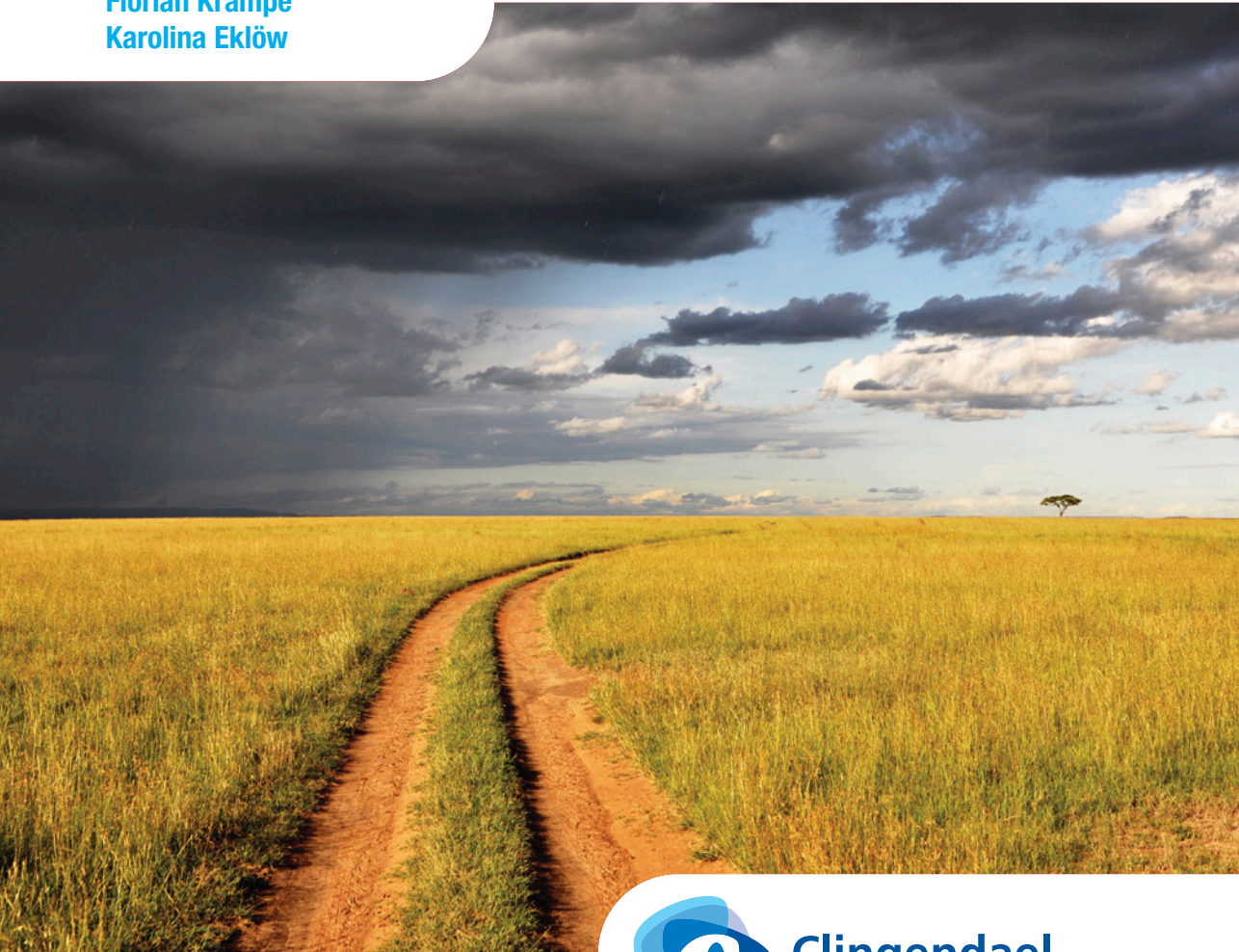


Climate Security

Making it #Doable

Dan Smith
Malin Mobjörk
Florian Krampe
Karolina Eklöv

The logo for SIPRI (Stockholm International Peace Research Institute) is a red square with the word "sipri" in white lowercase letters.

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With assistance from
Rickard Söder and Mikaela Wang

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Executive summary

Climate-related events left no region unaffected in 2018. These events demonstrate how climate change impacts are worsening. Despite increased geopolitical tensions that seem to undermine the Agenda 2030 or the Paris Agreement, global and regional organisations have been able to achieve some progress in addressing and mitigating climate-related security risks. This report, prepared for the Planetary Security Conference taking place in The Hague on 19-20 February 2019, feeds into the conversation by sketching the past year's trends in relation to climate and security.

Developments among regional organisations illustrate a growing awareness and action on climate security. A number of thematic debates in the European Union system, the African Union Peace and Security Council and the Arab League have been held, interrogating the links between, for instance, peace and climate, and water and security. Often, a strategic proposal or action plan has been the outcome of the discussions. In the UN system, the advances are illustrated by three interconnected changes:

- First, more United Nations Security Council (UNSC) resolutions now include language on the need for adequate climate risk assessment and management strategies. Likewise, several UNSC member states raise the issue in various events and forums. The formation of a Group of Friends on climate security illustrates the increasing support from governments around the world and their shared intention to push the climate security agenda forward.
- Second, the establishment within the UN system of a Climate Security Mechanism can be considered to be a first step towards a more comprehensive response to climate-related security risks. The Mechanism is located in the Department of Political Affairs (DPA) with staff allocated to it by the UN Development Programme and the UN Environment Programme as well as by the DPA. Its task is to provide integrated climate risk assessments to the UNSC and other UN bodies.
- Third, an independent Expert Working Group on Climate-related Security Risks was established with support from Sweden. It has provided assessments of climate-related security risks and risk management strategies to the UNSC. Germany has reconvened a similar group and announced its ambition to build on the efforts made by Italy, Netherlands and Sweden in 2017 and 2018. Other UNSC members, including Belgium and the Dominican Republic, have also embraced the agenda.

Looking forward, it is important to continue this momentum in both the UN system and regional organisations. For this, leadership is essential. Similarly, mitigating climate-related security risks will require actors to play different roles and to operate in different time horizons. In making climate security actions #Doable we argue there are at least three upcoming processes at global level that will be key in shaping action on climate security in 2019.

- First, the UN Secretary General's Climate Summit in 2019 is a key advocacy moment to shape the climate action agenda. This event will not specifically address climate-related security risks but will focus on raising the ambition to mitigate carbon emissions and foster climate financing. One of the arguments for raising the level of ambition on both mitigation and adaptation is based on climate-related security risks. The Planetary Security Initiative (PSI) community can nourish this summit and long-term agenda by supplying the knowledge that of necessity will be demanded.
- Second, the continuation of short-term diplomatic efforts in the UN, UNSC and regional organisations can be expected to continue, but progress should not be taken for granted. There is, for example, a risk that the recently established Climate Security Mechanism could become too overloaded with tasks. In order to analyse and suggest management interventions for the many relevant situations where climate change is increasingly posing security risks, more capacity is needed. More staff and resources are needed to continue feeding the system with well-informed and policy-relevant knowledge on climate-related security risks.
- Third, in July 2019 there will be a High-Level Political Forum (HLPF) monitoring and reviewing three Sustainable Development Goals (SDG) that are key to the peace and security agenda: SDG10 on Inequalities, SDG13 on Climate Action, and SDG16 on Peace, Justice and Strong Institutions. The HLPF presents a unique opportunity to understand the interconnected nature of these three SDGs and set long-term goals integrating climate-related security risks. Connecting the dots and advocating action to bridge long-term and short-term policy processes is key to making climate security actions #Doable.

1 Introduction

Climate change has landed. In 2018, its impact swept across the globe, taking human life, undermining livelihoods, destroying infrastructure, shaking national economies and stressing state budgets. Up to 1,000 people died in flooding in Kerala in southern India and 100 people during the wildfires in Attica, Greece. Typhoon Mangkhut in the Philippines forced half a million people to leave their homes. Tens of thousands of homes and facilities have been destroyed across regions in the US, Indonesia, Colombia and Europe. The recent *Global Risks Report 2019* from the World Economic Forum identifies extreme weather events and the failure of climate change mitigation and adaptation as the two most likely risks the world is facing, and ranks them second and third after nuclear war in terms of negative impact.¹

At a time when the need for international cooperation to face a global challenge has never been clearer or more pressing, there risks being a deficiency of cooperative instinct. There has been a marked deterioration in some aspects of major geopolitical relationships. The US and China are at loggerheads over trade and the South China Sea. The US and Russia have fallen out over arms control. Western and central Europe are alarmed by Russian moves in Crimea and the Sea of Azov. US-Turkish relations have soured over strategy in northern Syria. The US and Europe disagree on how to relate to Iran. Relations are deteriorating to almost toxic levels in some respects.

There is growing scepticism towards multilateral agreements that were achieved on the basis of what some had considered to be globally shared norms, rules and regulations. Informal coalitions of populist and authoritarian governments have gained greater confidence and credence in criticising and rejecting multilateral agreements, ranging from the International Criminal Court to trade agreements. This trend has left its mark on climate change negotiations. The climate conference in Katowice in December 2018 saw the US, Russia, Saudi Arabia and Kuwait join together to obstruct a joint statement welcoming the Intergovernmental Panel on Climate Change (IPCC) 1.5°C report published in October 2018.

This scepticism contrasts sharply with the approach required to make progress on facing up to the challenges that climate change poses. This approach has several features, beginning with close attention to evidence. It recognises the connections between areas of politics, policy and action that are sometimes held separate, such as environment on the one hand and security on the other. It stresses the need for

¹ Global Risks Report 2019, 14th edition, Geneva: World Economic Forum, p. 5.

collaborative action to meet shared challenges that do not respect national borders. And it seeks to identify and mitigate possibly harmful side-effects of policy decisions.

This report reviews the progress made in global and regional organisations on addressing and mitigating climate-related security risks despite the turmoil in global politics at large. It builds on the two previous progress reports for the Planetary Security Initiative (PSI).² The report focuses on progress in the UN and in regional intergovernmental organisations, both showcasing achievements and highlighting new challenges. Climate risks are multidimensional and they affect, as stressed in the IPCC fifth assessment report in 2014, diverse dimensions of security: human security, critical infrastructure, violent conflicts, and national security and defence policies.³ The concept of 'comprehensive security', which was used in the IPCC fifth assessment report, directs attention towards the multifaceted nature of climate risk and invites examination of how different dimensions of security interact.⁴

This report begins with a brief overview of the state of global climate and climate-related impacts in 2018. We then survey recognition of climate-related security risks in the activities of regional organisations, multilateral institutions and the UN system. Thereafter, the final chapter looks at geopolitical challenges and how efforts to comprehend climate-related security risks can be integrated into multilateral efforts.

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- 2 Mobjörk, M., Smith, D. and Rüttinger L. 2016. Towards a Global Resilience Agenda: Action on Climate Fragility Risks, Hauge: Clingendael, adelphi and SIPRI; Vivekananda, J., Fetzek, S., Mobjörk, M., Sawas A. and Wolfmaier S. 2017. Action on Climate and Security Risks: Review of Progress 2017, Den Haag: Netherlands Institute of International Relations 'Clingendael'/adelphi/SIPRI/Center for Climate and Security.
 - 3 Adger, W.N., J.M. Pulhin, J. Barnett, G.D. Dabelko, G.K. Hovelsrud, M. Levy, Ú. Oswald Spring and C.H. Vogel, 2014. Human security. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects*. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 755-791.
 - 4 Mobjörk, M., Gustafsson, M., Sonnsjö, H., van Baalen, S., Dellmuth, L.M., Bremberg, N. 2016. Climate-related Security Risks: Towards an Integrated Approach, Stockholm: SIPRI and SU.

2 2018 in review

This chapter will give a brief overview of the state of global climate, its impacts and its prospects. The chapter also reviews policy development on climate-related security risks in the multilateral system, most notably intergovernmental organisations at global and regional levels. It focuses on progress, showcasing the prospects for action despite increasingly global uncertainties and tensions.

2.1 The state of global climate

The World Meteorological Office (WMO) concludes that the global mean temperature for January to October 2018 was $0.98 \pm 1.12^\circ\text{C}$ above the pre-industrial baseline, i.e. 1850–1900.⁵ In 2018, the warming effect of the most recent *El Niño* wore off and the affected regions moved into the cooling phase, *La Niña*. Though 2018 is not the hottest year on record, it is beaten only by the three previous years, 2015–2017. The 20 warmest years on record have occurred in the past 22 years. Sweltering temperatures are becoming ‘the new normal’.⁶ In the latter part of 2018, forecasts surfaced from the WMO of an imminent new *El Niño* event by early 2019, unusually occurring soon after its predecessor, but likely to be somewhat weaker.⁷

Greenhouse gas concentrations reached new highs in 2017. The US National Oceanic and Atmospheric Administration (NOAA) Mauna Loa Observatory in Hawaii has registered record-high carbon dioxide levels for some months. The executive director of the International Energy Agency (IEA), Fatih Birol, stated that the agency expects the record to show that carbon emissions increased in 2018.⁸ IEA data on the first

5 The State of the Global Climate 2018, provisional statement, November 2018.

6 <https://data.giss.nasa.gov/gistemp/news/20180716/>; <https://data.giss.nasa.gov/gistemp/news/20180215/>; Dan Smith’s blog, ‘The heat and its implications’, 22 August 2018 <https://dansmithsblog.com/2018/08/22/the-heat-and-its-implications/>

7 McGrath, M. ‘Strong chance of a new El Niño forming by early 2019’, *BBC*, 27 November 2018 <https://www.bbc.com/news/science-environment-46347451>; Leahy, S. ‘2019 may be the hottest year yet—here’s why’ *National Geographic*, 6 December 2018 <https://www.nationalgeographic.com/environment/2018/12/2019-may-be-hottest-year-yet-el-nino-climate-change/>

8 Vaughan, A. ‘Energy sector’s carbon emissions to grow for second year running’, *The Guardian*, 8 October 2018 <https://www.theguardian.com/environment/2018/oct/08/energy-sector-carbon-emissions-grow-second-year-climate-change-coal>

nine months confirmed that carbon emissions reached a historic high, although exact numbers will not be available until March 2019.

In 2018, we also saw continued attention given to the way oceans are both being shaken up by climate change and also driving it.⁹ The oceans absorb much of the CO₂ emissions, and ocean temperatures have broken heat records for several years in a row. In January 2019 an article in *Science* showed that the oceans are warming on average 40 percent faster than was estimated by the IPCC in 2014. The article concluded that the heating has added to the destruction of coral reefs, increased rainfall, rising sea levels, deteriorating ocean oxygen levels and melting ice and glaciers.¹⁰

Both Arctic and Antarctic sea ice were well below average throughout 2018. Massive Canadian glaciers are shrinking rapidly, something never seen before.¹¹ In January 2019, reports show that the Antarctic sea ice reached its smallest size at this time of the year since 1978.¹² As well as the size of the ice cap, there is a worrying decline in total ice volume. Multi-year ice is thicker than saltier seasonal ice, making it more resistant to weather.¹³ More than 70 percent of sea ice is currently seasonal, which makes it the newest and thinnest ever observed by NASA.¹⁴ It is therefore likely that Arctic ice thickness will fluctuate more in the future due to its vulnerability to changing weather. Another well-known effect is the risk of feedback loops. When the Arctic Ocean is covered by ice, it reflects more sunlight, but when there is less ice, more heats get absorbed by the darker ocean. The result is a reinforced increase of the warming of the planet, and further melting of the ice.

Beyond climate itself, there is concern about the potential interactions between different aspects of environmental deterioration. An international study of ecological 'regime change' – that is, large, sudden and lasting changes in critical ecological sub-systems, or what most people refer to as 'tipping points' – revealed that interactions between various forms of currently unfolding environmental harm are poorly understood and have

9 Reuters, 'The planet's hidden climate change', 30 October 2018: <https://www.reuters.com/investigates/special-report/ocean-shock-warming/>.

10 Cheng, L., Abraham, J., Hausfather, Z. and Trenberth, K.E. 2019. How fast are the oceans warming?, *Science*, 363:6423, pp. 128-129, DOI: 10.1126/science.aav7619

11 Cecco, L. 'We've never seen this': massive Canadian glaciers shrinking rapidly', *The Guardian*, 30 October 2018 <https://www.theguardian.com/world/2018/oct/30/canada-glaciers-yukon-shrinking>;

12 <http://nsidc.org/arcticseaicenews/A-record-low-start-to-the-new-year-in-Antarctica>

13 NASA, 2018b. With thick ice gone, Arctic sea ice changes more slowly. Available at: <https://climate.nasa.gov/news/2817/with-thick-ice-gone-arctic-sea-ice-changes-more-slowly/> [Accessed 12 November 2018].

14 In NOAA's annual Arctic Report Card, released in Dec 2018, the estimation is 77% seasonal ice compared to 1980. <https://www.arctic.noaa.gov/Report-Card> See also: https://www.washingtonpost.com/energy-environment/2018/12/11/arctic-is-even-worse-shape-than-you-realize/?utm_term=.fb91595812e4 (accessed 7 December 2018)

almost certainly been understated.¹⁵ In this respect, it is worth noting that humanity has wiped out 60 percent of animal species since 1970, suggesting that what is often known as the sixth extinction is well advanced.¹⁶ This is confirmed by a study showing enormous loss of insects, with over 40 per cent of species threatened with extinction; insects' fundamental role in ecological balance suggests this aspect of the decline in biodiversity could be catastrophic.¹⁷ And in 2018, Earth Overshoot Day – the moment in the year when humankind has consumed more ecological resources and services than can be replenished in the course of that year – came earlier than ever before.¹⁸

2.2 Climate events and weather-related disasters

Throughout 2018, extreme weather events, droughts, wildfires and flooding occurred around the world causing humanitarian crises as well as capital losses. The disasters demonstrate the interplay between different climate events, but also show that the outcome is dependent on the vulnerability of a society and its ability to respond. Societies' responses will not be able to eliminate negative consequences but could at least reduce the most disastrous effects on human lives, well-being and prosperity.

In terms of heat and drought, the world faced record high summer temperatures. On 26 June 2019, in Quriyat in Oman, a new meteorological milestone was set for the 'highest "low" temperature' ever reached. During the course of 24 hours, the 'coolest' temperature reached during the night was 42.6°C.¹⁹ Similar records have been registered

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- 15 Rocha, J.C., Peterson, G., Bodin Ö. and Levin, S. 2018. Cascading regime shifts within and across scales, *Science*, 21 December 2018, 362:6421, pp. 1379-1383, DOI: 10.1126/science.aat7850
 - 16 Carrington, C. 'Humanity has wiped out 60% of animal populations since 1970, report finds', *The Guardian*, 30 October 2018 <https://www.theguardian.com/environment/2018/oct/30/humanity-wiped-out-animals-since-1970-major-report-finds>; see also Elizabeth Kolbert, *The Sixth extinction: An unnatural history* (London etc, Bloomsbury, 2014).
 - 17 Sánchez-Bayo, F. and Wyckhuys, K.A.G. 'Worldwide decline of the entomofauna: A review of its drivers', *Biological Conservation*, April 2019 (released early) Vol. 232, pp 8-27, <https://doi.org/10.1016/j.biocon.2019.01.020>; Carrington, D. 'Plummeting insect numbers "threaten collapse of nature"', *The Guardian*, 10 February 2019, <https://www.theguardian.com/environment/2019/feb/10/plummeting-insect-numbers-threaten-collapse-of-nature>.
 - 18 See Earth Overshoot Day (webpage) <https://www.overshootday.org/>; Watts, J. 'Earth's resources consumed in ever greater destructive volumes', *The Guardian*, 23 July 2018 https://www.theguardian.com/environment/2018/jul/23/earths-resources-consumed-in-ever-greater-destructive-volumes?CMP=Share_iOSApp_Other
 - 19 Millward, A. 'Omani town sets temperature record after one of the hottest days ever monitored', *Guinness World Records*, 5 July 2018 <http://www.guinnessworldrecords.com/news/2018/7/omani-town-sets-temperature-record-after-one-of-the-hottest-days-ever-monitored-531904>

in Australia.²⁰ In Europe, the temperature was 3-7°C above average in July.²¹ With unusually little rainfall, combined with high evaporation because of the heat, large areas of northern Europe experienced drought and vegetation was stressed. In Sweden, the wheat harvest decreased by 40 percent, with similar figures in Denmark.²² Moreover, the drought created conditions for wildfires. Sweden alone experienced around 50 forest fires, the worst outbreak ever recorded.

Similar patterns are detected across countries all over the globe. Greece faced heat and devastating wildfires causing the death of a hundred people.²³ In the US, the southwest²⁴ and California²⁵ have been plagued by drought. The largest wildfire in California in November, the Camp Fire, contributed to an extraordinary fire season with the deadliest fires in modern time: 85 people died in the fires.²⁶ Fires are not caused by climate change alone but it does make the situation significantly worse, as extensive drought dries out soil and vegetation.

Australia continues to struggle with a multi-year drought despite some rainfall in affected areas of Queensland and New South Wales – the first for a long time.²⁷ Central America is likewise confronting a multi-year drought, which has increased food insecurity for approximately two million people in Guatemala, El Salvador and Honduras. This devastating consequence demonstrates different societies' capability to manage stress. In August, the UN Food and Agriculture Organisation (FAO) and the World Food

20 Morton, A. 'How Australia's extreme heat might be here to stay', *BBC News*, 13 January 2018 <https://www.bbc.com/news/world-australia-42657234>

21 NOAA - <https://www.climate.gov/news-features/event-tracker/hot-dry-summer-has-led-drought-europe-2018> (accessed 10 Dec 2018)

22 NOAA - <https://www.climate.gov/news-features/event-tracker/hot-dry-summer-has-led-drought-europe-2018> (accessed 10 Dec 2018)

23 European Commission (26 July 2018) Copernicus EMS Monitors Forest Fires in Attika, Greece <https://emergency.copernicus.eu/mapping/ems/copernicus-ems-monitors-forest-fires-attika-greece>

24 NOAA - <https://www.climate.gov/news-features/featured-images/exceptional-drought-parts-seven-states-us-southwest> (accessed 10 December 2018)

25 Nicas, J. and Fuelled, T. 'Wildfire Becomes Deadliest in California History', *The New York Times*, 12 Nov 2018. <https://www.nytimes.com/2018/11/12/us/california-fires-camp-fire.html> (accessed 10 December 2018)

26 McKay, R. et al, 'California wildfire that killed at least 85 people fully contained', *Reuters*, 25 November 2018 <https://www.reuters.com/article/us-california-wildfires/california-wildfire-that-killed-at-least-85-people-fully-contained-idUSKCN1NU0A9>

27 Frances Mao, 'Australia drought: How much rain would end "the big dry"?' *BBC News*, 12 October 2018 <https://www.bbc.com/news/world-australia-45741494>; Chan, G. "'This drought is different": it's drier and hotter – and getting worse', *The Guardian*, 3 October 2018 <https://www.theguardian.com/environment/2018/oct/04/this-drought-is-different-its-drier-and-hotter-and-getting-worse>

Programme (WFP) began working with governments and other partners to mitigate the risk.²⁸

More broadly, along with violent conflict, climate change has been identified as the main driver behind the disturbing rise in world hunger in recent years, after several decades in which the numbers of people suffering chronic hunger had been falling. In three successive years – 2015, 2016 and 2017 – chronic hunger increased worldwide, affecting over 800 million people in 2017 and leaving nearly 100 million people dependent on humanitarian aid. In most regions of Africa and much of South America, food shortages and malnutrition increased but more than half a billion of the world's hungry live in Asia.²⁹

While some regions have been plagued by drought, others had too much water. Kerala in India, Sumatra Island in Indonesia, the Carolinas in the US, and Kuwait are four regions that experienced devastating flooding in 2018. The heavy rain in Kerala in southern India caused flooding and landslides that forced more than 220,000 people to leave their homes, and across the five affected Indian states 900 people lost their lives.³⁰ Heavy rain caused flooding and landslides in Sumatra, Indonesia, leading to infrastructure damage and killing at least 21 people.³¹ Heavy rain and thunderstorms also caused severe flooding in Kuwait.³² Hurricane Florence, which hit the US east coast, caused unprecedented flooding. In North Carolina, just one of the three states affected, tens of thousands of homes and other buildings were damaged.³³

In multiple extreme weather events throughout 2018 exceptionally high wind speeds were measured. When Typhoon Mangkhut hit the Philippines in September,

28 Moloney, A. 'Two million risk hunger after drought in Central America - U.N', *Reuters*, 7 September 2018 <https://www.reuters.com/article/us-americas-drought-un/two-million-risk-hunger-after-drought-in-central-america-un-idUSKCN1LN2AY> (accessed 10 December 2018)

29 Harvey, F. and McVeigh, K. 'Global hunger levels rising due to extreme weather UN warns', *The Guardian*, 11 September 2018 https://www.theguardian.com/environment/2018/sep/11/global-hunger-levels-rising-due-to-extreme-weather-un-warns?CMP=Share_AndroidApp_+TypeApp; 2017 SOFI report https://www.unicef.org/publications/index_100818.html; 2018 SOFI report <https://www.wfp.org/content/2018-state-food-security-and-nutrition-world-sofi-report>

30 Thakur, P. 'Monsoon Floods in 2018 Have Killed 993 People Across 5 States So Far', *The Weather Channel*, 27 August 2018 <https://weather.com/en-IN/india/monsoon/news/2018-08-27-monsoon-flood-death-toll> (accessed 10 December 2018)

31 BBC NEWS, 'Indonesia flash flooding kills at least 21 on Sumatra island', 13 October 2018 <https://www.bbc.com/news/world-asia-45850015> (accessed 10 December 2018)

32 Al Jazeera, 'Kuwait faces flooding as rains lash Middle East', 6 November 2018 <https://www.aljazeera.com/news/2018/11/kuwait-faces-flooding-rains-lash-middle-east-181106104141540.html> (accessed 10 Dec 2018)

33 Insurance Journal 'Hurricane Florence Damage in North Carolina Reaches \$17B', 2 November 2018 <https://www.insurancejournal.com/news/southeast/2018/11/02/506414.htm> (accessed 18 December 2018)

winds speeds were up to 325km per hour (kph); the immediate destruction forced approximately half a million people to leave their homes and killed at least 50.³⁴ In the Chinese province of Guangdong more than 2.5 million people were evacuated, though only two deaths were reported immediately after the typhoon had hit land.³⁵

In addition, some areas have faced hurricane-type events worse than ever before or even for the first time. Just east of Kuwait City, a wind gust of 115kph was reported in October, which is the highest measured in the region.³⁶ Somalia was hit by the tropical cyclone Sagar in May, which might be the strongest landfalling cyclone on record for Somalia. Thousands of people were affected by the flash flooding, and local news reported at least 31 people had died.³⁷ Similarly, Hurricane Leslie hit Portugal in October with wind gusts up to 176kph.³⁸ It is very rare that Atlantic hurricanes reach the Iberian peninsula.

2.3 Geopolitical tensions and progress in multilateral organisations

In January 2018, the *Bulletin of the Atomic Scientist* set its long-lasting and much quoted 'Doomsday Clock', on which midnight means apocalypse, to two minutes to midnight.³⁹ That is the closest it has been set to apocalypse since the late 1950s. On the same day, *The Economist* had a cover story on 'The Next War: the growing threat of a great power conflict'.⁴⁰

The *Bulletin's* focus was broader than that of *The Economist*. The latter focused anxiety on the risk of great power war, regarded until recently as a banished spectre. The *Bulletin* started at the geopolitical level, directing attention to North Korea's

34 Field, A. 'Philippines typhoon: More than 100 dead and missing', *CNN*, 17 September 2018 <https://edition.cnn.com/2018/09/17/asia/philippines-typhoon-mudslide-intl/index.html> (accessed 12 December 2018)

35 BBC News, 'Typhoon Mangkhut: South China battered by deadly storm', 17 September 2018 <https://www.bbc.com/news/world-asia-45543664> (accessed 12 December 2018)

36 Al Jazeera, 'Kuwait faces flooding as rains lash Middle East', 6 November 2018 <https://www.aljazeera.com/news/2018/11/kuwait-faces-flooding-rains-lash-middle-east-181106104141540.html> (accessed 12 December 2018)

37 Di Liberti, T., 'Rare tropical cyclone makes landfall in Somalia', in May 2018, *NOAA*, 24 May 2018, <https://www.climate.gov/news-features/event-tracker/rare-tropical-cyclone-makes-landfall-somalia-may-2018> (accessed 12 December 2018)

38 BBC News, 'Storm Leslie: Portugal hit by hurricane-force winds', 14 October 2018 <https://www.bbc.com/news/world-europe-45853847> (accessed 12 December 2018)

39 Mecklin, J., 'It is 2 minutes to midnight', *Bulletin of the Atomic Scientists*, 25 January 2018: <https://thebulletin.org/sites/default/files/2018%20Doomsday%20Clock%20Statement.pdf>.

40 *The Economist*, 'The Next War: the growing threat of a great power conflict', 25 January 2018: <https://www.economist.com/printedition/2018-01-27>.

nuclear weapons programme and the tense confrontation that had emerged because of it. The *Bulletin's* concerns also included the unfolding impact of climate change and the pressures of new information technologies in its analysis of rising risk. The two publications were aligned in their worry that the international system is failing, although there was a difference of emphasis. *The Economist* regretted the US failure under the Trump administration to protect the international system it had established and from which it continues to benefit. The *Bulletin* placed more emphasis on the way that key world leaders give less respect to the international institutional framework of treaty obligations and the UN than used to be the case. They were, in short, in their own ways equally worried about international stability and multilateral cooperation as one of the conditions for providing security.

Like any cooperative endeavour, multilateral organisations function on the premise of mutual trust. That is why the plentiful evidence of increased distrust in international politics between individual powers has caused echoes in the multilateral system. Most notably, by the end of 2018, the architecture of US-Russian arms control was clearly crumbling. The stand-out symptom of this was President Trump's announcement of the imminent US withdrawal from the 1987 Treaty on Intermediate Nuclear Forces. This came after several years of disputes, going back to the Obama era, about Russian non-compliance with the Treaty. But that is not the only aspect of arms control that is in deep trouble. The 2010 Strategic Arms Reduction Treaty, which reduced numbers of long-range nuclear weapons, expires in 2021 and there are no talks yet planned on extending or replacing it. As well as US-Russian relations looking troublesome, the US increased tariffs on Chinese goods, to which China responded in like manner. At the same time, tensions rose in the South China Sea when US and Chinese naval vessels passed within just 40 metres of each other. There were also continuing tensions between Russia and Europe over the former's 2014 annexation of Crimea, between Iran and Saudi Arabia, between China and India, between India and Pakistan, and between Turkey and the US over policy in Syria.

This backdrop of disunity makes it especially noteworthy and encouraging that, on some issues, unity in the quest for pragmatic solutions to certain issues has prevailed. This is particularly true on the issue of climate-related security risks and how global and regional organisations should respond to them.

Progress in the UN system

The UN system is currently taking on a reform process championed by the Secretary General, António Guterres. The need for it has been described as a necessity to reflect today's world. The process partly involves reorganising the UN's agenda, for example by prioritising action to prevent violent conflict, and partly involves reorganising the bureaucracy, agencies and some activities of the UN system as a whole. To create a UN that is fit for purpose in a world that has changed so profoundly in its demographic,

political, economic, technological, cultural and natural dimensions is both an outstanding priority and a herculean task.

The following section explores just one part of this endeavour by looking at how the UN system is starting to take on the task of addressing climate-related security risks, with particular emphasis on the UN entity that focuses on international security: the Security Council.

United Nations Security Council and member states

In the past, it was controversial to attempt to discuss climate change on the UN Security Council (UNSC), as the UK did in 2007 and Germany in 2011. Various states, members and non-members of the UNSC alike, regarded it as provocative or irrelevant or both. In more recent years, however, there began to be a slowly dawning realisation of the risks that climate change and related environmental stresses, such as land degradation, pose to international peace. The change occurred away from the headlines and with little or no short-term impact on action; it was a change in consciousness and understanding and it took time to feed through. The process was catalysed by new UNSC members who pledged to bring this agenda forward. Sweden, who joined in 2017-18, already used its ambitions on climate security to win support for its election campaign. Since early 2017 the number of UNSC resolutions that include language on the need for adequate climate risk assessment and management strategies has multiplied. These resolutions have been about the need to understand and manage specific situations and crises that were on the UNSC agenda, including mandates for peacekeeping operations. This is specifically noticeable for UN Missions in the Sahel and Horn of Africa that have been mandated to assess climate risks, including Lake Chad,⁴¹ UNOWAS (United Nations Office for West Africa and the Sahel),⁴² MINUSMA (Mali),⁴³ UNAMID (Darfur),⁴⁴ UNSOM and AMISOM (Somalia).⁴⁵

Following the Arria Formula meeting chaired by Italy on 'Preparing for the security implications of rising temperatures' in December 2017,⁴⁶ several UNSC member states continued to raise the issue in various events and forums throughout 2018. On World Water Day 2018, on 22 March, the Netherlands convened a meeting of the UNSC on the

41 Lake Chad Region ([S/RES/2349](#))

42 UN Office West Africa and the Sahel ([S/PRST/2018/3](#))

43 United Nations Multidimensional Integrated Stabilization Mission in Mali ([S/RES/2423](#))

44 UNAMID Darfur ([S/RES/2429](#))

45 UN Assistance Mission in Somalia ([S/RES/2408](#)) / AMISOM [http://undocs.org/S/RES/2431\(2018\)](http://undocs.org/S/RES/2431(2018))

46 This meeting was chaired by Italy and co-hosted by Sweden, Morocco, the UK, the Netherlands, Peru, Japan, France, the Maldives and Germany.

impact of climate-related water scarcity in the Lake Chad basin.⁴⁷ The briefers included UN's Deputy Secretary-General Amina Mohammed, independent conflict adviser Chitra Nagarajan and Mohammed Bila from the Lake Chad Basin Commission. The experts recommended a risk assessment on climate-related security risks in the region and regular presentation of the findings to the UNSC. They also emphasised that key to reconciliation and peace in the region are strengthened governance mechanisms and approaches that are based on human rights and which are conflict, climate and gender sensitive.

After successfully integrating climate change into UNSC Resolution 2349 on Peace and Security in the Lake Chad Region (2017) there was a call for improved UN risk assessments and risk management strategies. During its Security Council presidency in July 2018, Sweden chaired an open debate on climate-related security risks. UN Deputy Secretary-General Amina Mohammed stressed the complex relationship between climate change and conflict in the Lake Chad region. In her view, action on climate change should become an integral part of building a culture of prevention and ensuring peace.⁴⁸ In October 2018, Secretary-General António Guterres briefed the UNSC on 'The Role of Natural Resources as a Root Cause of Conflict' and stressed that the UN 'is seeking to strengthen our capacity to address the growing threat of climate-related security risks'.⁴⁹ Later the same month, several states – the Netherlands, Bolivia, Côte d'Ivoire, Belgium, Dominican Republic, Germany, Indonesia and Italy – convened an Arria Formula meeting on 'Water, Peace and Security' aimed at strengthening global monitoring of developments relating to water quantity and quality. It underlined the need for timely information sharing and early warning, as indicated by the UNSC's preventive agenda.⁵⁰

These developments fit well with the growing recognition that the role of the UNSC is not simply to respond to crises but also to prevent them from occurring. Although the US has held a low profile in 2017 and 2018, China seems to support this broadening of the UNSC agenda, at least to the extent of acknowledging that it has a role to play in addressing climate-related security risks. Russia's position is nuanced. It opposes the

47 Government of the Netherlands (18 March 2018) The Netherlands puts water centre stage at the UN on World Water Day <https://www.government.nl/latest/news/2018/03/18/the-netherlands-puts-water-centre-stage-at-the-un-on-world-water-day>

48 United Nations, 11 July 2018, Deputy Secretary-General's remarks at Security Council Debate on "Understanding and Addressing Climate-related Security Risks": <https://www.un.org/sg/en/content/dsg/statement/2018-07-11/deputy-secretary-generals-remarks-security-council-debate->

49 UN, October 16, 2018. Remarks to Security Council on the 'Maintenance of International Peace and Security: The Root Causes of Conflict – The Role of Natural Resources'

50 What's in Blue (25 October 2018) Water, Peace, Security Arria Formula Meeting: <https://www.whatsinblue.org/2018/10/water-peace-and-security-arria-formula-meeting.php>

UNSC assuming responsibility for the issue of climate change, for which, in any case, no one is arguing; it is also reluctant to treat climate-related security risks as a thematic question.⁵¹ Nevertheless, it agrees that when climate change is a factor among the drivers of conflict and insecurity in a country on the UNSC agenda, it is appropriate to discuss it. The trendline suggests that the UNSC will continue to address the issue. The latest country to bring it to the UNSC agenda was the Dominican Republic in its January 2019 presidency when it convened an open debate on the impacts of climate-related disasters on international peace and security.⁵²

The Climate Security Mechanism and Expert Working Group

Over the years since the 1992 Earth Summit in Rio de Janeiro and the entry into force two years later of the UN Framework Convention on Climate Change, it has become increasingly common for world leaders to label climate change as the greatest threat to global security.⁵³ However, engagement by the UNSC has not been commensurate with either the scale of the threat or the urgency with which it was sometimes depicted. Nor has the UNSC taken a systematic approach. A key issue here, summed up by Swedish Foreign Minister Margot Wallström in December 2017 was ‘an institutional gap in the UN system when it comes to addressing the risks of instability, insecurity and conflict arising from the interaction of climate change and social, economic and political factors’.⁵⁴ The point was echoed in the Hague Declaration on Planetary Security.⁵⁵ Within this lay a two-step problem: The first was how to bring well-established practical research findings on the relationships between climate change, socio-political contexts and risks of instability, insecurity and in some cases violent conflict to the attention of central UN actors including the UN Secretary-General and UNSC. The second was

51 Dröge, S. 2018. Climate and Security Revisited, *SWP Comment* No. 34 August 2018.

52 What’s in Blue, Open Debate: “Addressing the impacts of climate-related disasters on international peace and security” 25 January 2019 <https://www.whatsinblue.org/2019/01/open-debate-addressing-the-impacts-of-climate-related-disasters-on-international-peace-and-security.php>

53 See, *inter alia*, quotations and references in: Rüttinger, L., Smith, D., Stang, G., Tänzler, D. and Vivekananda J. 2015. *A New Climate for Peace - Taking Action on Climate and Fragility Risks* Berlin: adelphi, International Alert, Woodrow Wilson International Center for Scholars, European Union Institute for Security Studies; Rothe, D. 2016. *Securitizing Global Warming: A Climate of Complexity*, Routledge: Abingdon and New York, NY; Ghazi, W. G., Muniruzzaman, A. N. M. and Singh, A. K., 2016. *Climate Change and Security in South Asia: Cooperating for Peace*, Global Military Advisory Council on Climate Change (GMACCC) Paper no. 2 (GMACCC/Institute for Environmental Security/European Climate Foundation); Goldberg, J., ‘The Obama doctrine’, *The Atlantic*, April 2016.

54 <https://www.government.se/speeches/2017/12/speech-at-seminar-on-climate-change-and-security/> Margot Wallström, Statement on December 8, 2017, ‘Speech at seminar on climate change and security.’

55 The Hague Declaration (2017) Planetary Security Initiative https://www.planetarysecurityinitiative.org/sites/default/files/2017-12/The_Hague_Declaration.pdf.pagespeed.ce.QijtUyjl3f.pdf

how to move from information and analysis about risks towards generating adequate responses.⁵⁶

The need to give climate-related security risks a space within the central UN system gained increasing support during 2018. In November 2018, responding to the call by member states for greater focus on issues such as climate-related security risks, the UN formally established a pilot coordination mechanism for climate and security – the Climate Security Mechanism. Housed within the UN Department of Political Affairs as it transforms itself into the Department of Political and Peacebuilding Affairs (DPPA), with staff input from the UN Development Programme (UNDP) and UN Environment Programme (UNEP), the Climate Security Mechanism has the task of providing integrated climate risk assessments to the Security Council and other UN bodies through synthesising first-hand insight from different UN agencies and external experts. The goal is thereby to strengthen the capacity to take evidence-based policy decisions. There is a possibility it will also be allotted the task of assessing system-wide climate-related security risks, which would be an important step in ensuring the UN is fit for purpose in a climate-changing world.

The independent Expert Working Group on Climate-related Security Risks complements the coordinating work of the Climate Security Mechanism. It has provided assessments of climate-related security risks and risk management strategies relevant to the UNSC agenda. Synthesising expertise from different fields, it feeds knowledge and analysis into the UN system to strengthen decision making and programming on those risks within the UN. During 2018 the group published climate-related security risk assessments on Lake Chad, Iraq, Somalia and Central Asia.⁵⁷ The four reports build on research and insights from the field to provide integrated assessments of climate-related security risks – as well as other social, political and economic aspects.

Both initiatives – the Climate Security Mechanism and the Expert Working Group – were well received by several member states during 2018. It is important to highlight that the modest Climate Security Mechanism is a pilot initiative that requires strengthening so it can be strategically and practically meaningful. It is a small team and a new component in the UN system. As climate-related security risks and related issues are absorbed into the working framework of the UNSC's and broader UN system's agendas, there is a possibility that the mechanism will be over-burdened with too many tasks, to be carried out by too few staff, with too little time and budget. There is also the risk that the availability of the Climate Security Mechanism for analytical and guidance tasks in this

56 Born, C. 2017. A Resolution for a Peaceful Climate: Opportunities for the UN Security Council. *SIPRI Policy Brief*, January 2017.

57 Expert Working Group on Climate-related Security Risks <https://www.sipri.org/research/peace-and-development/climate-change-and-risk/expert-working-group-climate-related-security-risks>

field could become a licence for passivity by other parts of the system. Continued active engagement is needed from member states who are supportive of the establishment of the mechanism to ensure it fulfils its potential.

The link between climate change and security is nothing new under the roof of the United Nations. Ten years ago UN Environment was requested by the UN General Assembly to provide technical input to the drafting of a Secretary-General's report '*Climate change and its possible security implications*'. A broader network of stakeholders, governments and regional organisations are now rising to the occasion to strategically manage risks. This broad commitment is new. Governments and regional organisations are now rising to the occasion to strategically manage risks. The Climate Security Mechanism and the Expert Working Group are examples of how to bring research and practice from the field to the attention of the UNSC and gain traction despite geopolitical headwinds. This raises the possibility that a similar apparatus could be established in comparable institutional arenas, such as the EU, African Union, Association of Southeast Asian Nations (ASEAN) and other regional organisations. It is worth recognising that a number of processes are ongoing within the UN, regional organisations and joint partnerships aiming to mitigate climate-related risks and enhance resilience. Especially prominent is an EU-supported project led by UN Environment which is developing a methodology to help stakeholders map climate change and security hotspots and identify investments to reduce the risks.⁵⁸

Progress in regional organisations

The scale, depth and transnational nature of climate-related security risks challenges the capacity of national governments to respond adequately. In addition to raising the need for global responses, climate-related security risks increase the relevance of intergovernmental organisations (IGOs). It is, therefore, not only important to understand the climate-related security risks that regions are experiencing, but also to analyse how regional IGOs are developing their capacities to deal with these risks.⁵⁹

A recent study shows that, in various ways, climate-related security risks have found their way into the policy frameworks and institutional discourse of key regional organisations such as the EU, ASEAN, the South Asian Association for Regional

58 UNEP, '*Climate change and security risks*' <https://www.unenvironment.org/explore-topics/disasters-conflicts/what-we-do/risk-reduction/climate-change-and-security-risks>

59 For a first review of the growing research on IGO's responses to climate security, see Dellmuth, L.M., Gustafsson, M., Bremberg, N., Mobjörk, M. 2018. Intergovernmental organizations and climate security: Advancing the research agenda, *WIRE Climate Change*, <https://doi.org/10.1002/wcc.496>; Dellmuth, L.M., Gustafsson, M., Bremberg, N., Mobjörk, M. 2017. IGOs and Global Climate Security Challenges: Implications for Academic Research and Policymaking, *SIPRI Fact Sheet*, December 2017.

Cooperation (SAARC), the Economic Community of West African States (ECOWAS) and the Intergovernmental Authority on Development (IGAD). Climate-related security risks have become increasingly mainstreamed among policy makers across regional organisations.⁶⁰ This trend is generally reflected in other regional organisations and their discussions during 2018. The African Union, for example, held its 774th meeting of the AU Peace and Security Council, chaired by Rwanda, on 'The link between climate change and conflicts in Africa and addressing the security implications'. This theme reappeared in other AU regional conferences during the year, the latest being a conference hosted by the African Union Southern African Regional Office in November that linked climate security to the AU Agenda 2063.⁶¹

Other examples come from the League of Arab States. During the UN Security Council debate on climate-related security risks in July 2018, the delegation from Sudan, on behalf of the Arab Group,⁶² supported strengthening the UN's capacities to address climate-related security risks. Several members of the Arab League⁶³ have convened in various forums to address climate-related challenges, mainly food and water security.⁶⁴ For example, the Arab Water Council, consisting of all 22 Arab states, recognises that climate may reshape peace prospects.⁶⁵ The Council is finalising an Action Plan (2019-2021) that aims to achieve stronger coordination on the impacts that climate change will have on water resources in the region.⁶⁶

The Caribbean Community (CARICOM) has long been a strong advocate for recognising climate change as an existential security threat. It has a number of strategies for

60 Krampe, F. and Mobjörk, M. 2018. Responding to Climate-Related Security Risks: Reviewing Regional Organizations in Asia and Africa. *Current Climate Change Reports*, 20: 1–8. Springer International Publishing. DOI: 10.1007/s40641-018-0118-x; Bremberg, N, Sonnsjö, H, and Mobjörk, M. 2018. The EU and Climate Security: a community of practice in the making? *Journal of European Integration*, <https://doi.org/10.1080/07036337.2018.1546301>

61 African Union - Conference On Climate Change And Structural Transformation In Southern Africa-AU-SARO Official Speech <https://ausaro.africa/conference-on-climate-change-and-structural-transformation-in-southern-africa-au-saro-official-speech/>

62 UN Meetings coverage - Addressing Security Council, Pacific Island President Calls Climate Change Defining Issue of Next Century, Calls for Special Representative on Issue <https://www.un.org/press/en/2018/sc13417.doc.htm>

63 a.k.a *League of Arab States*

64 Arab League meets to address food security, November 2018 <https://www.almasryalyoum.com/news/details/1343653>

65 Arab Water Council, *The Arab Water Council participates in the launching of the SDG-Climate Nexus Facility Session on the occasion of the 2nd Arab Sustainable Development Week*, 18 November 2018 <https://bit.ly/2BkFwKS>

66 Arab Water Council, November 2018 <https://www.almasryalyoum.com/news/details/1343653>

regional cooperation on climate adaptation and societal resilience.⁶⁷ Guidelines on these issues for the Caribbean and other Small Island Developing States (SIDS) are set out in a document adopted in 2014 known as the *SIDS Accelerated Modalities of Action (SAMOA) Pathway*. The Pathway will be internationally reviewed by the UN in 2019, possibly during the UN High-Level Political Forum in July and also at a session in September.⁶⁸ In December 2018 representatives of the Caribbean region met in a regional Planetary Security Conference organised by the Caribbean Disaster Emergency Management Agency (CDEMA) and others, where they agreed a Plan of Action to bolster resilience. This Plan will be presented at the forthcoming Planetary Security Conference and will be monitored on a bi-annual basis by CDEMA.

In May 2017, the Andean Community adopted its Andean Disaster Risk Management Strategy following the Sendai Framework for Disaster Risk Reduction (2015-2030). The strategy's starting point is that anthropogenic climate change has increased the frequency of the El Niño Southern Oscillation (ENSO) and thus the intensity of floods and droughts in the region.⁶⁹ The strategy aims for timely decision making and review of instruments for the reduction of disaster risks.

The EU has a self-described comprehensive approach to security, which suggests it should be particularly well positioned to respond to climate-related security risks. Recent research shows, however, that the EU lacks an overall coherent policy and has a quite significant gap between a well-established discourse of policy aspirations and actual policy actions and outcomes.⁷⁰ That said, there are indications that a community of practice is emerging on climate security issues within the EU, addressing (if not always agreeing on) the areas in which it overlaps with the spheres of climate diplomacy, development, and security and defence.⁷¹ In February 2018, the Council of the European Union called for effective responses to climate-related security risks across policy areas in its Conclusions on Climate Diplomacy. In these Conclusions, the Hague Declaration and Planetary Security Conferences were explicitly referred to as examples of policy

67 Communiqué issued at the conclusions of the 39th regular meeting of the Conference of Heads of Government of the Caribbean Community <https://bit.ly/2CcrCMM>

68 UNGA to conduct a High-Level Review of the SAMOA Pathway in 2019 <https://sustainabledevelopment.un.org/sids/samoareview>

69 Andean Disaster Risk Management Strategy, Paragraph 45 https://www.preventionweb.net/files/submissions/53543_estrategiaandinaingles01.06.pdf

70 Planetary Security Initiative (June 2018) *Europe's Responsibility to Prepare: Managing Climate Security Risks in a Changing World*; Planetary Security Initiative (June 2018) *Climate-related security risks in Iraq and Mali: What the EU can do*

71 Bremberg, N., Sonnsjö, H. and Mobjörk, M. 2018. The EU and climate-related security risks: a community of practice in the making? *Journal of European Integration*, 17/2: 1–17. DOI:10.1080/07036337.2018.1546301 See also Bremberg, N. 2018. European Regional Organizations and Climate-related Security Risks: EU, OSCE and NATO, *SIPRI Insights on Peace and Security*, No. 2018/1

action. The EU underlines the importance of translating analysis into action, so climate projects are more conflict sensitive and security approaches more climate sensitive.⁷² In June 2018, EU High Representative for Foreign Affairs and Security Policy, Federica Mogherini, hosted a high-level event which drove home the urgency of tackling the risks that climate change poses to peace and security. Ministers from around the world, top UN officials and leading experts testified to the many real and potential security risks, at the event themed 'Climate, peace and security: the time for action'.⁷³

Both regional security contexts and regional vulnerability to climate change affect the framing of climate-related security risks.⁷⁴ In the region of the IGAD, whose eight member states are in the Horn of Africa and Nile Valley, considerable research has linked low-level violent conflict between herders and farmers to the rising pressures of demographic change, economic development and climate change.⁷⁵ IGAD policy frameworks acknowledge the role of climate change among the stressors affecting their region's security. By contrast, ECOWAS, which also faces problems of herder-farmer conflict, appears to focus concern about underlying causes of conflict and insecurity on the question of natural resources. This appears to originate from its experience with the role that natural resources played during recent conflicts. While there is an awareness of climate change among ECOWAS officials, the policy frameworks focus narrowly on the implications of natural resources rather than on climate change.

For regional organisations to respond adequately to increasing climate-related security risks, there is a need to invest in the development of better internal coordination mechanisms that could direct policy action across institutional boundaries. Considering the recent positive experiences with the instalment of a joint coordination mechanism in the top UN level (the Climate Security Mechanism), there is reason to think that a similar approach within regional organisations would help facilitate cooperation and informed

72 <http://data.consilium.europa.eu/doc/document/ST-6125-2018-INIT/en/pdf>

73 <https://unfccc.int/news/political-leaders-urge-more-climate-action-and-strong-outcome-in-katowice>
UNFCCC (27 June 2018) Political Leaders Urge More Climate Action and Strong Outcome in Katowice.

74 Krampe, F. and Mobjörk, M. 2018. Responding to Climate-Related Security Risks: Reviewing Regional Organizations in Asia and Africa. *Current Climate Change Reports*, 20: 1–8. Springer International Publishing. DOI: 10.1007/s40641-018-0118-x; Krampe, F., Scassa, R. and Mitrotta, G. 2018. Responses to climate-related security risks: Regional organizations in Asia and Africa. *SIPRI Insights in Peace and Security* No 2018/2.

75 See e.g. references in: van Baalen, S. and Mobjörk, M. 2018. Climate Change and Violent Conflict in East Africa: Integrating Qualitative and Quantitative Research to Probe the Mechanisms, *International Studies Review*, 20:4, pp. 547–575, <https://doi.org/10.1093/isr/vix043>; Bekele, H. 2010. Conflicts between Afar Pastoralists and Their Neighbours: Triggers and Motivations, *International Journal of Conflict and Violence*, 4 (1): 134–48; Charles, C., Daniel B.W. 2011. Climate, Carbon, Civil War and Flexible Boundaries: Sudan's Contested Landscape, *Land Use Policy* 28 (4): 907–16.

decision making. With the African Union, like the UN, going through a deep-reaching reform process, this appears as a unique opportunity to respond to the changing landscape and prepare the institution for future cross-sectoral risks.

Inevitably, climate-related security risks overreach the boundaries of IGOs. Regional IGOs could improve their ability to respond to climate-related security risks by utilising the subsidiarity principle. The way IGOs respond to climate-related security risks also reflects the influence of regional powers, which can either help or hinder the identification of a problem and the elucidation of a response. Diplomacy is therefore as important as technical and financial support in strengthening an organisation's capacity to mitigate climate-related security risks.

3 Towards '#Doable'

Events in 2018 confirmed that climate change poses manifold security challenges at different levels of international society. The weakening of multilateral institutions and increasing scepticism towards international norms, rules and regulations pose a serious risk, such that governments might become unable to address the global challenges of climate change. The tendency to view foreign policy as a zero-sum transaction clashes with the goals of Agenda 2030, the Paris Climate Agreement and the Sendai Framework for Disaster Risk Reduction.

Contemporary international politics, however, also offers room for new actors and new coalitions. In climate security policy this includes the formation of a Group of Friends on Climate and Security among governments active on the issue in the UN. The member governments support each other's efforts; this is visible in several events in the UNSC organised by multiple actors, and in the stances taken during UNSC debates.

Reviewing actions on climate security policy, this report has shown that despite increasing geopolitical turmoil, progress has been made. Deeper knowledge gained through climate risk assessment reports and the Climate Security Mechanism in the UN system is evidence of a slowly unfolding but fundamental change in the issue's standing. Continued support for these efforts will be critical in continuously mainstreaming climate security within the highest UN level. As well as reconfiguring mandates, improving the ability of organisations to respond to climate-related security risks will require new forms of collaboration and new tasks. Experience shows that merely allotting additional tasks to an organisation does not achieve transformation. Change needs support through additional resources and new incentives. Strategic leadership and persistence are key elements of supporting an organisation's capacity to assess and mitigate climate-related security risks.

3.1 Three parallel processes in 2019

Given the current tensions between geopolitical divisions and progress on climate security, the question becomes how to navigate the climate security road in 2019 and continue to mainstream climate-related security risks in the international system. The difficulty in the translation from analysis to policy has not been due to any deficiencies in the uptake of the underlying issues. Rather, the problem has been in the realm of 'So what?' In other words, it has been a challenge to grasp the practical policy implications of an analysis that reveals how climate change interacts with other features of the social, political, economic and demographic landscape to produce insecurities

and instabilities which, if they persist, could in some cases generate violent conflict. Yes, but so what? What is the ministry for development, or foreign affairs, or defence, or environment supposed to do about it?

The basic problem is that ownership of the problem and solution is not simple. The landing point for the policy responses within the machinery – in a government or an intergovernmental organisation – is often unclear.

The reason for this is that climate-related security risks do not pose a problem that is neatly shaped for any particular department. Seen from an analytical perspective, there is a problem; seen from a departmental perspective, there are many problems. There is a long-term issue of development, i.e. building resilience; there is a short-term problem of, for example, water shortages exacerbating tensions in this or that country. There is an issue of insecurity at global level because of the impact of climate change: what happens to the more than one billion people living in low-lying coastal areas if sea levels rise as fast or faster than so far predicted? And what happens to regional and even global security agendas if national governments are unable to care for the well-being of those people as their homes and livelihoods become less viable? There is also an issue of security at local levels, as evidenced by localised violent conflicts in the Horn of Africa, but also as evidenced for years in Yemen, part of the background to today's humanitarian catastrophe there.

We suggest that the best way to approach this is to recognise that different actors have wholly different roles to play in addressing climate-related security risks:

- 1) **The long-term development issues** are part of the turf of UNEP, the UNDP, DevCo in the EU, national development agencies and international non-governmental organisations. Development must be climate proofed and climate action must be development friendly. Also, there are several countries in which neither the climate nor the development agenda can proceed with absorbing the peacebuilding agenda. Thus, climate-friendly development must be conflict sensitive while peacebuilding must be climate smart. These principles are relevant irrespective of which organisation works on the agenda.
- 2) **The short-term diplomatic issues** are, as ever, in the purview of foreign ministries and the UNSC, and comparable entities at regional level. They may arise in the context of good offices and mediation missions in the UN and standard diplomatic relations between different governments. But the key point is that the analysis which informs them must include appropriate attention to climate change and similar environmental issues. These are increasingly evident and important aspects of the challenges to human insecurity in a considerable number of countries and regions. To ignore the role of nature in today's unfolding political crises is simply to ignore part of the reality of those crises and conflicts.

- 3) **Between the long and the short term sits advocacy.** It can usefully be broken down into three components. First, there is advocacy for raising the ambitions for climate action. One aspect of this is to aim to reduce carbon emissions. Similarly, and closely related, there is advocacy for raising the ambitions for financing adaptation and building resilience. Taken together, these steps could mean that the deterioration in human security and international stability that might rightly be feared as a long-term result of climate change would be less than the worst. Second, there is advocacy to try to resolve incipient or actual violent conflict, to bring parties together, pointing out that whatever divides them, the challenge of climate change could well unite them. Third, and closely related, there is the advocacy task of getting climate-friendly elements included in peace negotiations and settlements.

Leadership is key in this. Hierarchy, cooperation and management look different in different organisations, but a point of responsibility and accountability is a must. In this case, in particular, it is the responsibility for ensuring there is an integrated whole that contains the long-term and short-term strands along with the advocacy and which weaves them into a single, coherent and mobilising narrative.

During 2019, a sequence of events and platforms have the potential to stimulate attempts to advance this three-part agenda. These events and platforms are located at international level but are shaped by the diplomatic efforts, actions and intentions of numerous actors from different localities. Power dynamics of course play a role in the possibilities of influencing agendas, but likewise responsibility and accountability are necessary.

A Race We Can Win – A Race We Must Win

The UN Secretary-General's Climate Summit in September 2019 is a key advocacy moment to shape the climate action agenda. The aim of the summit is to raise ambitions on mitigation of carbon emissions and on climate financing. Secretary-General António Guterres has described climate change as 'the absolute priority' for the organisation. He will urge action in six areas during the potentially pivotal Climate Summit: climate finance and carbon pricing, energy transition, nature-based solutions, industry transition, cities and local action, and resilience.⁷⁶

The Climate Summit is a critical moment in the 2019 calendar for all actors to support higher ambitions for mitigation, resilience and adaptation. The Climate Summit provides an opportunity for the climate security community gathered within the PSI network to

76 UN SDG Knowledge Hub, Leila Mead, 'UN Secretary-General Urges Leadership to Face "Direct Existential Threat" of Climate Change', 13 September 2018 <http://sdg.iisd.org/news/un-secretary-general-urges-leadership-to-face-direct-existential-threat-of-climate-change/>

contribute by making a case, based on planetary security, for decisive climate action, and with practical suggestions on mitigating climate-related security risks.

Short-term consolidation in the UNSC

The integration of climate-related security risks into resolutions and the work of the UNSC is essential for global recognition of climate-related effects on security and violent conflict. It is an immediate and short-term tool to strongly emphasise the security-related nature of climate change.

Germany has entered a two-year period as an elected member of the UNSC and has been the most explicit in announcing climate and security as one of the key priorities for its work. Other newly elected members such as the Dominican Republic and Belgium are part of the Group of Friends on Climate and Security in the United Nations,⁷⁷ providing a momentum to continue and develop the efforts made by Italy, the Netherlands and Sweden during the last two years. In August 2018, Germany invited, as part of their preparation work, a group of friends of member states in the UN General Assembly, and in October 2018 a group of experts to form a network on climate and security. At the time of writing this report, the functions of these two groups has not yet been decided. However, these invitations demonstrate Germany's ambition to continue the momentum built up in recent years to strengthen the UN system's ability to prioritise climate-related security risks. Early indications are that short-term consolidation is taking place with Germany's support of the Dominican Republic for their high-level open debate in the UNSC about the impacts of climate-related disasters on international peace and security.⁷⁸ It would be an important development if South Africa and Indonesia – also new members of the UNSC – were to join and support initiatives on climate security.

Long-term strategy – engaging the High-Level Political Forum

The HLPF in July 2019 will monitor and review the progress of the Sustainable Development Goals (SDGs) with a particular focus on, inter alia, Inequalities (SDG10), Climate Action (SDG13) and Peace, Justice and Strong Institutions (SDG16). In July,

77 Federal Foreign Office of Germany, 'United Nations: Germany initiates Group of Friends on Climate and Security', 8 August 2018 <https://www.auswaertiges-amt.de/en/aussenpolitik/themen/klima/climate-and-security-new-group-of-friends/2125682>

78 Wettengel, J. 'Germany supports Dominican Republic's push for climate action in UN Security Council – source', *Clean Energy Wire*, 9 January 2019 <https://www.cleanenergywire.org/news/germany-supports-dominican-republics-push-climate-action-un-security-council-source/>; What's in Blue, Open Debate: 'Addressing the impacts of climate-related disasters on international peace and security', 25 January 2019 <https://www.whatsinblue.org/2019/01/open-debate-addressing-the-impacts-of-climate-related-disasters-on-international-peace-and-security.php>

the HLPF will gather civil society, the private sector and government delegations to review implementation and progress; a follow-up meeting in September alongside the General Assembly will bring heads of government into the assessment process. The 2019 HLPF presents a unique opportunity to understand the interconnected nature of the three named SDGs and set long-term goals integrating climate-related security risks.

Linking SDG13 (climate) with SDG16 (peace) and bringing expertise from both spheres under the same roof embodies the ambition that the integrated approach and Climate Security Mechanism embody. Recent progress in establishing the Mechanism, and supporting it through the Expert Working Group, has anchored climate-related security risks within the highest level of the UN system; 2019 thus provides a decisive momentum for its function. Established only in November 2018, the Climate Security Mechanism faces major tests of its capacity in preparations for the High-Level Political Forum in July and the Secretary-General's Summit in September. If both HLPF and Summit are successful, they will likely result in a wealth of further tasks assigned to the Climate Security Mechanism for late 2019 and into 2020. One practical step towards this end would be to provide the Mechanism with additional staff, most straightforwardly by member states seconding staff, financing posts and funding Junior Professional Officer (JPO) positions in the unit.

3.2 The new normal – or not

Climate action is feasible, thus the tagline for the Planetary Security Conference 2019: #Doable. Strengthening peace and security is also feasible; that has been the ineradicable lesson of the decade from the mid-1990s, as the world's zone of peace expanded even though new wars and violence broke out.

The challenges, of course, are formidable. The global economic system is built on an unsustainable scale of consumption of natural resources. The global political system experiences growing geopolitical tensions. As science provides more and more evidence of the current and likely future effects of climate change, we see more and more clearly a greater need for deeper cooperation on climate. That is precisely what is undermined by new geopolitical tensions. Nonetheless, as we have seen in this review, an optimistic story can also be told, with progress being made in adapting agendas and institutions to face the compound challenges of climate change. A teenager, Greta Thunberg, gained great publicity and an international profile when she held a long vigil outside the Swedish parliament building in 2018 demanding that politicians take action on climate change. Invited to speak at the Katowice climate conference in December, she told the delegates, 'Change is coming whether you like it or not.'

Although some of the changes for the better identified in this report are modest, they indicate that it is a matter of choice in politics and policy, whether the change that is coming is something that we will like and thrive with.