



AUGUST 2021

## Mission Probable: the EU's efforts to green security and defence<sup>1</sup>

The European Union has recently started in earnest to climate-mainstream its defence and security sectors. It published a Climate Change & Defence Roadmap and the external dimension of the EU Green Deal recognises climate action as contributor to peace and stability, for instance in the rather unstable European neighbourhood. The EU aims to climate-proof its military and civilian defence missions, as calls for disaster and humanitarian assistance are rising globally, and it is seeking to include green innovation more prominently in defence investments and R&D. However, many of the plans are yet to be turned into tangible action and climate change objectives remain subordinate to the objective of “operational effectiveness”. Perhaps most striking is that an emission reduction target for the military is still out of sight, whereas the EU as such has committed to be climate neutral in 2050. Moreover, traditional advocates for climate change action tend to focus on other sectors, possibly because they fear that for the military climate-security is a topic to justify higher spending or even military intervention. Despite this neglect further strides can be made to use European militaries as green innovators, emission reducers and enablers of environmental peacebuilding and disaster assistance.

### From awareness of climate as security risk to policy change

The European Union (EU) has long recognized climate change as a threat multiplier or risk to conflict and insecurity. Diplomatically, it has called for greater recognition of climate impacts on security policy. The need to address climate risks in and around the EU's geography and its greater visibility asks for European instruments to address them, but for long

this meant stepping up efforts to mitigate climate change in general, and not specific action to target the security dimension of climate change.

The European Green Deal (EGD) and an agreement to spend 30% of the EU's budget (2021-2027) on climate change action will give the bloc greater teeth in its fight against climate change. In 2020, the European External Action Service (EEAS) presented a Climate Change & Defence Roadmap, which aims to integrate climate change into existing and future European military operations.<sup>2</sup> This year, EU Defence Ministers called for

1 This policy brief has been adapted from the 'Regional Climate Security Risk Analysis: The European Union and Climate Security Risks' from the World Climate Security Report 2021 published by the International Military Council on Climate and Security in June 2021.

2 European External Action Service, [Climate Change and Defence Roadmap \(EEAS \(2020\) 1251\)](#), (Brussels: European External Action Service, November 2018).

its implementation, with annual updates by the EU's High Representative and Head of the European Defence Agency.<sup>3 4</sup> Overlap is emerging, with the recent adoption by NATO of a climate-security agenda. Even though the EU's Common Security and Defence Policy itself is still "under development" and tends to focus at relatively small and low-risk missions, it is well ahead in its efforts to integrate climate-security. There is also ample scope to connect efforts to climate-proof the military to the realms of diplomacy and development, where the EU traditionally has more clout and climate change is already integrated to a larger extent.

The roadmap was also included in the January 2021 EU Council Conclusions on the external dimension of the European Green Deal, which looked at further integrating EU climate objectives into the remit of EU external action. These conclusions supplemented a pre-existing set of Council Conclusions on EU Climate Diplomacy. Considering the pace of these changes, this policy brief will analyse the EU's contribution to climate-security, with a focus at the military, by proposing and answering the following questions:

1. What is included in the EU's Climate and Defence Roadmap?

---

3 The Council recognises the impact that environmental issues and climate change have on security and defence, and calls for the comprehensive implementation of the Joint Climate Change and Defence Roadmap in line with the Council Conclusions on Climate and Energy Diplomacy of 25 January 2021. In this regard, the Council reaffirms the need for close cooperation with Member States and pursuing closer cooperation opportunities with relevant international partners such as the UN, NATO, the OSCE and the African Union (AU). It also encourages Member States to contribute with concrete actions and invites the High Representative, acting also in his capacity of Vice-President (VP) of the Commission and Head of the European Defence Agency, to provide a first annual update on the implementation process in the first semester of 2022.

4 Council of the European Union, [Council Conclusions on Security and Defence \(8396/21\)](#), (Brussels: Council of the European Union, May 10 2021).

2. What other instruments are available to the EU at this moment to address climate-security risks?
3. What are the key gaps or shortcomings in EU climate-security policy targeting the military?
4. Are the EU's efforts in this field truly supported throughout the EU?
5. What recommendations can be made to enhance the EU's ability to address climate-security?

## The EU's Climate and Defence Roadmap

As part of its **Common Security and Defence Policy (CSDP)**, the EU recently adopted a **Climate and Defence Roadmap** that was prepared by the European External Action Service (EEAS). It aims to enhance climate resilience for current and future EU missions by identifying gaps in strategic and operational readiness. It entails a trajectory for short, medium, and long-term actions to better climate-proof security activities. They are divided into three pillars.

Under the **operational dimensions pillar of the roadmap**, actions include early warning, risk assessments and forecasting, mainstreaming, enhancing preparedness for extreme weather events, carbon tracking and inserting environmental security advisors in missions.<sup>5</sup> Such advisors are now working in Mali and Central African Republic, with one being recruited for the EU civilian mission in Somalia.

Under the **capability development pillar of the roadmap**, measures include integrating environmental concerns into EU trainings, exploring green public procurement, catalysing green military R&D funded by the EEAS, European Defence Agency and European Defence Fund. Additionally, efforts of EU member states through the Permanent Structured Cooperation (PESCO) and enhancing synergies regarding waste management (circular economy policy) are

---

5 European External Action Service, "Roadmap", 5-6.

listed as ways to climate-proof the defence sector.<sup>6</sup>

Under the **pillar to strengthen multilateral partnerships of the roadmap**, actions are included to cooperate on the climate-security agenda with international organizations, including the UN, NATO and the African Union and to include climate-security considerations in defence and security engagements with external countries, as well as strengthen African civil protection agencies.<sup>7</sup>

Of particular interest in this plan is the focus placed on mainstreaming efforts at all levels of the security and defence sectors across the EU. From the insertion of environmental advisors on a ground level for all CSDP missions to the innovation around carbon-friendly defence procurement, the plan shows a strong commitment to placing environmental factors at the heart of the EU's security apparatus, with the hope that this will make missions more robust and responsive to a more complex risk matrix. A recent 2021 report commissioned for the European Parliament Subcommittee on Security and Defence (SEDE) identified a number of multi-vectoral climate threats such as water scarcity, resource conflict and Arctic competition on internal and external security, but further mainstreaming is still important.<sup>8</sup>

## Connection of other policies and instruments

The Roadmap on Climate & Defence can be considered the newest effort of the EU to integrate climate change into the realm of its external action, that include activities in the field of diplomacy, development and trade.

As part of its **Common Foreign and Security Policy**, the EU has an elaborate climate diplomacy action plan in place, with the climate-security nexus at its heart. Climate change is prominently included in many of the bilateral dialogues between the EU and other countries. Climate security was included in the work of the conflict prevention and mediation support unit of the EEAS, and climate risks are part of its early warning and early action policies, further articulated in the Roadmap. For example, conflict mediators have been trained to recognise how climate change and its impacts of scarcities of natural resources influence dynamics between groups in society. Attention is growing with regard to the need for climate investments to be conflict sensitive so that they don't benefit one group over the other.

European countries have been **leading voices multilaterally** for climate-security to be recognized at the highest of levels. In 2020, Germany used its role as chair of the UN Security Council (UNSC) to propose a resolution which identifies potential climate-related risks through a Security Council managed mechanism, but this was derailed by the United States, China and Russia. France remains a leader of climate-security topics at the international level as well, using its permanent seat in the UNSC to raise the climate-security agenda. Finally, EU member states have thrown substantial support behind the UN Climate Security Mechanism, with the Netherlands and Sweden being key leaders on integrating climate-security into all levels of the UN. Clearly, Europe is pushing hard to be front and centre in the fight against climate-security both within the bloc and outside it.

Additionally, the EU's efforts to mainstream climate change in its external action are reflected in the structure of the EU's funding instrument. This year, the European Parliament and Council agreed that 30% of the newly established **Neighbourhood, Development and International Cooperation Instrument (NDICI)** should be spent on climate-related activities. Incentivizing climate action in the EU neighbourhood and developing countries may provide new opportunities

---

6 European External Action Service, "Roadmap", 7-9.

7 European External Action Service, "Roadmap", 10-11.

8 Christoph Meyer, Francesca Vantaggiato & Richard Young, *Preparing the CSDP for the new security environment created by climate change* (Brussels: Directorate-General for External Policies, June 2021).

for environmental peacebuilding. The NDICI or “Global Europe” instrument, which is a merger of previous instruments, aims to offer greater flexibility when appropriating funding to a conflict’s source of origin. If climactic drivers are pushing regional instability more often EU cooperation with other countries is likely to include financing for climate action, preferably in a conflict-sensitive way. The overall allocation is €79.5 billion for the 2021-27 cycle, an increase of 10% from the previous cycle.<sup>9</sup>

The EU has also integrated climate change and sustainability into its external **trade agreements**. They usually stipulate the ratification and implementation of the Paris Agreement on Climate Change as part of any external trade deal. Also, the EU is embarking on a Carbon Border Adjustment Mechanism (CBAM), an import levy on carbon-heavy imports such as steel and cement. Currently, European industry is subject to the Emissions Trading Scheme, that charges a price for CO<sub>2</sub> used in carbon-heavy industrial processes and might be extended to fuels used in transport and heating of buildings. The new mechanism is designed to level the playing field and avoid industry relocation outside the EU. Other countries are pushing back, arguing that the measure is a form of protectionism, which may lead to new tensions.<sup>10</sup>

Lastly, in January 2021, EU Council Conclusions were agreed upon on **climate and energy diplomacy** as key ingredients of the external dimension of the European Green Deal. They stipulate reductions in “further investments into fossil-fuel-based infrastructure projects in third countries,” improve and expand climate financing for renewable energies, while enhancing the readiness of global governance to deal with the geopolitical consequences of the energy

transition.<sup>11</sup> The EU has already committed \$23.2 billion to global climate financing, more than double its 2013 figure.<sup>12</sup> In the run-up to the UN Climate Summit COP26 in Glasgow, the EU plans to be a constructive and assertive partner, advocating for more ambitious Nationally Determined Contributions (NDCs).<sup>13</sup> The EU seems to be prepared to deal with not just the financing of the energy transition but also the geopolitical consequences.

With the Climate and Defence Roadmap and an impressive set of policies mainstreaming climate change into the EU’s external action, the EU seems to have its house in order. However, there are still areas open for improvement, and the dots can be better connected.

## Areas for improving the EU’s climate-security angle in the defence sector

The first area of concern is that the EU’s roadmap is just that: a roadmap. Little tangible progress has been made on the ground. The roadmap does not actually contain a specific timeline to achieve short, medium or long-term operational improvements and thus there is a risk that these reforms will be delayed or even shelved amidst the confluence of other objectives of specific EU missions and the CSDP in general. Climate-security readiness is being sacrificed at the expense of general operational readiness.

Another problem emerges as the roadmap lacks focus on the role of the military in

---

9 Council of the European Union, “[NDICI-Global Europe: final green light for the new financial instrument to support the EU’s external action](#)”, *Council of the European Union*, June 9 2021.

10 Kira Taylor, “[US raises concerns over Europe’s planned carbon ‘border tax’](#)”, *EURACTIV*, May 11 2021.

11 Council of the European Union, [Council conclusions on Climate and Energy Diplomacy - Delivering on the external dimension of the European Green Deal \(5263/21\)](#), (Brussels: Council of the European Union, January 25 2021), 7.

12 EU Neighbours: East, “[Climate and energy diplomacy: EU highlights key role of external policy in delivering European Green Deal](#)”, accessed June 14 2021.

13 Council of the European Union, “Conclusions on Climate and Energy Diplomacy”, 3.

decarbonisation. An exact overview of emissions of the defence sector is lacking as emissions of military missions abroad are not covered by EU policy that, just like the Paris Agreement on Climate Change, focuses on emissions at home. A recent study pointed to the cumulative emissions in 2019 of the defence sectors of EU member states equalling roughly 24.8 million tCO<sub>2</sub>e, the equivalent CO<sub>2</sub> emissions of 14 million average-sized cars a year.<sup>14</sup>

This statistic demonstrates the emissions contributions of the military and shows the sector needs to be applied with similar rigorous targets to other sectors the EU is climate-proofing. It is interesting to note that the EU just published a gigantic package of new proposals to reduce emissions to a level of -55% compared to 1990 levels. In this so-called “Fit for 55” package, specific attention is paid to reducing emissions in sectors, but with no mention of the military as a sector where emissions need to be reduced. Military emissions are assumed inclusions in the national emission reduction targets of EU member states (under the so-called effort sharing regulations) and sectors that are covered by emissions trade, including the newly proposed Emissions Trading System for fuels used in transport and the built environment. Interestingly, the NATO Secretary-General has been asked to prepare preliminary emissions targets for member states and a feasibility study of the alliance’s ability to meet net zero emissions by 2050, which could serve as a template for EU members.<sup>15</sup>

The European Union’s desire to institutionalise and prioritise climate-security within its agenda is evident, however it is not clear how the roadmap connects to agencies and ongoing security policy processes within the bloc. For instance, it does not explicitly mention how the Directorate-General of

Defence Industry & Space (DG DEFIS) can contribute.<sup>16</sup> The roadmap discusses the role the European Defence Agency (EDA) can play, however again it lacks specificity. This is despite these organs being the best placed centrally to oversee reforms and changes to the European defence sector at large.

The EU also has an opportunity to kickstart the climate-mainstreaming in the defence sector through its “Strategic Compass” that was announced 2020. It aims to serve as a doctrine to guide the EU’s military cooperation dimensions.<sup>17</sup> Whilst climate change is identified as a “global threat,” little of the Compass discusses how the on-the-ground actions will be either aimed to combat climate threats or climate-proofing conventional operations and weapons.<sup>18</sup> Integrating environmental considerations such as a reduced carbon footprint and smaller number of troops deployed are all extremely important and need to be seriously considered by decision makers in Brussels.<sup>19</sup> Fortunately, there is still time to integrate the climate dimensions, since the compass is not set to be up for adoption until 2022.

The roadmap mentions initiatives like the Permanent Structured Cooperation (PESCO) as a framework and context for climate-proofing military activities, yet there are no details as to how tangible collaboration will look, especially on the ground. PESCO means that militaries of EU member states pursue voluntary structural integration of manpower and technology. It is not clear yet if some PESCO initiatives, such as these focusing on transport and logistics already include a climate dimension or could bring it in. Moreover, the roadmap and surrounding communication does not mention how the

---

14 Stuart Parkinson & Lindsey Cottrell, *Under the Radar: The Carbon Footprint of Europe’s Military Sectors*, (Brussels: The Left group in the European Parliament - GUE/NGL, February 2021), 7.

15 North Atlantic Council, “Brussels Summit Communiqué”, *North Atlantic Treaty Organisation*, June 14 2021.

16 European External Action Service, “Roadmap”, 8-9.

17 Robin Emmott, ‘[Strategic Compass: EU considers military doctrine, new tank development](#)’, *Reuters*, November 19 2020.

18 European External Action Service, *Towards a Strategic Compass*, (Brussels: European External Action Service, May 2021).

19 Dick Zandee, Adája Stoetman & Bob Deen, *The EU’s Strategic Compass for security and defence: Squaring ambition with reality*, (The Hague: The Clingendael Institute, May 2021), 58.

roadmap will integrate climate considerations into the Coordinated Annual Review of Defence (CARD). CARD helps monitor EU member defence plans to help suggest improvements to meet PESCO's objectives. Better leveraging of PESCO's and the European Defence Fund's (EDF) capabilities to facilitate green procurement and defence technology research would be a positive step in this direction.<sup>20</sup>

Indeed, in contrast to major military powers like the United States, there is limited information about the climate vulnerability of military assets in the EU. It is currently not known how or if naval bases of European militaries, for instance, are threatened by sea level rise. There is little objective information on what climate change may imply for domestic and international emergency and humanitarian assistance, beyond generalised observations that calls will increase because of climate change. Equally, there is little assessment of how such developments may also affect the positioning and threat of strategic rivals of the EU. The roadmap discusses the need to enhance vulnerability assessments, yet again no specific details or timelines are provided.

The overall narrative presented by the EU on climate action still focuses on the long-term economic gains of transitioning to a low carbon economy, instead of the urgency of climate action because it is a security threat affecting life and death. Framing climate change as an economic topic focuses on 'soft gains' and there is limited consensus as to how climate change breeds conflict and insecurity. This can dull member state proactivity. Sharper framing of climate change as a direct influencer of hard security and subsequent interventions as a multilateral peace-building opportunity

may receive more unanimity in support by EU leaders and groups.<sup>21</sup>

## Broad political backing still needs to be fostered

What is remarkable is that a large force driving the push to "green the army" is coming from within the defence sector rather than from civilian policymakers or climate activists. Historically, the military seems not to have appeared on their radar screen as big emitter. In climate and development circles, fears of securitisation are prevalent, based on concerns that hard security actors would only be interested to justify increasing spending or even military intervention; a major concern for countries where the checks and balances in place to keep the military accountable are weak, normally developing or authoritarian states. Moreover, in many unstable countries, the military is considered part of the problem rather than the solution.

This also explains the lack of attention for military emissions in the recent "Fit for 55" climate package. Whereas the green movement typically focuses on emissions from big industries, the transportation and energy sectors, they fail to recognise the military as large fossil energy consumer. This dwarf's attention to the real issue, namely that the calls for military assistance at home and abroad will be on the rise because the increase of extreme weather, even if our carbon footprint is reduced, and because Europe cannot be carbon neutral if the military is still using fossil fuel to power its navy, air force and army vehicles.

Even so, the EU defence sector still does not fully recognise their contribution to combating climate insecurity. Some argue for instance that binding commitments on energy sustainability for defence could adversely affect the performance of existing

---

20 European Union Institute for Security Studies, [\*Event Report: Climate change, defence and crisis management: from reflection to action\*](#) (Paris: European Institute for Security Studies, 11 December 2020), 3.

---

21 Louise van Schaik & Paul Hofhuis, [\*Transatlantic Cooperation on Climate Change: Beyond the Beauty Contest\*](#), *Wilson Center*, February 8 2021.

capabilities or operational performance.<sup>22</sup> Climate change also competes for attention and funding with more established threats, such as cyber-security or Russia.

Moreover, the EU struggles to ensure proper coordination and consistency around member states' mainstreaming efforts. Some states are ahead of others such as France, which has begun integrating climate considerations into its military. However, this has not been aligned at an EU level and it is stated that climate objectives are subordinate to operational effectiveness of the army.

Some member states argue that climate mainstreaming within national defence sectors should be left to national governments. Consequently, jurisdictional friction between the EU and NATO could occur; whilst NATO recently has become more proactive in integrating climate considerations into its activities, the EU remains clearly ahead and some member states prefer the lead to be with NATO. They consider NATO the most important military organisation and see NATO targets as less binding, and thereby less of a threat to national sovereignty. However, also in the EU, unlike to other fields such as standards for cars, mainstreaming efforts on defence are conditional on the fact that all activities are optional for countries to participate in. EU Defence Ministers have now agreed to an annual stocktake of the roadmap, a welcome development yet more concrete review mechanisms are needed.

Finally, it is remarkable how little the Roadmap is connected to the other climate-security efforts that are linked to the climate diplomacy Council Conclusions and the European Green Deal more generally. There seems to be a disconnect with mainstream climate policy and the Climate & Defence Roadmap seems hardly on the radar of DG CLIMA, the Green Diplomacy Network or the Working Party on International Environmental

Issues where the EU's position for the UNFCCC COPs is prepared.

## Recommendations

When compared to most other nations and organizations, it could be argued that the EU has been very progressive in integrating climate into security and defence considerations. However, much more needs to be done. To step up its contribution, the following measures could be considered:

### Development and Foreign Policy

- The EU should continue to consider how to integrate environmental peacebuilding further throughout its Common Foreign and Security Policy, Common Security and Defence Policy, as well as neighbourhood policy, enlargement policy and development cooperation policies. More efforts need to be put in place to improve the management and fairer distribution of natural resources, use climate issues in peace dialogues and mediation, promote the use of renewables and land restoration in conflict prone territories and areas with high numbers of refugees.
- A European version of the UN Climate Security Mechanism could be considered that brings together expertise from defence, diplomacy, development and environmental tracks of the EU.

### Defence

- EU Defence Ministers could adopt an emissions reduction target for the European defence sectors.
- The EEAS or European Defence Agency should increase funding to research on the vulnerability to climate change of EU military assets and capabilities, and such work should be linked to the discussions on a European Strategic Compass.
- PESCO could be used for mutual learning on how to build resilience and redirect attention to climate-mitigation and adaptation activities, e.g. implementing more sustainable procurement and supply chains.
- Climate vulnerability assessments and forecasting international and domestic

---

<sup>22</sup> European Union Institute for Security Studies, [\*Climate change, defence and crisis management: from reflection to action\*](#), Event report, December 11 2020.

assistance should become part of the CARD process in which capabilities are mapped.

- Investments in defence R&D and research on how climate risks affect the security could be funded by the EDF but also through Horizon Europe and DG DEFIS.
- In the EU CSDP missions, climate change-related security risks should be taken into consideration more explicitly, including by considering how to provide a safe operating space for environmental peacebuilding activities on the ground.
- Military organizations need to be aware about the distrust in climate and development circles towards them and need to work collaboratively with civilian actors to enhance understanding and cooperation.

### **Analysis and Foresight**

- Research should also be funded on how climate change affects the capabilities of strategic rivals of the EU, notably Russia and China.
- In further research, risks of an unmanaged energy transition need to be taken into consideration.
- A review is needed of best-practices of governmental and NGO activity from across and outside the EU to help facilitate greater learnings for climate-proofing activities.

### About the Planetary Security Initiative

The Planetary Security Initiative sets out best practice, strategic entry points and new approaches to reducing climate-related risks to conflict and stability, thus promoting sustainable peace in a changing climate. The PSI is operated by Clingendael - the Netherlands Institute of International Relations.

[www.planetarysecurityinitiative.org](http://www.planetarysecurityinitiative.org)  
[psi@clingendael.org](mailto:psi@clingendael.org)  
+31 70 324 53 84

 @PlanSecu  
 Planetary Security Initiative  
 Planetary Security Initiative  
 Newsletter

### About the Clingendael Institute

Clingendael – the Netherlands Institute of International Relations – is a leading think tank and academy on international affairs. Through our analyses, training and public debate we aim to inspire and equip governments, businesses, and civil society in order to contribute to a secure, sustainable and just world.

[www.clingendael.org](http://www.clingendael.org)  
[info@clingendael.org](mailto:info@clingendael.org)  
+31 70 324 53 84

 @clingendaelorg  
 The Clingendael Institute  
 The Clingendael Institute  
 clingendael\_institute  
 Clingendael Institute  
 Newsletter

### About the authors

**Louise van Schaik** is Head of Unit EU & Global Affairs at the Clingendael Institute. She also coordinates the research on climate change and is an expert in the field of climate-security, EU climate policy, EU and global health policy, EU external action and multilateralism

**Akash Ramnath** is a Junior Research Fellow at the Clingendael Institute. He is part of the Planetary Security Initiative team and contributes to research on EU green energy diplomacy and climate-security more generally.