistance and disaster relief efforts, building on previous steps and
lessons learnt.

• The High Representative in coordination with Member States will ensure the
comprehensive implementation of the new CSDP-Climate Package, including the
swift development of clear profiles for environmental advisers.

• The EEAS will reflect climate change and environmental degradation considerations
in operational scenarios as appropriate to support the operationalisation of the Rapid
Deployment Capacity by strengthening preparedness and to provide realistic
frameworks of employment.

• Relevant Commission services and the EDA will explore the development of
collaborative projects for post-conflict environmental assessment and restoration in
the context of the Incubation Forum for Circular Economy in European Defence.

3. Ensuring a sustainable and climate-resilient European security and defence

Climate change and environmental degradation will transform the way actors involved in
peace, security and defence will plan, invest and operate. The EU should scale up its
engagement to facilitate and support Member States to address the growing magnitude,
complexity and urgency of the challenges involved, in line with the objectives of the European
Green Deal and the Strategic Compass.

3.1. Develop climate and environmental expertise and raise awareness

There is an urgent need to further raise awareness and develop the necessary specialised skills
to facilitate the implementation of climate adaptation and mitigation measures in security and
defence. This applies to all relevant EU actors, including EU Delegations and CSDP
missions/operations as well as, at the national level, different ministries in the EU Member
States.

To bring together different training providers and address the needs of different training
audiences in a systematic manner, an EU Climate Security and Defence Training Platform
will be established in the framework of the European Security and Defence College (ESDC).
Its objective will be to develop the required expertise at EU and national level, including for example environmental law and crime experts, environmental engineers, and climate-related security risk analysts. This will also enable the EU to gradually develop a pool of (certified) experts that Member States could make available to CSDP missions/operations in addition to their work in national ministries. Once established, the platform could support coordination with other international parties.

The EU multilayer crisis management exercises provide another opportunity to raise awareness and test and validate how EU crisis management mechanisms can respond to climate-related security concerns. The EDA and relevant Commission services are organising tabletop exercises to examine the dependencies in relation to defence-related critical energy infrastructure when compromised or rendered inoperable due to hybrid threats, as part of their joint study on these issues.

3.2. Military capabilities and infrastructure

The energy intensive nature of Member States’ armed forces, who are also the largest public owner of free land and infrastructures in the EU, offers opportunities to become more efficient and generate climate and biodiversity benefits at scale. A coherent and smart approach to the climate adaptation and mitigation efforts of the military must preserve, and where possible enhance, operational effectiveness. Improved energy efficiency and sustainability not only reduces the carbon footprint, it reduces costs, decreases the logistical burden and advances self-sustainability in the operational context – thus adding to the safety and freedom of movement of the armed forces. It must also take into account that the armed forces operate specialised equipment that usually has a very long life-cycle, whereas developing next generation capabilities can take years if not decades.

An assessment of the manifold impacts and risks generated by climate change needs to inform short to long-term defence planning and investments. For instance, to ensure that equipment can operate under challenging climate conditions, to train and equip the armed forces for more frequent military assistance to civilian authorities in response to natural disasters, or to improve the resilience of infrastructure used by the military and ensure that military capabilities can be deployed in a reliable and sustainable manner across land, air and sea. As Member States are increasing their defence budgets, such measures need to be an integral part of developing climate-proof armed forces. It is equally important to ensure that other horizontal policies, such as initiatives on sustainable finance, remain consistent with the European Union efforts to facilitate the European defence industry’s sufficient access to finance and investment.

49 Forthcoming EDA data show efficiency gains of approximately 33% over the period 2016-2020.
50 See also Joint Communication on Defence Investment Gaps Analysis and Way Forward, JOIN(2022)24 final, 18.05.2022.
There is already a lot of work ongoing to address these climate and energy challenges among the armed forces, including through different expert formats at the EDA, partly funded by the European Commission (see box below). Moreover, Member States are currently addressing many of these issues by developing and implementing national strategies to prepare the armed forces for climate change, as called for in the Strategic Compass. The EU Climate and Defence Network of experts from Member States’ defence ministries, which was formed as a follow-up to the Strategic Compass at the initiative of the EEAS and the EDA, has proven to be a useful format to foster cooperation, coordination and the exchange of best practices in this regard.\footnote{The Network, which is co-chaired by the EEAS and EDA, developed and agreed an indicative template to be used by Member States for their development of national strategies to prepare the armed forces for climate change. Doc. JOIN(2022) 48 final, 10 November 2022.}

With the momentum generated through these national strategies, it becomes critical to substantially enhance cooperation between Member States in the EU framework. This will lower the risk of fragmentation and ensure interoperability among the EU’s armed forces while creating economies of scale. These objectives can only be achieved through a well-aligned whole-of-government approach at national and EU level. For example, the development of standards for sustainable fuels would ensure the interchangeability of such fuels between Member States’ Armed Forces.

Against this backdrop, the Commission and the High Representative will explore possibilities to support Member States, both individually and through accelerated civilian-military cooperation, in line with the objectives of the Strategic Compass and the European Green Deal. To this end, a new Climate and Defence Support Mechanism will be set up between relevant Commission services, the EEAS and the EDA to work with Member States to identify gaps and collaborative opportunities in areas such as the development of skills, sharing or conducting research and studies, developing green standards, data gathering, developing methodologies or technical concepts, enhancing incentives and promoting collaborative projects. In this context, as part of a phased approach, the Commission and High Representative, in close consultation with the EDA, will consider the establishment of a dedicated EU-led Competence Centre on Climate Change, Security and Defence to enhance the climate adaptation and mitigation effort among the Member States’ armed forces, including, where relevant, through the European Investment Bank.

### Relevant EU instruments, policies and tools that provide a strong foundation for further work:

- Three projects were launched in 2021 under the European Defence Fund (EDF) for defence-oriented solutions dedicated to support research and development of defence technologies and products on climate, energy management and efficiency with a budget of EUR 84 million.
- The Action Plan on Military Mobility 2.0\footnote{Doc. JOIN(2022) 48 final, 10 November 2022.} integrated sustainability and energy efficiency as key objectives in the development of future dual-use transport infrastructure and
capabilities, including the fuel supply chain for the large-scale movement of military forces and their equipment\textsuperscript{53}.

− Member States are addressing energy efficiency, circularity and energy resilience in the defence sector through Commission-funded activities under the umbrella of the European Defence Agency, including the Consultation Forum for Sustainable Energy in the Defence and Security Sector (CF SEDSS)\textsuperscript{54}, the Incubation Forum for Circular Economy in European Defence (IF CEED)\textsuperscript{55} as well as the Symbiosis initiative (offshore renewable energy for defence)\textsuperscript{56}. Moreover, the EDA Energy and Environment Capability Technology Group (EnE CapTech) identifies technological gaps and proposes collaborative projects\textsuperscript{57}.

− Collaborative projects in the framework of the Permanent Structured Cooperation (PESCO) address challenges related to climate and environmental degradation, most notably the Energy Operational Function project\textsuperscript{58} and Helicopter Hot and High Training.

− The JRC has launched a project to identify, assess and tackle climate risks to EU defence, with the aim of providing scientific and technical support to Member States in order to make defence more climate-resilient.

\begin{table}[h]
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Key actions at EU level:  
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\textbullet The ESDC will establish an EU Climate, Security and Defence Training Platform supported by the EEAS, relevant Commission services, the EDA and SatCen, to ensure that the EU has the expertise needed, including by supporting our partners.  
\textbullet Relevant Commission services, the EEAS and the EDA will set up a Climate and Defence Support Mechanism to work with Member States to identify gaps and collaborative opportunities, in order to promote concrete climate adaptation and mitigation action among the armed forces. A first report on its findings will be presented to Member States in the second half of 2024.  
\textbullet As part of a phased approach, the Commission and the High Representative, in consultation with EDA, will consider the establishment of a dedicated EU-led  
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\textsuperscript{53} This is in line with the TEN-T policy, which aims to reduce the carbon footprint of the transport sector and the effects of climate change, while the new Regulation for the deployment of alternative fuels infrastructure sets mandatory deployment targets for electric recharging and hydrogen refuelling infrastructure.


\textsuperscript{55} Commission-funded initiative run by the EDA, which pursues project ideas based on circularity principles in the fields of critical raw materials, additive manufacturing, materials for textiles, ecodesign, green procurement, SCIP database under the Waste Framework Directive, data, EMAS uptake in military ranges, and spare parts management. A dedicated project circle addresses relevant critical raw materials for EU defence, such as titanium, tungsten, antimony, including to foster their circularity in different sections of the supply chain.

\textsuperscript{56} \url{https://eda.europa.eu/what-we-do/energy-policies/symbiosis}.

\textsuperscript{57} This includes a new E+ZERO project that aims to propose and demonstrate a rapidly deployable modular camp with positive energy balance, advanced water management and purification technologies and with no greenhouse gas emissions.

\textsuperscript{58} \url{https://www.pesco.europa.eu/project/energy-operational-function/}.
- Relevant Commission services, the EEAS and the EDA will continue to explore the challenges and potential opportunities for green public procurement for defence needs.

- The EEAS will incorporate climate change-related aspects in the 2024 EU Integrated Resolve exercise.

- Relevant Commission services and the EDA will conduct further studies to help manage climate and environment risk systematically and comprehensively in EU military installations and minimise damage, loss and disruption due to climate and weather hazards.

- Relevant Commission services, the EEAS and the EDA will continue to work together with Member States on the energy transition of dual-use transport infrastructure and capabilities, including fuel supply chains, in follow-up to the Action Plan on Military Mobility 2.0.

- Relevant Commission services and the EDA will continue to analyse the impact of revised energy-related directives and a revised policy framework on military infrastructure, and also explore the project ideas and studies developed in the CF SEDSS context, e.g., on improving energy efficiency and buildings performance in defence.

- The EEAS and the EDA will consult with Member States on the permanent establishment of the Climate and Defence Network to monitor and support the implementation of national strategies and explore collaborative opportunities.

- Relevant Commission services, the EEAS and the EDA, together with Member States, will continue promoting consistent approaches in the various ongoing collaborative projects in the area of climate and defence in PESCO and the EDF, making best use of the Coordinated Annual Review on Defence framework to identify new possible projects.

### 4. International cooperation

Climate change and environmental degradation are global challenges that require an active consolidated multilateral agenda. The EU will further increase its engagement with international and regional organisations and third countries, at both political and operational levels.
4.1. Setting an ambitious global agenda

The EU will continue to set an ambitious global agenda with regard to the climate and security nexus. Many initiatives led or supported by the EU, most notably on water, ocean, food security, energy transition and raw materials value chains, have a strong partnership component, such as the EU Energy Platform, which is highly relevant for the climate and security nexus. Furthermore, the EU will encourage international initiatives with a transboundary dimension to address the climate and security nexus and to enhance global action on energy efficiency and renewable energy in a conflict sensitive manner.

Examples of EU-led or supported initiatives:

- **Water security and droughts**: Together with partners, the EU will champion global implementation of integrated water resources management, an increased focus on the water-energy-food-ecosystem nexus, and a stronger water governance at all levels. The EU also promotes proactive drought management in relevant international fora, such as the UN Convention on Combating Desertification and the International Drought Resilience Alliance.

- **Ocean governance**: The EU and its Member States will champion the universal ratification, entry into force and effective implementation of the UN High Seas Treaty to ensure better protection of the ocean.

- **Energy transition**: The EU and its Member States will also continue, together with G7 partners, to engage in a new model of long-term partnerships called Just Energy Transition Partnerships with fast-growing developing countries, providing financial support to enable a shift to clean energy sources and an ambitious nationally determined contribution, with a central emphasis on a socially just transition.

- **Critical raw materials (CRMs)**: As part of the external dimension of the EU’s Critical Raw Materials package, the EU will strengthen its global engagement to develop and diversify investment, production, and trade with reliable partners and will deploy new diplomatic initiatives, such as the Critical Raw Materials Club, bringing together consuming and resource-rich countries to promote the secure and sustainable supply of CRMs. These partnerships will support emerging and developing countries to develop sustainable raw materials value chains, add local value and diversify their economies, while respecting environmental and social standards.

The EU and its Member States, as board members of multilateral development banks (MDBs) and international financial institutions (IFIs), will continue to champion and

59 The EU opened its EU Energy Platform to those neighbours that are most affected by Russia’s war of aggression against Ukraine to address jointly their energy security concerns.

60 The EU’s external energy engagement in a changing world (JOIN(2022) 23), which was published alongside the REPowerEU Plan on 18 May 2022, aims to reduce the world’s overall energy demand, boost the international development of renewables and ensure a fair competition for resources more globally.

61 See conclusions of European Council of 23 March 2023: “The European Council welcomes the UN 2023 Water Conference and its Water Action Agenda. It acknowledges the need for enhanced EU and global action on water and underlines the importance of a strategic EU approach to water security.”
support ambitious and innovative proposals to further align MDB and IFI strategies and financial flows with the Paris Agreement goals, and to strengthen their capacity to address climate change, biodiversity loss, pollution and fragility, while maintaining their strong focus on poverty reduction. Such support from MDBs and IFIs also contributes to stability, peace and security.

In the context of accelerated global warming, **deliberate large-scale intervention in the Earth’s natural systems** (referred to as “geoengineering”), such as solar radiation modification, is attracting more attention. However, the risks, impacts and unintended consequences that these technologies pose are poorly understood, and necessary rules, procedures and institutions have not been developed\textsuperscript{62}. These technologies introduce new risks to people and ecosystems, while they could also increase power imbalances between nations, spark conflicts and raises a myriad of ethical, legal, governance and political issues. Guided by the precautionary principle, the EU will support international efforts to assess comprehensively the risks and uncertainties of climate interventions, including solar radiation modification and promote discussions on a potential international framework for its governance, including research related aspects.

### 4.2. Addressing the climate and security nexus together with partners

The EU will continue its efforts in all relevant **UN fora**, including the UN Security Council and the Peacebuilding Commission, and its cooperation with different **UN agencies** on climate and environmental risks to peace and security through established dialogues and partnerships. The implementation of the Sustainable Development Goals (SDGs) is also important in this context.

The priorities for the **EU-UN** strategic partnership on peace operations and crisis management for 2022-2024 already reflect and mainstream the climate and security nexus. The EU will support UN efforts under the ‘New Agenda for Peace’ and continue enhancing effective operational cooperation on the ground, including through EU delegations and between UN peace operations and EU CSDP missions and operations. The engagement of the EU and UN in Somalia\textsuperscript{63} serves as a good starting point for closer engagement, such as in the area of joint training to local coastguards. The EU’s progressive deployment of environmental advisers to all CSDP missions and operations will enable the development of synergies, such as joint local capacity-building effort, data sharing, and management of the environmental footprint. The EU will also deepen its exchange with the **UN Climate Security Mechanism** to enhance sharing of lessons learnt, coordination and cooperation on policy and programming approaches, and training.

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\textsuperscript{62} The EU remains committed to the previously agreed international position under the Convention of Biological Diversity decision X/30

\textsuperscript{63} The EU is conducting a military training mission (EUTM Somalia) and a civilian maritime capacity building mission (EUCAP Somalia), and the UN conducts an assistant mission (UNSOM).
Example of EU-UNEP partnership on climate change and security

The first phase of the EU-UNEP partnership on climate change and security developed tools and capacities to enhance environment- and climate-security analysis and preventive action to address conflict and fragility risks in two pilot countries, Nepal and Sudan. Moving from its pilot phase to scaling up at the regional level, the partnership will aim to address emerging climate and environment-related risks in three priority regions: the Horn of Africa, the Middle East and North Africa (MENA), and West Africa and the Sahel.

The EU will use all channels and existing dialogues at bilateral level and with international organisations, such as NATO, the African Union, the Association of Southeast Asian Nations, the Arctic Council, the Community of Latin American and Caribbean States, the League of Arab States, OSCE, as well as with G7 and G20, to address climate change, environmental degradation and security.

Example of African Union-EU partnership: Innovation Agenda

The African Union and the EU have agreed to develop an ambitious agenda to foster scientific cooperation between researchers to develop knowledge together, as well as sharing technology and expertise. This includes most notably joining forces to advance climate resilience, mitigation and adaptation, taking the security-related impacts of climate change into account.

The Joint Declaration on EU-NATO cooperation of January 2023 stressed the need to jointly address the security implications of climate change. Both organisations have made substantive progress in supporting the adaptation of the armed forces of their members to the adverse effects of climate change and environmental degradation and in reducing the negative impact through mitigation measures. Therefore, there is hence a need for closer coordination and an opportunity for concrete cooperation on selected work strands, such as on Data analysis and early warning, training and awareness-raising, resilience building, and capability development (including with regard to energy efficiency and the energy transition) provide concrete opportunities for cooperation. The High Representative and the Commission will consult with NATO the possibility of setting up an EU-NATO structured dialogue on these issues. Synergies with other EU-NATO dialogues on related areas will explored as appropriate, e.g., EU-NATO Structured Dialogue on Resilience and the EU-NATO Taskforce on the resilience of critical infrastructure.

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64 The EU organises climate and environment dialogues and regional and bilateral cooperation activities, including high-level dialogues on climate change and environment with Canada, India, Japan, South Korea, the US and others, and seeks green alliances with partners who have demonstrated commitment to the highest ambition. The EU also organises political and security dialogues with bilateral partners and will continue to integrate climate change and environmental considerations in these discussions, building on good experiences of such dialogues with the US, Canada, the UK and Rwanda.


The EU will also convene regional climate, environment and security dialogues permitting **wider engagement with partners**, both in regions acutely vulnerable to climate change, and those that may currently receive less attention in the field of climate and security. These dialogues will also support coordination between various parties both within and between regions.

In addition to EU’s efforts to address the climate and security nexus through close partnerships at multilateral, regional and bilateral levels, cooperation with civil society as a whole, including local actors, research bodies, and think tanks will also be enhanced.

**Key actions at EU level:**

- The High Representative and the Commission, with EU Member States and international partners, will champion and support ambitious and innovative proposals to further align MDB and IFI strategies and financial flows with the Paris Agreement goals.

- Guided by the precautionary principle, the Commission and the High Representative will support international efforts to assess comprehensively the risks and uncertainties of climate interventions, including solar radiation modification and promote discussions on a potential international framework for its governance, including research related aspects.

- The EEAS will seek closer cooperation between EU and UN experts on the ground with the aim of creating greater synergies between their respective activities and further exploring joint initiatives, e.g., in training and capability development.

- The EEAS and relevant Commission services will further integrate climate change and environmental considerations in dialogues with bilateral partners and regional organisations, and various civil society organisations where relevant.

- The High Representative and the Commission will consult with NATO the setting up a structured dialogue to address the manifold linkages related to climate change, environmental degradation, security and defence, with a view to exploring synergies between both organisations and identifying possible cooperation in areas of mutual benefit. This should take place within the framework of an envisaged comprehensive implementation document on EU-NATO cooperation.

- The EEAS and relevant Commission services will explore the possibility for exchanges with the NATO Climate Change and Security Centre of Excellence on lessons learnt and best practices.

- The relevant Commission services and EEAS will convene climate, environment and security dialogues in priority regions of concern to support spaces for discussion of specific challenges and to foster cooperation.
5. Way forward

The Commission and the High Representative invite the European Parliament and the Council to welcome the Joint Communication and to support the new outlook on the climate and security nexus. The Commission and the High Representative will report on the progress made on the implementation of the Joint Communication to Member States.