Integrating Climate in Germany’s National Security Strategy
How to Avoid Being Derailed by Russia’s Aggression

The uneven distribution of climate impacts and emissions has long hindered a coherent international response to climate change. Moreover, given the return of great power politics, revisionist powers appear ready to weaponize the dependencies that result from attempting to address such challenges multilaterally – even at the expense of their own long-term security. Although the need to respond to Russia’s war in Ukraine has made the political case for fighting climate change harder to make, Germany must prioritize climate as a collective, global dimension of its security as it drafts its National Security Strategy (NSS).

– Germany must continue to bolster the climate-security nexus in two traditional ways: by strengthening resilience to climate impacts – particularly in world regions already acutely affected by climate change – and by helping to maintain a stable global climate by consistently reducing emissions.

– Germany should focus on those fields where it can rework dependencies into partnerships and gain autonomy of action vis-à-vis Russia.

– Germany needs a multidimensional risk assessment that integrates geopolitics, human security, and economic dependencies alongside climate and environmental factors to make its partnerships and cooperation sustainable.
Integrating Climate in Germany’s National Security Strategy

POLICY BRIEF

A peaceful, value-based order is inconceivable in an intertemperate global climate. That there can thus be no peace without climate protection is an obvious takeaway from the latest Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), which lays out in painful detail the consequences of climate change. Therefore, the German government is right to speak in ambitious terms about the need to work toward a more coherent climate foreign policy and the need for diplomatic engagement in its December 2021 coalition agreement. In that agreement, the government also announced its intention to write a National Security Strategy (NSS). When describing her plans for the NSS in March 2022, Foreign Minister Annalena Baerbock underlined that climate policy would be one of its central fields of action. She framed climate issues in the term “security for the fundamental necessities of our lives,” which she named as one of three pillars of German security policy alongside “the invulnerability of our lives” (i.e., physical safety) and the protection of “the freedom of our lives” (under the umbrella of democratic societies and the rule of law).

Consultations on the NSS are now underway in a security environment that has radically changed. These are no longer times of peace but of war. Classic questions of territorial integrity and national and allied defense, as well as the reform of the Bundeswehr, are at the center of debate. Russia’s war of aggression in Ukraine has also forced policy-makers to solve the problem of negative dependencies – from energy supplies to economic relations with major powers such as authoritarian China.

In short, the war has placed the focus of German security on core tasks while it has made far-sighted cooperation around the protection of global goods like the climate much harder. And yet, the security threat posed by climate change is only increasing. Short-term but catastrophic weather events are a direct threat to human life. Slow-onset climate impacts are leading to the degradation of land, water, and air quality; droughts are leading to crop losses. Accompanied by geopolitical shocks, all are dynamically changing the strategic context. Against this backdrop, Germany should not lose sight of its ambition to promote climate security.

This paper identifies three policy areas that are of central importance for the NSS when it comes to climate protection:

- Comprehensive emission reductions, including in the security sector
- Energy security through (renewable) energy cooperation
- Resilience to security risks arising from growing climate impacts in terms of conflict, social fragmentation, and displacement

These fields – already centrally important to German security in their own right – also impact classical security issues and offer Germany a degree of autonomy in handling them.

CONCEPTUALIZING THE CLIMATE-SECURITY NEXUS

The German government must maintain its capacity to act in the face of complex crises. In today’s world, that requires an understanding of how climate and security are related. There are two obvious starting points:

**Concept 1: Climate Impacts**

Climate impacts are not only relevant to Germany’s security domestically, for example, when its population requires protection from floods or heat waves; but also internationally, when such impacts abroad negatively affect geopolitical stability or supply chains. Here, the focus moves beyond classic state security to human security, which places protecting human rights and safeguarding natural and economic livelihoods at the center of security policy considerations. This focus includes the protection of vulnerable groups in particularly affected areas – small island states and global climate hotspots – irrespective of the immediate consequences for Germany. The relevant tools to address challenges

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Related to climate impacts tend to be crisis management and peacebuilding, but they also include development and humanitarian policy.

**Concept 2: Planetary Security**

Here, considerations center around maintaining an intact earth and climate system as a global common good. The aim is to limit the progress of climate change by means of determined emissions reductions, thereby keeping its consequences within a predictable framework in the long term. In view of the risks of unchecked global warming and the danger of tipping points in the Earth System, the relevance of these issues to human security is clear. The measures to reduce global emissions that are stipulated in the 2015 Paris Agreement are considered the primary policy instruments in this context.

These two starting points will be familiar to those drafting the NSS because Germany already engages with them at home and at the international level. When it comes to dealing with climate impacts, for instance, the 2017 Federal Government Guidelines on Preventing Crises, Resolving Conflicts, and Building Peace – commonly known as “the Guidelines” – identify peace and security, development, and human rights as essential commitments. These Guidelines thus provide a basis for focusing on climate shocks abroad and are backed up in the framework of the United Nations in both its Sustainable Development Goals (SDGs) and concept of human security. As for planetary security, the Guidelines name the preservation of prosperity and opportunities for current and future generations as an essential German security interest.


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**TABLE 1 – TWO CONCEPTUALIZATIONS OF CLIMATE CHANGE: HOW THEY IMPACT SECURITY AND ARE ANCHORED IN GERMAN FOREIGN POLICY**

<table>
<thead>
<tr>
<th>CLIMATE IMPACTS</th>
<th>PLANETARY SECURITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escalating resource conflicts, local climate-related loss and damage, climate-related displacement, food insecurity</td>
<td>Global warming resulting in a worldwide increase in extreme weather events, ocean acidification, biodiversity loss, etc.</td>
</tr>
<tr>
<td>Vulnerable groups in regional and local contexts, especially in the Global South</td>
<td>The population worldwide, prosperity and security within nation states</td>
</tr>
<tr>
<td>Building resilience in the face of existing climate impacts, reducing and managing climate risks</td>
<td>Respecting planetary boundaries, fostering an intact Earth System with predictable and limited climate impacts, preserving biodiversity, etc.</td>
</tr>
<tr>
<td>Striving to ensure human security and the protection of human rights as supported by the UN’s Sustainable Development Goals (SDGs)</td>
<td>Aiming to ensure prosperity and equal opportunities for current and future generations</td>
</tr>
<tr>
<td>Local climate adaptation, capacity building, crisis prevention, crisis management</td>
<td>Global emissions reduction (mitigation), which must be developed in all sectors, including in the security sector and disaster management, green defense, procurement, and supply chains</td>
</tr>
</tbody>
</table>

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6 Ibid., pp. 8–15.
7 Ibid., p. 35.
Thus, climate impacts and planetary security make for a natural springboard into our own considerations about how to anchor the security–policy dimensions of climate change into Germany’s National Security Strategy. We do, however, need to recognize some conceptual problems. Most obviously, the two points cannot be addressed separately:

• A determined attempt to secure the planet by reducing emissions helps to avoid and soften climate impacts. The global reduction or avoidance of greenhouse gases diminishes the need to adapt to future climate impacts or to compensate for loss and damage.

• A failure to act on the second point – for example, through the mitigation or avoidance of greenhouse gases – increases the severity of climate impacts and related loss and damage. If action is taken at the same speed as it has over the past decade, the climate crisis may become catastrophic, making the management of climate impacts impossible as described by the limits of adaptation in the IPCC report.

THREE FOCUS AREAS FOR GERMAN CLIMATE SECURITY POLICY IN THE WAKE OF RUSSIA’S AGGRESSION

Russia’s war of aggression and the ruptures it is causing in the international system have negative spillover effects in areas such as crisis management and humanitarian aid that make providing and preserving public goods more difficult. It is also expected that political tensions will hamper efforts to mitigate and address climate change in multilateral fora. Nonetheless, there are fields where concrete steps toward mitigation and adaptation to climate change can be taken and where old dependencies can be replaced by new partnerships. We pick out three, but this approach could be equally applied to other fields of action such as environmental and climate considerations in plurilateral trade.

Pragmatism is required in the face of parallel global crises. Initiatives to act on climate change will take place in an international context in which both financial resources and the political capacity or willfulness to act greatly diverge. While Germany should and will continue to preserve and strengthen multilateral processes, we acknowledge that an ideal scenario – in which concrete and coordinated steps toward sufficient emissions reductions are taken at the highest level of global governance – may not materialize in the foreseeable future.

1. Addressing Planetary Security Through Emissions Reduction – Also in the Security Sector

Due to heavy constraints on the carbon budget, all sectors need to be rapidly and simultaneously decarbonized. The security sector is no exception. In 2021, the German Bundeswehr emitted 1.71 million tons of CO2-equivalents within the country, mostly from buildings and transport such as jet fuel. Foreign deployments, which may be resource heavy, are unaccounted for in that figure. Yet in that sector, the German government now faces the challenge of mobilizing short- and medium-term funding to respond to the changed security situation caused by the Russian war of aggression against Ukraine – mobilization that potentially comes at the cost of the green transformation. Immediate spending requirements should therefore be aligned with sustainability considerations.

Since 2014, the Federal Ministry of Defense (BMVg) has been publishing a biennial sustainability report based on the goals of the Agenda 2030. In it, the BMVg documents the resource consumption and energy balance of various areas of the German defense sector, including electricity and energy consumption and the CO2 emissions of mobility systems used by the Bundeswehr. In addition, the ministry has drawn up a road map for achieving climate neutrality by 2023. In this context, recommendations are being developed to set up sustainable energy systems in consultation with experts in mobility as well as in other areas such as the building sector.

The “sea change” (Zeitenwende) in security policy that German Chancellor Olaf Scholz declared in the aftermath of Russia’s February 2022 invasion of Ukraine – specifically, the onetime special fund of 100 billion euros it provides to the German armed

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10 As is the case for other parts of the federal government, the Ministry of Defense is bound by sectoral emissions reductions targets until 2030, as set out by the German climate protection law. See ibid., p. 13.
forces – gives the German government the opportunity to accelerate the implementation of the defense sector’s existing sustainability goals. Emissions in the defense sector account for only a small share of the overall emissions balance. However, because the government can directly control emissions in this sector, it has a particular responsibility to contribute to emissions reductions there. The emissions balance could be included as a hard criterion in procurement guidelines. Moreover, Germany – together with its NATO and European Union (EU) allies – should increasingly invest in the research and development of low-emission energy and mobility systems in the defense sector. This could be further incentivized by including all military transport in the EU-Emissions Trading System (EU-ETS).14

Fostering the independence of the armed forces from fossil fuels is in Germany’s direct security interest because it would save costs in the medium to long term while increasing the operational capability of the Bundeswehr. Sourcing electricity from renewables and using off-grid systems in the context of foreign deployments could, for example, reduce dependence on energy infrastructures that are often fragile. This is especially true in remote regions or those disproportionately affected by climate change where continuous operational capability is key.

2. Replacing Hydrocarbon Dependencies With Energy Partnerships and Increasing Autonomy

Those drafting the NSS are facing overlapping crises – in the European security order, energy, and climate – the roots of which are symptomatic of a structural deficit in German and European security thinking in recent decades: the preference for short-term economic advantage at the expense of broader responsibilities. The current energy crisis is a case in point. Europe’s primary energy security concern has long been to secure sufficient and cheap oil and gas imports. Its dependence on gas, especially from Russia, was particularly severe given fixed infrastructures (pipelines) and long-term contracts as well as geopolitical concerns. In the context of Russia’s invasion of Ukraine, this narrow conception of energy security severely backfired; Germany, in particular, is struggling to free itself from imports.

It is crucial that Germany draws the right lessons from this experience. The integration of climate considerations can help anticipate dependencies and long-term consequential costs (financial, ecological, and geopolitical) and thereby increase resilience to external foreign policy shocks. Moreover, renewable energy sources and the European Green Deal promise Germany a degree of autonomy by reducing its expenditures on energy imports while allowing it to make an important contribution to planetary security. Thus, the NSS should not only frame the use of renewables as a means to increase security of supply within Germany, but also embrace the geo-economic and foreign policy potential that would result from assuming a leadership role in accelerating the green transition both within Germany and worldwide.

Germany needs to build new energy partnerships that help it avoid long-term path dependencies on fossil fuel imports. It would be of little use, for example, if it increased its security of supply in the short term through gas provided by long-term contracts with a few supplier countries that ultimately led to new geo-economic and geopolitical dependencies. Rather, foreign policy must leverage mutual benefits in those areas of transformation that minimize risks and dependencies. One crucial area in this regard is the sourcing of so-called rare minerals and other raw materials imported for green technologies and digital infrastructures (see box on page 6).


REDUCING GEOPOLITICAL RISK IN THE SOURCING OF CRITICAL RAW MATERIALS

Though not all “rare minerals” are actually rare, many are found only in certain geographical locations or produced and processed by a few states.\(^{17}\) This has geopolitical implications: Many resources needed for the green transformation are extracted in states that are characterized by fragility and a high risk of violent conflict. Because the governance of natural resources in these states is often problematic, increased demand could be accompanied by threats to social peace and human security on the ground.\(^{18}\)

A dominant player in the extraction of these raw materials is China, which – supported by heavy government subsidies – has secured a leading position and accounts for the vast majority of global production. With few production capacities of their own, Western countries have become increasingly dependent on imports of critical resources, having neglected the strategic importance of this sector in developing supply chains and trade partnerships – a situation that has become a threat both to economic resilience and security.\(^{19}\)

At least three complimentary pathways exist to decrease dependencies:

1. In the medium-term, EU countries should work toward diversifying their trade relationships, thereby decoupling markets for materials critical to national security and reducing dependence on China. It has been argued that, in reworking its partnerships, the EU should prioritize partnerships with countries that are socio-politically stable, where the risk of economic coercion is low, and where the risks of expected disruption to supply due to climate-related natural disasters are manageable.\(^{20}\) It must also be taken into account that materials needed for the green transition are by no means sustainable per se as their extraction and processing are often accompanied by local environmental impacts or emit considerable amounts of CO2.\(^{21}\) Therefore, the challenge is to relate the global potential for reducing emissions to local environmental impacts and to design supply chains that are as environmentally friendly as possible.

2. In the long-run, EU countries could explore ways and means to ramp up domestic production. The EU Commission has recently taken concrete steps in this direction. If this path is pursued, however, priority must be given to adhering to environmental standards and safeguards.\(^{22}\)

3. Another long-term ambition for EU countries should be to develop a circular economy in which critical materials can be recycled to decrease demand.

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\(^{17}\) Leonard et al., “The geopolitics of the European Green Deal,” (see note 15).


\(^{22}\) Proposed mining projects, like the one in the Barroso mine in Portugal considered for unearthing lithium reserves, already demonstrate that environmental scrutiny will be a justified concern. See Sam Fleming, Alice Hancock, and Peter Wise, “EU digs for more lithium, cobalt and graphite in green energy push,” Financial Times, August 16, 2022: https://www.ft.com/content/363c1643-75ae-4539-897d-ab16adfc1416 (accessed August 19, 2022).
Furthermore, the decarbonization of the energy sector should be pursued with an international outlook through diplomatic efforts at the bilateral, plurilateral, and multilateral level. Germany has already agreed several new energy partnerships, including a bilateral initiative with India and a plurilateral agreement with South Africa under the Just Energy Transition Partnership (JETP) concluded among that country, major European states, the EU, and the United States during the climate conference in Glasgow.  

These have the potential to combine climate policy ambitions with other foreign policy fields of action. With its planned participation in financing the green transformation in these countries, Germany can proactively shape its bilateral relations. There is great potential here for reducing emissions, as both India and South Africa are currently heavily dependent on fossil fuels, especially coal. Technology transfers could also leverage innovation potential. Furthermore, it may be useful to include additional financial resources for adaptation measures in local contexts in the JETP. Considering the links between mitigation and adaptation outlined above, this may make Germany’s commitment to the green transformation abroad more credible.

At the same time, climate partnerships can be a door opener for innovative companies. This networked approach to German foreign policy engagement should be promoted by the National Security Strategy. The softening of the goal of the G7 countries to no longer support fossil fuels abroad and the German government’s planned investments in Senegalese gas production not only send the wrong political signals to developing countries, but they also promote considerable economic risks at home and abroad by creating stranded assets.


Moreover, data shows that extreme weather and other climate events can prolong existing armed conflicts, increase their intensity, or cause more suffering for conflict-affected populations, contributing to complex humanitarian crises. While socioeconomic and political conditions continue to be the primary drivers of violent conflict, climate impacts are likely to increase future risks of conflict. In countries characterized by pronounced ethnic divisions and heavy dependence on agriculture, the risk for violent conflict increases after climatic extreme events. While the IPCC currently finds that socioeconomic and governance factors play a more central role than climate change in causing violent conflict, it is estimated that with increasing global warming, the consequences of weather and climate extremes will increase vulnerabilities and thus will also increasingly affect violent intrastate conflicts.

These increasing security implications of climate change – including the possibility that Russia’s war in Ukraine will be worsened by climate impacts – must be addressed. Specifically, impetus should be given within the framework of the United Nations. Alongside partners such as those convened under the Group of Friends on Climate and Security or the Alliance for Multilateralism, Germany has been advocating for the inclusion of climate considerations in the UN Security Council and other political fora. Admittedly, addressing climate as a threat to international security at the highest level remains fraught with difficulty as several states remain skeptical of this agenda. Notably, Russia has objected to the aspirations of bringing climate into the purview of the UN’s peace and security pillar.

Still, practical options exist. As a traditional supporter of the UN’s climate security agenda and the largest donor to the UN Peacebuilding Fund, Germany should support the further integration of climate security advisors in UN peace operations. In addition, it should work to ensure that humanitarian and development organizations within the UN system integrate climate expertise not only into strategic planning, but also into staffing. Measures could include tailored knowledge transfers for leadership personnel seconded to peacekeeping missions and mainstreaming climate security seminars into existing institutions, such as the Center for International Peace Operations. Environmental peacebuilding could be further integrated into existing mediation and crisis prevention efforts.

Climate-sensitive crisis prevention and management should also be reflected in concrete terms at the financial level. Germany currently contributes around 6 billion euros annually to global climate finance, making it one of the biggest contributors among industrialized countries. However, in the recent past, the majority of German climate finance has been directed toward mitigation measures – about 55 percent between 2013 and 2019 – while a relatively small share is reserved specifically for adaptation – about 17 percent. To start closing this gap and address the rapidly increasing climate crisis and its impacts in the Global South, the envisioned annual increases in climate finance over the next years should be primarily targeted toward adaptation. Because the vast majority of adaptation funding comes directly from the federal budget (as opposed to private funds), the federal government has considerable leverage in directing resources toward vulnerable countries and populations.

28 Intergovernmental Panel on Climate Change, “Climate Change 2022” (see note 1), p. 13.
29 Ibid., p. 15. Moreover, beyond the risk of armed conflict, the IPCC assumes that regions and people that already suffer from development constraints are particularly vulnerable to climate risks. Vulnerability is higher in regions with high poverty rates, problems with governance structures, limited access to essential services and resources, and where people already suffer from armed conflict or are directly dependent on natural resources. See ibid., p. 14.
Biodiversity Loss Impacts Security

Experts worldwide identify biodiversity loss among the top three global risks. Consequently, the loss of biodiversity and local resource degradation should also become a focus area for the German government at the intersection of climate impacts and threats to human security. In this context, more attention should be paid to the functions of local ecosystems ("ecosystem services"), taking into account the limits of their resilience and linking them to the needs of local populations.

The reforestation method of "farmer-managed natural regeneration," for example, offers the potential to revegetate agriculturally used land areas and to leave the local implementation of the changed land use to the farmers concerned. At the diplomatic level, the links between climate change and biodiversity loss could be addressed by bringing the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change (UNFCCC) closer together at the annual Conferences of the Parties (COPs).

Conclusion: Implementing Climate Security Multi-Sectorally

The Russian war against Ukraine has disrupted multilateral efforts to curb emissions, diverted resources, and shifted public attention from preventing crises to reacting to them. At the same time, realizing the adverse effects of fossil fuel dependencies has triggered governments to pursue energy transition targets with renewed determination. In this geopolitical shift, Germany is formulating its National Security Strategy, which must balance the need for a strong response against Russian aggression with immediate efforts to avoid future crises, including new conflicts, hunger, and the destruction of the human climate niche.

Without the protection of the natural environment, no economy will be able to flourish for long. As the climate crisis is unleashed and ecosystems collapse, the struggle to protect human rights and the most vulnerable will fail. Conflict mediation methods cannot ease tensions when natural resources continue to dwindle at a breathtaking rate. The planetary crisis threatens the very foundations of human development, including the sovereignty and security of entire states and societies. Therefore, the basis for national security is a safe climate and biosphere.

Consequently, the starting point for national security considerations should be the protection of planetary security and the global commons. Global emissions reductions should be framed as an inherent security interest and integrated into traditional areas of security and geopolitics. Budgeting must change so that the costs of negative externalities such as environmental impacts or human rights violations are calculated into strategic decisions alongside issues of security of supply and geopolitics. As a valued knowledge broker, Germany has the tools and capacities to enable science and industry to contribute to the greater good and instigate sustainability transformations beyond national borders.

At the same time, emerging climate risks are closely related to local challenges, such as biodiversity loss and food insecurity. Germany’s engagement in crisis prevention, peacebuilding, and development cooperation provides a good basis for addressing climate impacts institutionally and exploiting synergies. Only through a cross-thematic anchoring of climate and environmental protection will the National Security Strategy make a long-lasting impact. Because providing actual security requires eliminating the structural violence that is resulting from the destruction of our common home, planet Earth.
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