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# **FINDING THE RIGHT ROLE FOR NATO IN ADDRESSING CHINA AND CLIMATE CHANGE**

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## **EXECUTIVE SUMMARY**

The North Atlantic Treaty Organization (NATO) has evolved considerably since the end of the Cold War — taking on emerging threats like transnational terrorism and piracy, and venturing into new arenas such as cybersecurity and space. Today, two new issues are rising fast on NATO's agenda, despite neither fitting comfortably into the mission of an alliance founded to address a direct military threat to Europe: China and climate change.

The primary geostrategic competitor of the future — for the United States at least — is China. But while China presents a complex set of economic, political, technological, and military challenges for which developing common trans-Atlantic positions is proving challenging, it is also very unlikely to trigger NATO's Article 5 collective security provision.

Meanwhile, the primary existential threat faced by allies is climate change, which will of course affect NATO operations (including through its impacts on low-lying military bases) and the livelihoods — and potentially political systems — of NATO nations. The alliance is but one forum, however, that ought to be utilized to curb greenhouse gas (GHG) emissions to combat human-induced global warming. Moreover, mitigating the impacts of the climate crisis will require cooperation with China even as the strategic rivalry between the West and China intensifies.

How the alliance plans to address China and climate change remains far from clear — as does NATO's approach to these two issues as member states continue to calibrate their national positions. Nonetheless, the June 2021 NATO summit communiqué made clear that the alliance intends to tackle both of these security challenges as it develops its new Strategic Concept.

In this paper, we examine how NATO might usefully contribute to the trans-Atlantic response to the China challenge and climate change, while stressing why the United States and Europe will need to look beyond NATO to strengthen other frameworks — particularly the U.S.-European Union and NATO-EU relationships — as they seek to develop trans-Atlantic responses to these increasingly complex twin challenges.

## INTRODUCTION

The June 2021 North Atlantic Treaty Organization (NATO) summit in Brussels launched the process to develop a new allied Strategic Concept to update its 2010 predecessor.<sup>1</sup> As the summit communiqué stressed, NATO remains the central vehicle for security cooperation between the United States, Canada, and Europe.<sup>2</sup> Leaders noted the “multifaceted” threats faced by the alliance, including “systemic competition from assertive and authoritarian powers, as well as growing security challenges to our countries and our citizens from all strategic directions.” They endorsed the NATO 2030 agenda, which seeks to ensure the alliance is equipped to face the most pressing present and future security challenges.<sup>3</sup>

Two issues that are rising fast on NATO’s agenda are China and climate change. As they did in the 2021 communiqué, these twin challenges will feature in the new Strategic Concept in some fashion, but how the alliance plans to address China and climate change and what NATO’s proper role is on these two issues as member states calibrate their national positions remain far from clear.

The primary geostrategic competitor of the future — for the United States, at least — is China. But while China presents a complex set of economic, political, technological, and military challenges for which developing common trans-Atlantic positions is proving challenging, it is also very unlikely to trigger NATO’s Article 5 collective security provision. As French President Emmanuel Macron flatly stated after the 2021 Brussels summit, “NATO is a military organization, the issue of our relationship with China isn’t just a military issue. NATO is an organization that concerns the North Atlantic, China has little to do with the North Atlantic.”<sup>4</sup>

Meanwhile, the primary existential threat faced by allies is climate change, which will of course affect NATO operations (including through its impacts on low-lying military bases) and the livelihoods — and potentially political systems — of NATO nations. However, the alliance is but one forum that ought to be utilized to decrease greenhouse gas (GHG) emissions. Moreover, mitigating the impacts of climate change will require cooperation with China even as the strategic rivalry between the West and China intensifies. As Janka Oertel, Jennifer Tollman, and Byford Tsang articulated in a recent European Council on Foreign Relations paper, “Having acknowledged the fundamental systemic differences between it and China, Europe will increasingly have to balance the growing competitive dimension with the need to coordinate to achieve ambitious climate protection, including engaging China on the evolving rules of global competition around carbon.”<sup>5</sup>

Although NATO has evolved considerably since the end of the Cold War — taking on emerging threats like transnational terrorism and piracy, and venturing into new arenas such as cybersecurity and space — neither China nor climate change is an issue that fits comfortably into the mission of an alliance founded to address a direct military threat to Europe. Indeed, the nature of these two key threats highlights that member states will need to strengthen other frameworks that will play a more direct role



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in managing and addressing them, particularly the U.S.-European Union and NATO-EU relationships. Yet the June 2021 summit communiqué made clear that NATO intends to tackle both of these security challenges as it develops its new Strategic Concept (whereas the 2010 iteration mentioned climate change only briefly and China not at all). In this paper, we examine how NATO might usefully contribute to the trans-Atlantic response to the China challenge and climate change, while stressing why the United States and Europe will need to look beyond NATO as they seek to develop trans-Atlantic responses to these increasingly complex twin challenges.

## THE CHINA CHALLENGE

In 2020, Secretary-General Jens Stoltenberg tasked a “NATO 2030” expert reflection group with preparing a set of ideas for the allies to consider as they move to develop a new Strategic Concept that addresses the alliance’s main concerns for the coming decade. The expert group put the China challenge quite starkly, arguing that the country is “best understood as a full-spectrum systemic rival, rather than a purely economic player or an only Asia-focused security actor.”<sup>6</sup> This characterization went beyond the European Union’s own March 2019 designation of China as a systemic rival, focused on trade, governance, and human rights;<sup>7</sup> it foregrounded that China’s growing military power is not confined to the Indo-Pacific and that its technology investments in Europe threaten NATO’s ongoing efforts to ensure a high level of military interoperability among alliance members.

At the June 2021 summit, the NATO heads of state and government described China as presenting “systemic challenges to the rules-based international order and to areas relevant to Alliance security.” They mentioned Beijing’s “rapidly expanding” nuclear arsenal, its military cooperation with Russia, and its “use of disinformation.” They also noted their desire for engagement with China on issues of common concern — such as climate change — and called for “reciprocal transparency and understanding” in the nuclear area.<sup>8</sup> But the communiqué remained vague on the question of which tools NATO should wield in response to challenges posed by Beijing, leaving the details of alliance efforts in this area for the Strategic Concept to be unveiled at the Madrid summit in 2022.

Other NATO experts have added their calls for the alliance to shift more of its attention to China. Shortly after the June 2021 summit, former NATO Deputy Assistant Secretary-General for Emerging Security Challenges Jamie Shea and Syracuse University professor Michael John Williams wrote that “the Alliance must balance Russia — which remains a threat — with a new focus on Asia aimed at building modernized Indo-Pacific partnerships. China should be top of mind throughout all Alliance structures and a regular discussion point in all high-level meetings.”<sup>9</sup> Seton Hall University professor Sara Bjerg Moller has gone even further, arguing that the China challenge is precisely the type of threat NATO was designed to tackle, and that “[r]efocusing NATO to check the dangers posed by China’s rise would restore it to something closer to its original mission of safeguarding allies from strategic competitors.”<sup>10</sup>

The challenge that China poses for Europe is very different from the Soviet threat that NATO was originally formed to counter. With the Soviet occupation of Eastern Europe at the end of World War II, the United States, Canada, and Western Europe feared that Josef Stalin’s territorial ambitions extended even further west. NATO was created to reassure its founding European member states that the United States would protect them from

attack. China today is not poised to invade Europe militarily and thus the perceived threat is not as stark for the populations of NATO member states as those posed, for example, by Russia for the eastern members of the alliance and by migration (and the possibility that some of those migrants might have links to terrorist organizations) for southern allies.

In addition, the Soviet Union created its own closed economic sphere, de facto limiting Western Europe's economic exchange with it. China, on the other hand, is deeply embedded in the global economy, and in 2020, overtook the United States as the EU's largest trading partner.<sup>11</sup> Despite some calls in the United States for "decoupling," there is too much at stake with China to keep the economies as separate as those of the West and Soviet Union were during the Cold War.<sup>12</sup>

Not fearing a military invasion by China as they did from the Soviets during the Cold War, and economically intertwined with China as they never were with the Soviet Union, means that at least some U.S. allies will be unwilling, if asked, to choose sides between China and the United States in the heightening competition between the two superpowers. Recognizing European reluctance, Antony Blinken declared on his first visit to NATO as U.S. secretary of state in March 2021, "The United States won't force allies into an 'us-or-them' choice with China."<sup>13</sup>

### ***China's impact on NATO operations***

Since Article 5 refers to an armed attack in Europe or North America, China's actions in the South China Sea and more broadly in the Indo-Pacific are far outside NATO's writ in the North Atlantic, as Macron suggested in his post-summit comments. Nevertheless, Beijing has become increasingly active, although mostly non-militarily, in the Euro-Atlantic area where Article 5 applies. As the co-chairs of the NATO 2030 report argued, "China's control of a growing portion of critical European infrastructure—from telecommunications networks to port facilities—directly affects NATO readiness, interoperability, and secure communications."<sup>14</sup> China may not pose a Soviet-style, traditional military threat to Europe, but Chinese ships and planes operate in the Eastern Mediterranean, the North Atlantic, and the Arctic, and the Chinese military has conducted joint exercises with the Russians in the Mediterranean and Baltic seas. Beijing now controls approximately 10% of European port capacity, primarily along the Atlantic and the Mediterranean, including Piraeus in Greece, Valencia in Spain, and Zeebrugge in Belgium.<sup>15</sup>

China's challenge to NATO as a military alliance arises not only from its deployments, but its technology investments, including in 5G, as well as its role in supply chains, which could disrupt NATO military interoperability or create a Chinese capacity to disable weapons systems.<sup>16</sup> As Julie Smith, Andrea Kendall-Taylor, Carisa Nietsche, and Ellison Laskowski have argued, "NATO interoperability requires member states to have secure and resilient telecommunications infrastructure, which Chinese systems put at risk. Moreover, if the allies diverged in their responses to the China challenge, the result could be the adoption of different standards, which would also undermine the interoperability of forces."<sup>17</sup> In response, NATO member states should be able to count spending on secure 5G systems toward their 2% of GDP defense spending target.<sup>18</sup>

While the United States is restricting Chinese telecommunications giant Huawei from access to its 5G networks, the range of reactions across the alliance is varied.<sup>19</sup> Berlin is continuing to employ Huawei access, and although Paris favors Swedish and Finnish providers, it has not formally excluded the Chinese company.<sup>20</sup> Ottawa, the lone hold-

out of the Five Eyes on banning Huawei from its networks, has yet to reach a verdict as of mid-October 2021,<sup>21</sup> while Warsaw is pursuing Huawei's removal from Polish 5G networks.<sup>22</sup>

### ***NATO's tools for responding to the China challenge***

A decade ago, discussions about a forum for NATO conversations on China centered on the idea of a NATO-China Council, analogous to the NATO-Russia Council (NRC), a structured dialogue between the alliance and Moscow initially designed to ease the impact of NATO's enlargement into Central and Eastern Europe on the West's relations with Russia.<sup>23</sup> But the experience of the NATO-Russia Council demonstrates the limits of such a body; while presumably it should be important as a crisis management mechanism during a major conflict, the NRC failed to perform that role during the 1999 Kosovo war, when Russia suspended its participation in the NRC's predecessor, the Permanent Joint Council,<sup>24</sup> and during the 2008 Russia-Georgia war, when NATO declared it could not "continue with business as usual" in the NRC.<sup>25</sup> NATO proceeded to "[suspend] all practical cooperation" with Russia after the latter's invasion of Ukraine in 2014, despite seeking to keep a channel for dialogue open.<sup>26</sup>

While a forum for NATO-China discussions could prove useful beyond the military-military staff talks that have been held previously, NATO needs an internal alliance forum to help member states develop greater cohesion in responding to the myriad challenges that Beijing poses, namely in areas like 5G and artificial intelligence.<sup>27</sup> In their report, the NATO reflection group suggested forming a "consultative body modeled on the Coordinating Committee for Multilateral Export Controls" that operated during the Cold War.<sup>28</sup> CoCom, as it was known, was a voluntary mechanism with no formal enforcement procedures that enabled allied conversations to develop joint policies restricting the exports of sensitive technologies to the Soviet Union, China, and other Eastern bloc nations.<sup>29</sup>

The Cold War fear of keeping advanced Western technology out of the hands of the Soviet Union was a different challenge than the current concern that Chinese technologies will prove attractive to Western nations, giving Beijing the ability to infiltrate targets and inhibit operations during a crisis. To develop a common assessment of the threat China poses to building common approaches to technology investments within allied nations, the internal NATO forum<sup>30</sup> could serve as a platform to support key bodies such as the European Union, which will play a more important role than NATO in European decisionmaking on technology investment.<sup>31</sup>

NATO countries need to guard against falling prey to China's divide and conquer strategy facilitated through Beijing's own institutional mechanisms such as the Belt and Road Initiative<sup>32</sup> (BRI) that China has pursued in Europe — primarily through the 16+1/17+1 format that includes countries throughout Central and Eastern Europe — and Beijing's bilateral economic relations with European countries.<sup>33</sup> (In 2019, Italy signed a Memorandum of Understanding to join the BRI, becoming the first G-7 country to do so.<sup>34</sup>) In one notable example of China's economic power fracturing cohesion among democratic states, Athens blocked an EU statement criticizing China's human rights abuses in the United Nations Human Rights Council just months after the state-owned China Ocean Shipping Company bought a 51% stake in Greece's largest port, Piraeus.<sup>35</sup>

Coordination on technology investment decisions requires building stronger NATO-EU and U.S.-EU ties. In May 2021, the EU agreed to include Canada, Norway, and the United States in the Permanent Structured Cooperation (PESCO) Military Mobility project, an important sign for future U.S.-EU defense cooperation.<sup>36</sup> Building on a European Commission proposal,<sup>37</sup> the United States and European Union at their June 2021 summit announced the creation of a U.S.-EU Trade and Technology Council to set joint standards on new technologies, “with the aim of promoting a democratic model of digital governance.”<sup>38</sup> This council, which convened for the first time in September 2021, fits into a broader effort by the Commission to set forth an EU-U.S. agenda, creating a common framework for technology governance to ensure “secure 5G infrastructure across the globe and open a dialogue on 6G... part of wider cooperation on digital supply chain security done through objective risk-based assessments.”<sup>39</sup> Others have proposed a NATO-EU collaboration to establish an AI Center of Excellence that would more proactively address Chinese advances in artificial intelligence.<sup>40</sup>

NATO has a ready-made framework for working with Indo-Pacific partners through its global partnership program, which includes Japan, South Korea, Australia, and New Zealand, among other nations.<sup>41</sup> Foreign ministers from these four partners met at the North Atlantic Council (NAC) in December 2020 for the first time, and the NAC should hold such meetings on a regular basis to strengthen ties between NATO members and key U.S. democratic allies in Asia. The NATO 2030 expert group has suggested that NATO also seek a future partnership with India.<sup>42</sup>

Chinese deployments in the Euro-Atlantic area and increasing European (primarily U.K. and French) deployments in the Indo-Pacific will result in greater needs and opportunities for connectivity among U.S. allies across regions. Former U.S. Deputy Assistant Secretary of Defense for Europe and NATO Policy Ian Brzezinski has suggested that NATO could establish a small military headquarters in the Pacific through United States Pacific Command (PACOM) to help coordinate allied deployments in the region.<sup>43</sup> One way to begin building more multilateral interoperability in the Indo-Pacific would be to build a defense college for civilian and military leaders in the region similar to the NATO Defense College in Rome.<sup>44</sup> Such a college could include not just officers and political staff from America’s Asian allies but could serve to bring Europeans together with their Asian counterparts.

The accelerating importance of the Quadrilateral Security Dialogue or Quad (made up of the Indo-Pacific powers Australia, India, Japan, and the United States), along with formats like the France-India-Australia trilateral forum, creates opportunities for the U.S. and its allies to strengthen ties with India.<sup>45</sup> The United States has long worked closely with the U.K., France, and Germany in a NATO Quad on matters of significance for the trans-Atlantic area. Under U.S. leadership, a Quad plus Quad arrangement could bring key American allies plus one key non-allied security partner, India, together from Europe and the Indo-Pacific, and is a natural outgrowth of the NATO global partnership mechanism. Such conversations would primarily be political in nature, as key allies from these two regions could discuss the growing challenges that



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China poses. A Quad plus Quad arrangement might also help ease the tensions with France that erupted with the announcement of the AUKUS trilateral security pact and submarine deal between the U.S., U.K., and Australia in September 2021.<sup>46</sup>

These partnership formats could secondarily allow allies to share information on any new European deployments in the Indo-Pacific. A British Carrier Strike Group visited the region in spring 2021, paying calls to India, Japan, South Korea, and Singapore, and the British have announced that they will be deploying two warships permanently in the region.<sup>47</sup> Meanwhile, a French Amphibious Ready Group voyage transited in the South China Sea twice before its return to Toulon in July 2021.<sup>48</sup> (The first German warship to cross the South China Sea since 2002, a mission that has been repeatedly postponed due to German sensitivities and limited naval capability, is now on the docket again for later this year, but German military activity in the region will remain minimal.<sup>49</sup>) French Minister of the Armed Forces Florence Parly described the significance of the region to her country in 2019: “France is not going anywhere, because we are part of the region. We have territories here, we have more than 1.6 million inhabitants, several islands with different statutes, vast exclusive economic zones, and the responsibility that goes with the territory. The evolving security order affects us too.”<sup>50</sup> A Quad plus Quad mechanism could help the United States coordinate conversations among core European and Asian allies plus India on key political and economic challenges, and also provide a forum for discussion as France and the U.K. in particular become increasingly active militarily in the region.

Coordination is also important given that a key U.S. goal should be encouraging European “strategic autonomy” to develop the capabilities necessary to address security challenges in Eastern Europe, the Middle East, and North Africa. While increased French and British military deployments in the Indo-Pacific appear inevitable given the perceived interests of those countries, Europe has significant need to strengthen its capacity to manage more of the crises in its own neighborhood, especially as the United States continues to rebalance its foreign policy toward Asia. U.S. efforts to “pivot” depend on a more capable Europe in regions that historically have led the United States to put off its rebalancing efforts in favor of dealing with pressing conflicts — as in the Balkans in the 1990s and the wider Middle East after 2001.<sup>51</sup> While such European capabilities to take on greater responsibility for security along their periphery remain largely speculative to date, the U.S. and Europe not only have a stake in the development of those capabilities, but should seek to coordinate any prospects for a greater division of labor so that such activity does not weaken ties across the Atlantic.

While the United States is seeking opportunities to get Europe on board with developing common approaches to addressing the China challenge, and will attempt to use the Strategic Concept process to sharpen NATO’s focus on the threats posed by Beijing, NATO is less important for addressing the Chinese economic and technological challenges than the European Union and key bilateral relationships across the Atlantic. As a result, any effort by the United States and its allies to respond to China will require going beyond NATO.



## CLIMATE CHANGE

NATO has taken steps recently to lay out the ways that it can help in the effort to mitigate climate change,<sup>52</sup> and as an institution will be profoundly affected by the impact of climate change on military operations. But just as in the case of the China challenge, the alliance will be a limited tool among many that will be required to address the existential threat the climate crisis poses to the world.

While it is urgent given the scale of the environmental crisis that NATO prepare for climate-related security challenges and play its part in reducing greenhouse gas emissions, NATO should not and will not become the primary forum through which allies seek to tackle climate change. NATO, after all, is a military alliance. Short of militarizing the trans-Atlantic response to climate change — far from the desired response — the best way for NATO to address climate change is to adapt its own staffing, resources, and operations to assess and prepare for the security risks of climate change, while drastically reducing its own emissions as its member states take steps on their own and through other multilateral forums.

### *The intersection of climate change and security*

Climate change poses grave security risks, from water and food security to extreme weather events, natural disasters, climate-related migration, and violent conflict.<sup>53</sup> According to one estimate, 24.1 million people on average were displaced annually due to weather events and natural disasters from 2008 to 2018.<sup>54</sup> In 2010, the year the last NATO Strategic Concept was released, 400,000 people are estimated to have died due to climate change.<sup>55</sup> Models predict that the number of annual deaths could balloon to 1.5 million by 2100 if historical emissions trends are maintained.<sup>56</sup>



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Climate-related security risks are complex in their pace and geographic scope. But they are made particularly dangerous by their propensity to exacerbate each other. As the NATO Parliamentary Assembly recognized in 2015 through a resolution on climate change and international security,<sup>57</sup> climate change is a non-traditional threat multiplier.<sup>58</sup> Food and water scarcity increase the likelihood of conflict, which, in turn, increases climate-related migration. As the U.N. Security Council asserted in July 2020, drought, desertification, land degradation, and food insecurity in places like West Africa and the Sahel risk contributing to a vicious circle of extremism and conflict over natural resources.<sup>59</sup> In the Arctic, too, as Secretary-General Stoltenberg has argued, the melting of ice is “a strategic issue,” with competition between great powers over access to resources accelerated by global warming.<sup>60</sup>

NATO has long been cognizant of the security risks introduced by global climate change. In 1969, the alliance established the Committee on the Challenges to Modern Society (CCMS) to serve as a knowledge-sharing forum for NATO allied and partner countries on social, health, and environmental questions.<sup>61</sup> Secretary-General Jaap de Hoop Scheffer made early pronouncements on the matter in 2008;<sup>62</sup> these were only strengthened during the tenure of his successor Anders Fogh Rasmussen. In 2009, Rasmussen tasked NATO military planners with “[assessing] potential impacts, [to] update their

plans accordingly and consider the capabilities they might need in future.”<sup>63</sup> Addressing climate change in NATO, he continued, would mean “increasing preparedness to respond to natural and humanitarian disasters, at home or internationally, with all that that implies for training, equipment, and cooperation with civilian agencies.” The following year, NATO’s 2010 Strategic Concept built on Secretary-General Rasmussen’s momentum, acknowledging that environmental and resource constraints like “health risks, climate change, water scarcity and increasing energy needs” would significantly influence security in areas of concern to NATO and had “the potential to significantly affect NATO planning and operations.”<sup>64</sup>

By 2015, three of the ten “Instability Situations” identified in the alliance’s Framework for Future Alliance Operations as likely to manifest in the coming 15 years had direct links to climate change.<sup>65</sup> First was impeded access to and use of the global commons — a phenomenon exacerbated by scarcity of resources and climate change that, in turn, could disrupt financial markets, trade routes, transportation networks, and energy supplies.<sup>66</sup> The second was the “disruptive impact of migration,” which climate change is already heightening.<sup>67</sup> The third climate change-related instability situation cited was “large-scale disaster” — ranging from pandemics to famine or natural disasters and likely, the report noted, to be exploited by malicious state and non-state actors seeking to sow chaos and destabilize governments. In recent years, populist dissent and distrust in the United States and its NATO allies have been fueled by xenophobia and disinformation, threatening the resilience of their democracies. (To take only the most recent example, the crisis in Afghanistan has caused alarm among European politicians, who worry about a potential repeat of the 2015 migrant crisis and ensuing surge in support for antidemocratic populists and the far right.<sup>68</sup>) With climate change-related natural disasters and conflicts disproportionately affecting countries in the Global South, global warming will continue to propel migrants toward the United States and Europe, adding to the ability of nefarious actors in authoritarian rival states to exacerbate societal divisions.

The current NATO secretary-general, Jens Stoltenberg, himself a former U.N. Special Envoy on Climate Change, has been a vocal proponent of addressing climate change in NATO. In September 2020, he argued that despite being a military alliance, NATO ought to be concerned with climate change for three reasons: it “makes the world more dangerous”; “it makes it harder for [NATO’s...] military forces to keep our people safe”; and “we all have a responsibility to do more to combat climate change.”<sup>69</sup>

### ***The impact of climate change on NATO operations***

Climate change affects NATO’s air and maritime operations and more.<sup>70</sup> Because aircrafts require specified temperatures, pressures, and wind to perform properly during take-off and landing, rising temperatures, as in Iraq and Afghanistan, have impeded the functioning of transport planes and helicopters. Increases in sand and dust storms have created visual flight restrictions, interfering with alliance operations. NATO’s critical infrastructure is also threatened, for example, by the flooding of the American naval base in Norfolk, Virginia, that houses one of the alliance’s strategic commands. Given the reliance of NATO allies and partners on pipelines and cables that are potentially vulnerable to environmental disasters for energy supplies, the alliance should also not neglect the link between climate change and energy security.<sup>71</sup>

Although these changes will take place gradually and addressing them may not at first glance appear an obvious priority for the alliance, NATO can learn from the U.S. Department of Defense in better preparing for the worsening environment in which NATO operations will be conducted moving forward. The Pentagon has adopted a Climate Assessment Tool (DCAT), which analyzes the exposure to climate-related hazards of each of its 5,000 locations around the world using historical data and projections.<sup>72</sup> NATO could similarly adopt a tool to measure the climate-related risks to which its locations, operations, and missions are vulnerable.

### ***NATO's responsibility to counter climate change***

Stoltenberg is right to highlight the ethical imperative to address climate change, both for the sake of vulnerable populations already suffering its devastating effects and for future generations. At the crux of the humanitarian and security challenge posed by climate change is the fact that although it is a global threat, its impacts entrench existing global and social inequalities.<sup>73</sup>



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While wealthy countries bear the most responsibility for climate change, studies show that lower-income countries who have contributed the least to climate change are more vulnerable to its effects.<sup>74</sup>

Beyond exacerbating injustices between countries, the devastation wrought by climate change also disproportionately affects already more vulnerable groups within countries. According to U.N. data, women make up 80% of people displaced by climate change and climate-related migration leads to higher death rates for women in lower-income countries.<sup>75</sup> Given that climate change and environmental injustice go hand in hand, it is urgent that militaries of NATO — an alliance of wealthy nations with outsized greenhouse gas emissions that disproportionately harm citizens of the Global South — shoulder at least their share of the burden by reducing their emissions as much and as quickly as possible. The question here is the role NATO will play in those actions relative to other non-military forums.

### ***NATO's tools for responding to climate change***

While it is of critical importance given the scale of the climate crisis that the alliance adapt to better prepare for related security challenges and play its part in reducing emissions, NATO will not become the primary forum through which member states seek to tackle climate change. While NATO may serve as a forum for information sharing on non-traditional threats to allies, its core mission, as a military alliance, ought to remain deterring traditional security threats and coordinating military responses where those are needed.

NATO should focus on demonstrating leadership with respect to creating more sustainable practices as it carries out its missions and operations, which leave a colossal carbon footprint.<sup>76</sup> The U.S. military alone produces more greenhouse gas emissions than up to 140 countries<sup>77</sup> and the U.S. Department of Defense, according to a 2019 study by the Costs of War project at Brown University, is “the world’s largest institutional user of petroleum and correspondingly, the single largest producer of greenhouse gases... in the world.”<sup>78</sup> Yet for far too long, efforts to measure the precise carbon footprint of militaries

has been stymied by a lack of data and accountability.<sup>79</sup> It is surely no coincidence that increasing transparency on militaries' GHG emissions could lead to pressure to reduce emissions by limiting military activity. Moreover, decreasing reliance on fossil fuels could confer a unique military advantage, both to NATO countries' militaries and to the alliance itself. Indeed, as the Brown Costs of War study notes, reducing fuel consumption would in turn decrease "the dependence of troops in the field on oil, which... makes them vulnerable to enemy attacks" — a link of which the U.S. military in particular has long been aware.<sup>80</sup>

The priority for NATO member states, however, ought first and foremost to be to reduce their own militaries' emissions. While this is primarily an issue for each nation to address itself, since 2014, members of the alliance have sought to reduce the emissions of their military forces and infrastructure through the Green Defence Framework, which aims to increase NATO's operational effectiveness by changing its energy use.<sup>81</sup> The Smart Energy Team (SET) was established from the Green Defence Framework to advise NATO on its attempts to "green" the alliance. NATO should pursue and deepen these efforts by developing and implementing an emission measurement system for permanent infrastructure (like buildings, barracks, and depots) to incentivize host countries to reduce their militaries' emissions.<sup>82</sup>

Beyond seeking to reduce the emissions of NATO countries' militaries at the national level, NATO might also consider the carbon footprint of NATO military exercises when determining their size and scope. The alliance could even create an "exercises emissions scorecard" that provides transparency regarding the emissions produced by NATO exercises with the goal of creating more sustainable military practices. Efforts like these would fit well with Stoltenberg's recent declaration that NATO will conduct "an alliance-wide assessment of our assets and installations, integrate climate change into our planning and exercises, partner with industry to deliver climate mutual capabilities and prioritize sustainable technology."<sup>83</sup>

Furthermore, the urgency of curbing emissions offers all the more reason to, as the NATO 2030 Young Leaders Group has suggested, reform NATO's 2% of GDP defense spending metric.<sup>84</sup> Instead of focusing its defense burden-sharing conversation solely on that benchmark, NATO, recognizing the deleterious impact of military equipment on the climate, could find ways to reward allies for shifting to sustainable military technologies.

The alliance should urgently follow the secretary-general's proposal that NATO countries voluntarily agree to greenhouse gas emission reduction targets for their militaries. In September 2020, Secretary-General Stoltenberg suggested that:

"it is time to explore how NATO and our armed forces can contribute to... helping Allies to reduce their military carbon footprint... A first step could be for NATO to help members of our Alliance to calculate the specific carbon output of their militaries. And then to report those figures. The next step could be to consider voluntary targets for Allies to progressively cut those emissions."<sup>85</sup>

On this point, the June 2021 Brussels Summit Communiqué,<sup>86</sup> like the NATO Climate Change and Security Action Plan, showed promise.<sup>87</sup> Allies pledged to "significantly reduce greenhouse gas emissions from military activities without impairing personnel safety, operational effectiveness and our deterrence and defence posture." They also urged Stoltenberg to "formulate a realistic, ambitious and concrete target for the

reduction of greenhouse gas emissions by the NATO political and military structures and facilities and assess the feasibility of reaching net zero emissions by 2050,” a priority for the secretary-general. As for the NATO members’ national militaries, however, the communiqué was insufficiently ambitious. It said only that NATO would “develop a mapping methodology to help Allies measure greenhouse gas emissions from military activities and installations, which could contribute to formulating voluntary goals to reduce such emissions.” Yet member states should not wait to adopt such emissions reductions goals.

The next most important way for allied militaries to address climate change is to increase NATO staffing and resources tasked with assessing the security risks of climate change, invest in expertise on the intersection of climate and security, and incorporate climate scenarios into NATO’s existing activities.<sup>88</sup> This means empowering NATO’s Environmental Protection Working Group (EPWG), which seeks to diminish the harmful impact of NATO’s military activities on the environment, and the Specialist Team on Energy Efficiency and Environmental Protection (STEEEP), which “integrates environmental protection and energy efficiency regulations into technical requirements and specifications for military hardware, equipment, and machinery.”<sup>89</sup> NATO could also consider reviving the Environment and Security (ENVSEC) Initiative, a multilateral forum established in 2003 to address climate-related security risks in southeastern and eastern Europe, the South Caucasus, and Central Asia.<sup>90</sup> ENVSEC facilitated meetings between relevant stakeholders to “consult and agree on regional maps highlighting priority issues that are a threat to security” and raised funds to address them.

NATO allies should also make a political commitment to tackling the security risks posed by the existential threat of climate change. Citizens of NATO member states are increasingly aware of the security dimensions of climate change. When asked what they considered a major threat to their country in the Pew Research Center’s Summer 2020 Global Attitudes Survey, over 60% of citizens in every NATO member state surveyed cited global climate change.<sup>91</sup> For Spain, France, Italy, Belgium, the Netherlands, Germany, and Canada, global climate change was the most common response. Leaders of NATO member states should respond to this growing perception of climate change as an existential and security threat, especially in Europe, by publicly acknowledging the security risk it poses.

That said, to the extent possible, NATO member states must avoid militarizing the response to climate change. Beyond limited actions connected to NATO’s existing mandate as a military alliance, the alliance should prioritize deepening its cooperation on climate issues with other international organizations like the United Nations, European Union, and Organization for Security and Co-operation in Europe. NATO will never be a “first responder” to climate change. As Stoltenberg argued in 2016, this role lies in “areas other than defense,” like national environmental ministries and supranational climate policymakers (e.g. the European Commission).<sup>92</sup> Indeed, any attempts to militarize the response to global climate risk putting already vulnerable populations at greater risk.<sup>93</sup> As advocates of a feminist foreign policy remind us, demilitarizing the response to climate change — for instance, by avoiding militarizing national borders in a way that will harm vulnerable populations like climate refugees — is crucial.<sup>94</sup>

NATO can, however, play a role in combatting climate change through its emergency response mechanisms. The alliance's Euro-Atlantic Disaster Response Coordination Centre (EARDCC), founded in 1998, has assisted in several climate-related emergency responses, including flooding and extreme weather events in Ukraine, Moldova, Romania, and Hungary in the late 1990s and early 2000s, the 1999 earthquake affecting NATO member state Turkey, and the 2005 earthquake in Pakistan.<sup>95</sup> Climate-related security risks will only increase in the coming years and the EARDCC must be as prepared as possible to respond to ever-increasing environmental disasters, climate-related conflict, and migration crises. As it demonstrated in its humanitarian responses to the 2004 Indonesian tsunami,<sup>96</sup> and the following year in the United States after Hurricane Katrina,<sup>97</sup> NATO has the capacity to respond to natural disasters that other organizations do not possess.<sup>98</sup>

Ultimately, however, given the overwhelming impact of climate change on already vulnerable groups, efforts to address its security risks through a military alliance like NATO must not lead to a "securitization" of climate action, but rather to a "climatization" of other areas so as to build efforts to assess climate change's intersection with existing policy areas. As the NATO 2030 Young Leaders Group has argued, climate should be fully integrated into the core areas of NATO operations and missions.<sup>99</sup> To this end, a task force should be put in place to ensure coherence of climate-related efforts across the alliance — including the Green Defence Framework, SET, EPWG, and STEEEP.

## CONCLUSIONS

As NATO nations seek to address the China challenge and the existential threat posed by climate change, they should recognize the perilous nature of the linkage between these two issues.<sup>100</sup> It was only *after* the end of the most recent era of great power competition — the Cold War, the conclusion of which led to a decrease in defense spending<sup>101</sup> — that the U.S. saw a reduction in military energy consumption.<sup>102</sup> This suggests that fueling competition with China, especially in the military arena, could lead to a further increase in carbon emissions, thereby imperiling the effort to combat climate change. As NATO countries increase their efforts to manage the China challenge, they must remain mindful of the ways in which their military activities contribute to climate change.

While NATO as an institution has tools at its disposal to help allies harmonize their approaches to technology governance and mitigate NATO's own contributions to global climate change, the United States and NATO will need to enhance their cooperation with the European Union, which over time will play a greater role in addressing the China challenge and climate crisis than NATO. U.S.-EU cooperation on technology must continue to increase, and information sharing between the U.S., the EU, and NATO, such as through a proposed joint EU-NATO staff group to coordinate climate change measures, will be important.<sup>103</sup>

Indeed, despite the importance of reducing the emissions of NATO and NATO countries' militaries, climate change is a transnational challenge that demands a global, not only national or regional, solution. After all, China, the U.S., and Russia are the world's first, second, and fourth-highest GHG-emitting countries, respectively.<sup>104</sup> A robust response to the existential threat of climate change thus requires great power cooperation between the three on these issues, separate from the military arena. Yet finding a balance between cooperation and competition will be crucial. As Janka Oertel, Jennifer

Tollman, and Byford Tsang have noted, “As both the EU and China decarbonise their economies, they will not only face a similar set of challenges that cooperation could help overcome – but they will also be competing for leadership positions in low-carbon sectors, raw materials for green technologies, and the standards that govern them.”<sup>105</sup> To this end, while the EU should in particular work to “strengthen international governance systems around climate, including by making a serious effort to coordinate on the emerging standards for a decarbonised economy,” they should not forget that “competition [with China] around technologies, market shares, and standards will increase” as the EU, U.S., and China seek to achieve their climate goals.<sup>106</sup>

In that regard, one of the most important outcomes from U.S. President Joe Biden’s trip to Europe in June 2021 was the strong endorsement<sup>107</sup> he offered for the European Union at the first U.S.-EU summit meeting since 2014, a sentiment that was a far cry from his predecessor Donald Trump’s labeling of the European Union as a “foe.”<sup>108</sup> U.S.-EU cooperation needs to become a major centerpiece of allied climate change efforts and the trans-Atlantic response to China. At their June summit, the leaders declared a truce in their long-running Boeing-Airbus trade dispute in large part to combat the threat from the Commercial Aircraft Corporation of China, which will soon release a competitor to the Boeing 737 and Airbus A320, and which is cooperating with a Russian firm on a wide-body jet.<sup>109</sup> In addition, the leaders committed to establishing a U.S.-EU High-Level Climate Action Group.<sup>110</sup>

President Biden frequently refers to this moment in history as an “inflection point.”<sup>111</sup> Given the domestic divisions that plague the United States and many of its closest allies, he worries that democracies are not up to the challenge posed by authoritarian rulers. Can they prove to their citizens that they can effectively provide for them? Biden views cooperation with democratic allies as central to the American response, as demonstrated by the destination of his first overseas trip as president in June. As the leading forum for trans-Atlantic cooperation, NATO will be an important actor in confronting common global challenges. But given the nature of the threats posed by China and the climate crisis, the United States and its allies will need to go well beyond NATO to manage the most important issues facing the democratic community.



**Given the nature of the threats posed by China and the climate crisis, the United States and its allies will need to go well beyond NATO to manage the most important issues facing the democratic community.**

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