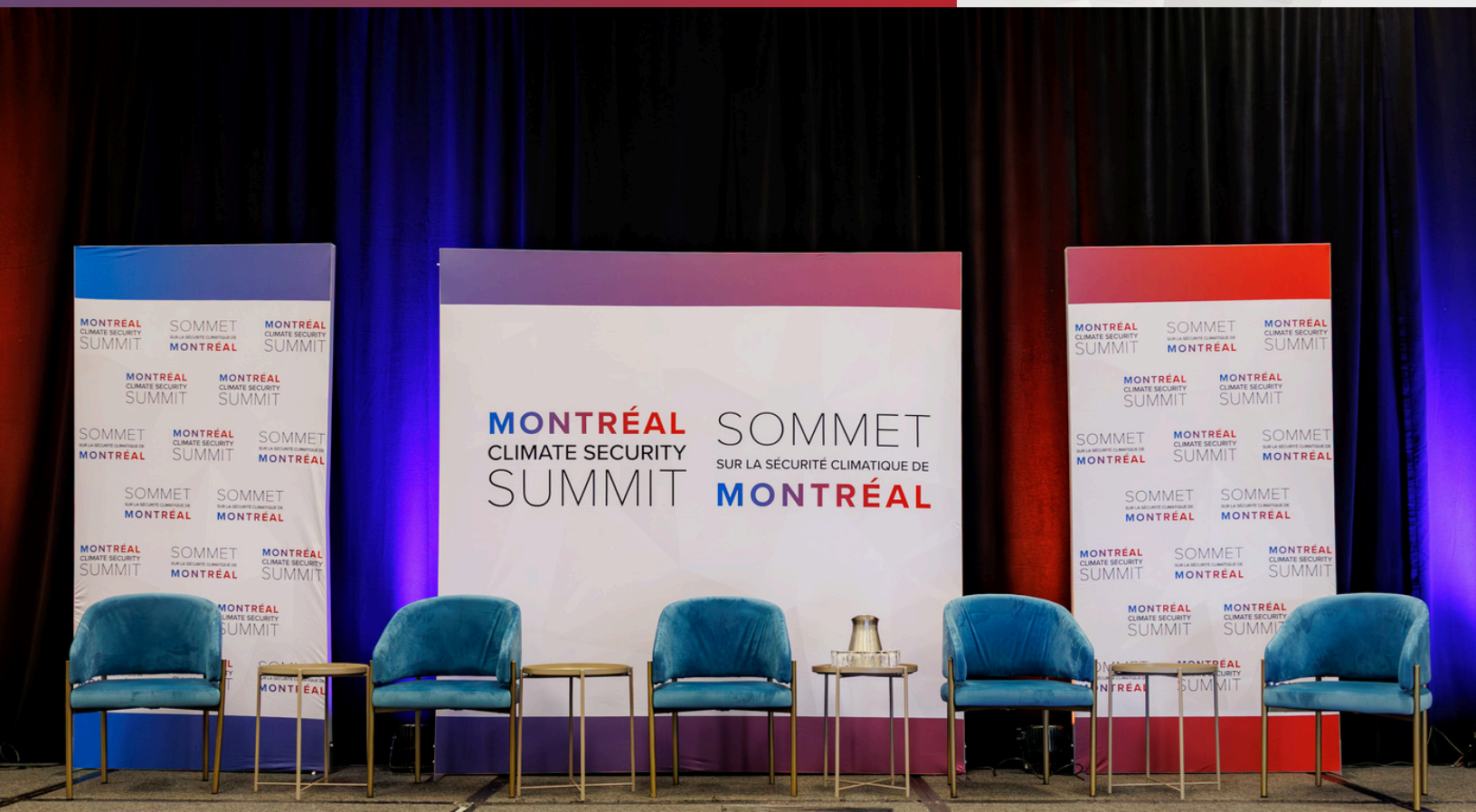
Event Report

4th Montréal Climate Security Summit

CDA INSTITUTE

2025



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Executive Summary

Event Overview

The 4th Montreal Climate Security Summit (MCSS) took place in Montreal on October 8-9, 2025, and was co-organized by the NATO Climate Change and Security Centre of Excellence (CCASCOE) and the Conference of Defence Associations (CDA) Institute. Under the theme "Strengthening military adaptation in the face of climate risks", more than 280 participants exchanged views on the security challenges posed by climate change and the cross-sectoral solutions needed to address them in a military context.

Core takeaways

Across keynotes, workshops, and panels, participants highlighted that climate change is a defining driver of instability and an operational risk shaping defence planning, readiness, and the geopolitical environment. Climate impacts are increasingly non-linear, requiring adaptive mindsets, new analytical tools, and closer integration of scientific expertise into defence forecasting. Rising climate-driven disaster is placing pressure on militaries as civilian systems struggle to cope, compounding existing local fragilities and contributing to secondary effects including domestic and regional instability, as well as internal and cross-border displacement. Climate hazards also amplify grey-zone and hybrid threats, as infrastructure failures, resource scarcity, and population displacement create vulnerabilities exploitable through cyber operations, economic coercion, and disinformation.

Summit discussions highlighted that resilience depends on data access, interoperability, and foresight. Regarding data access, the challenge is not data scarcity, but the failure to share and act on information, all of which is compounded by the language gap between scientists and security practitioners. In addition, early-warning systems were presented as central to reducing damage, while technologies such as artificial intelligence offer opportunities for multi-hazard analytics, if used judiciously.

Regionally, discussions underscored climate-security stressors in areas such as the Middle East and North Africa (MENA) region, the Arctic, and Eastern Europe. They included topics such as displacement and governance fragility, Arctic sovereignty and community resilience, and the security implications of fossil-fuel dependence under conditions of war and crisis. The domain-specific sessions highlighted that climate risks shape areas of land, air, maritime, space, and cyber military operations. Other conversations fostered debates in areas such as geoengineering and the regulation of dual-use technologies.

"We want to extend our heartfelt gratitude to all participants, keynote speakers, moderators, panelists, sponsors and staff from our organisations for their contribution to a successful Summit. We are looking forward to hosting you again in Montréal in Fall 2026."

Dr. Gaëlle Rivard Piché

Executive Director of the CDA Institute

Mr. Mathieu Bussières

Director of CCASCOE

Recommendations

Summit recommendations converged into **four priorities**.

1. NATO and national defence institutions should formally integrate climate change as a key operational consideration by mainstreaming climate adaptation into military procurement, capability development, and infrastructure planning, with decision-making supported by strategic foresight and expanded wargaming.

2. Defence decision-making must be strengthened through better integration of scientific expertise, interoperable data-sharing across nations and sectors, and assessments of national natural resource capital.

3. A whole-of-society approach to climate resilience should focus on coordinated risk-governance, investments, and capacity-building across military and civilian institutions, communities, and the private sector. The military should be clearly positioned as a force of last resort rather than a substitute for civilian authorities.

4. Decarbonization should be treated as a core security priority, with defence investments directed toward clean energy, low-carbon fuels, diversified supply chains, and greater domestic energy autonomy, thereby strengthening energy security and enhancing operational effectiveness and safety.

Introduction

The 4th edition of the Montreal Climate Security Summit took place in Montreal, Canada, on October 8-9, 2025, and was co-organized by the NATO Climate Change and Security Centre of Excellence (CCASCOE) and the Conference of Defence Associations (CDA) Institute. Building on prior editions, this year's summit convened more than 280 high-level civilian and military experts from government, NATO, think tanks, academia, industry, civil society, and international and regional organizations.

Under the theme "**Strengthening military adaptation in the face of climate risks**", participants examined current climate security risks and challenges across regional and operational domains, and explored solutions, including cross-sectoral cooperation mechanisms. The event featured a mix of plenary sessions, roundtable discussions, and interactive workshops encouraging active audience engagement.

Strategic Context

The Strategic Imperative for Military Adaptation

Opening the Summit, Lieutenant-General Peter K. Scott, Deputy Commander of Allied Joint Force Command Naples, NATO, underscored that climate change is a defining driver of global instability, directly shaping defence planning, operational readiness, and geopolitical stability. What once were exceptional military deployments in response to disasters are now increasingly routine, as civilian systems struggle to manage compounding emergencies. Climate hazards also amplify grey-zone and hybrid threats, while rising temperatures and energy volatility place unprecedented strain on energy grids, water systems, and logistics networks–making secure, resilient energy systems a strategic imperative.

Lieutenant-General Scott emphasized that building resilience to climate impacts reinforces national defence by enabling forces to maintain operational continuity and to uphold credible deterrence. He concluded by calling for deeper collaboration and greater strategic foresight across NATO and partner nations, stressing that proactive adaptation is critical.

The State of Climate Security Today

Panelists highlighted the need to bridge scientific, academic, and military perspectives to better understand and respond to emerging threats. They stressed that climate change has been acting as a risk multiplier, if not a direct driver of instability. Climate impacts are not linear. Tipping points can make climate and earth systems shift abruptly to new and unstable states, triggering cascading effects and posing challenges to traditional military planning and forecasting. Anticipating these changes requires new analytical tools, adaptive mindsets, and closer integration of scientific expertise into defence forecasting.

Additionally, panelists explored the growing political fragmentation complicating collective action. Nationalist politics, inward-looking policies, and great power competition hinder efforts to address shared climate risks. The discussion also highlighted the inherently global dimension of climate insecurity. Speakers emphasized that climate-driven pressures, such as flooding, drought, infrastructure damage, and resource stress, interact with political, economic, and governance factors to shape patterns of instability, displacement, and localized conflict. These dynamics can have implications beyond the region, including for North Atlantic security, particularly where existing vulnerabilities are compounded and spillover effects occur.

Finally, regional climate impacts can serve as early-warning indicators for broader global shifts. In addition, emerging technologies, especially artificial intelligence, offer opportunities to enhance forecasting, integrate satellite data, and improve situational awareness, though panelists cautioned that their deployment must be energy-efficient and mission-focused.

Regional Dimensions of Climate Security

Climate Security in the MENA Region

The Middle East and North Africa (MENA) region faces profound climate-related challenges that intersect with political, economic, and social vulnerabilities, shaping its overall security landscape.

Climate change is a major co-driver of migration and forced displacement, worsening livelihood loss and insecurity in fragile states such as Egypt and Lebanon. While unmanaged migration can heighten instability, structured pathways can instead support adaptation and resilience. Moreover, the region faces extreme water insecurity, driven more by weak management than absolute scarcity. Disputes involving Ethiopia's dam, as well as the Jordan–Israel water arrangements, reveal the political nature of water governance, while the heavy reliance on desalination in Gulf states introduces concentrated infrastructure risks.

Governance emerged as the decisive factor shaping outcomes. Strong institutions manage resources effectively, build trust, and reduce climate-related instability, while integrating climate security into planning and promoting cross-sector cooperation helps prevent systemic risks. The global shift away from fossil fuels is also heightening geostrategic competition in the MENA region. Russian companies are expanding nuclear and water infrastructure projects, and China leads in solar technology and manufacturing partnerships, as Western engagement declines. This reinforces the need for deeper collaboration with local actors and civil society.

Jordan's Climate Security Intelligence (CSI) initiative illustrates proactive, locally driven adaptation. Designed to provide early warnings and protect critical infrastructure, CSI embeds environmental foresight into security planning and prioritizes transparency and collaboration with external experts. Scaling similar models across the region remains a key challenge.

The Arctic

The Arctic is the fastest-warming region on Earth, warming at nearly four times the global average. This is rapidly reshaping the physical environment through severe coastal erosion, flooding, and permafrost degradation, which threatens infrastructure, logistics, and access routes for both communities and military operations. While the retreat of Arctic sea ice is expected to be gradually increasing the accessibility of certain shipping lanes and resource sites in the long term, the practical implications for sovereignty and strategic competition remain complex, uneven, and hypothetical. Russia and other actors are expanding the development of their Arctic regions, but much activity is still seasonal and constrained by harsh conditions, legal frameworks, and infrastructure limits. These climatic changes pose operational challenges for NATO navies, including submarine detection, search and rescue, and logistics, requiring specialized equipment and capabilities suited to extreme and fast-changing Arctic environments.

Security in the Arctic fundamentally depends on local resilience and the integration of Indigenous Traditional Knowledge (ITK). Local communities are increasingly leading adaptation efforts, such as erosion control projects in Tuktoyaktuk, Northwest Territories, and rapid mobilization during power failures in Nunavut. Direct interaction between adaptation actors and trust-building are essential, as worsening conditions threaten the livelihoods of Indigenous populations.

Eastern Europe

The discussion illustrated the deep interconnection between climate security risks, energy dependence, and geopolitical instability, with the war in Ukraine serving as a stark example. The Russian invasion was labeled as a "fossil-fueled conflict", diverting resources from climate preparedness to defence while generating massive greenhouse gas emissions from warfare, landscape fires, aviation rerouting, energy infrastructure destruction, and reconstruction. The war has also caused severe ecosystem destruction, including through the deliberate demolition of the Kakhovka dam, which wiped out irrigation for fields feeding 10 million people, cut drinking water for over one million, and flooded 80 towns. Amid this damage, Ukraine is pursuing a green recovery built on decentralized renewable energy. Solar microgrids, like those in Horenka, have proven far more resilient during bombardments than older systems, restoring power within hours as opposed to a year. Moreover, a more decentralized solar and hydrogen network offers greater protection against strikes. European Union (EU) member states are now studying Ukraine's approach as a model for maintaining energy resilience during crisis while advancing a sustainable transition.

Speakers also stressed that regional cooperation is critical for managing shared climate and resource challenges. Extreme weather increasingly threatens agriculture-dependent economies, and long-standing reliance on fossil fuels has left many states vulnerable to external leverage, especially from Russia. At the same time, cross-border risks, such as forest fires in the Western Balkans, further highlight the need for coordinated civil–military responses.

In her keynote, Dr. Svitlana Krakovska, Head of the Ukrainian Delegation to the Intergovernmental Panel on Climate Change (IPCC), and Head of the Applied Climatology Laboratory of the Ukrainian Hydrometeorological Institute (UHMI), situated Ukraine's experience within a broader global context. She described climate change as a universal threat multiplier that no state or military can confront alone, and further warned that urgent collective action is required to prevent catastrophic and irreversible impacts, stating that "there is no economy on a dead planet". Emphasizing the rapidly diminishing global carbon budget and characterizing Russia's invasion of Ukraine as a fossil fuel-financed conflict, Dr. Krakovska underscored that the energy transition is not only an environmental imperative, but security policy in its most tangible form.

Science and Operational Risks across Military Domains

Assessing Operational Challenges Across Military Domains

In his keynote, Major-General Timothy Arsenault, Deputy Commander of the Canadian Joint Operations Command, stressed that climate impacts are amplifying mission complexity across land, air, maritime, space, and cyber domains. Each domain faces unique vulnerabilities that, when combined, redefine the Armed Forces' capacity to operate effectively. He underscored that Allies must collaborate to proactively embed climate-risk foresight and adaptation measures across every level of command in order to strengthen collective resilience, interoperability, and shared awareness.

Geoengineering and Solar Radiation Modification: State of the Debate

Geoengineering carries far-reaching strategic and governance implications and involves significant scientific and technological risks across domains. Interest in solar radiation modification (SRM) has grown across industry and policy circles as a potential last resort measure to avoid triggering climate tipping points. However, speakers stressed that SRM entails fundamental uncertainties, including uncontrollable regional climate shifts, monsoon disruption, ozone depletion, unequal regional impacts, and large-scale risks to food-systems. Because impacts would likely be uneven and difficult to reverse once deployed, SRM raises challenges that extend beyond scientific feasibility to questions of governance, legality, and ethics.

Concerns about moral hazard persist, and the involvement of the private sector introduces additional regulatory and security risks. Speakers emphasized that public research does not equal endorsement of deployment, but that failing to explore the issue publicly risks leaving it in the hands of profit-driven actors. They concluded that research should proceed alongside accelerated emissions mitigation, transparency, and the development of clear governance frameworks.

Space Domain

Climate change is affecting space operations both directly and indirectly, from increased pressure on land-based infrastructures to upper-atmospheric cooling that contributes to orbital debris and heightened risks to space system sustainability. Infrastructure resilience gaps, including for key facilities such as the Guiana Space Center, pose strategic challenges to maintaining autonomous access to space. Rapid commercialization of space services further complicates procurement and capability-tracking.

Furthermore, space capabilities are indispensable for understanding climate change and anticipating associated security risks, as they support global monitoring, early-warning capacities, risk-modelling, and crisis response. Data fragmentation remains a critical vulnerability due to inconsistent standards, limited sharing, and growing private sector dominance complicating access. Speakers recommended that NATO integrates climate considerations into space doctrine, resilient infrastructure planning, and data systems to ensure continued operational effectiveness.

Disinformation in the Cyber Domain

Discussions revealed that climate disinformation is systematic, well-coordinated, and often serves strategic purposes. For example, certain institutions act as nodes in a broader influence architecture designed to manufacture the perception of public opposition to climate action, contrary to prevailing global support. Social media platforms amplify this dynamic, with only a small number of publishers producing most of the climate-denial content. Speakers emphasized that the objective of disinformation is no longer to persuade people that climate change is not a reality, but to make them feel isolated in their concern that it is real. This, in turn, undermines collective action and democratic cohesion.

Solutions include promoting stronger global governance and greater accountability from digital platforms, as well as stronger media literacy to better equip societies to identify and respond to disinformation. Participants emphasized the importance of recognizing disinformation as a national security issue and a form of cognitive warfare, rather than treating it solely as a communications or societal challenge. They also supported exposing disinformation funders, mobilizing grassroot counter-narratives, and using human-centered communication grounded in shared values.

Presenters stressed that climate impacts, cyber threats, and disinformation mutually reinforce instability. Protecting truthful public discourse is integral to cybersecurity, democratic resilience, and response to climate risks.

Maritime Domain

The maritime domain roundtable underscored that climate change is transforming the global ocean – altering water density, temperature, salinity, acidity levels, current circulation, and wind patterns, which directly impact naval operations and infrastructure. For example, these shifts influence sonar performance, submarine buoyancy, radar effectiveness, cooling systems, aircraft-carrier operations, and the mere resilience of coastal bases.

As part of the energy transition, navies are testing nuclear, hydrogen, methanol, renewable diesel, and synthetic fuels, but interoperability and supply-chain reliability remain major hurdles.

Speakers emphasized that scenario planning and wargaming are essential tools for preparing for disruptive climate events. Integrating climate foresight into naval design, training, and operations is a strategic imperative.

Across all military domains, climate change poses complex, interconnected risks that demand resilient infrastructure, adaptable personnel, and reliable interoperable data for effective early warning, decision-making, and response. Addressing these challenges requires integrated strategies and governance across dual-use civilian-military systems, along with sustained cooperation among governments, civil society, and Allies to maintain readiness.

Knowledge Exchange, Foresight and Decision-making Across Sectors

Addressing the complexity, uncertainty, and non-linear nature of climate impacts requires a systemic shift from reactive crisis management to proactive strategic preparedness, combining knowledge exchange, foresight, and structured decision-making across defence, governance, and civil sectors.

Climate Resilience as Defence and National Security Policy

Canadian Minister of National Defence, The Honourable David J. McGuinty, delivered a powerful keynote that continued to resonate across the climate security community of practice well beyond the Summit. He stressed that climate change is already amplifying existing security challenges and driving instability worldwide. Allies, he argued, need to ensure their militaries remain resilient and ready by both adapting to climate impacts and reducing the vulnerabilities they create. Therefore, climate resilience is not solely environmental policy; it is also military policy, fundamental to force readiness and national security.

Minister McGuinty highlighted the growing risks that climate disruption poses to fuels and energy supply chains – risks that directly affect military operations. Without secure supply chains, fleets cannot deploy, bases cannot operate, and missions cannot be sustained. In response, Canada is strengthening the resilience of its bases and infrastructure, factoring in changes such as sea-level rise, flooding, and permafrost thaw.

The Minister also stressed that adaptation and mitigation alone are not enough, as these measures risk addressing only the symptoms. Equipment can be replaced, infrastructure rebuilt, and forces resupplied—but nature itself cannot be substituted. National and natural security are inseparable, and protecting ecosystems is a form of deterrence. Failure to do so will compound insecurity and human suffering. Investing in prevention and resilience today will be less costly than responding to crises tomorrow.

Finally, he underscored the importance of integrating environmental and security data to inform defence policy and decision-making – an approach that can support more effective adaptation and mitigation across NATO while enhancing interoperability and operational effectiveness.

Strategic Foresight, Climate Risk Assessment, and Early Warning

Decision-making under uncertainty is inevitable, requiring leaders to navigate ambiguity, weigh imperfect options, and balance political feasibility with operational effectiveness. Through strategic foresight, organizations can integrate climate and environmental factors into defence planning, anticipating operational impacts and cascading disruptions.

Trust and accountability also emerged as central themes. Panelists noted that early-warning systems and civil-military cooperation rely on clearly defined roles, transparency in how information is generated and used, and joint planning processes that build confidence among partners. Maintaining trust is increasingly challenging as adversaries exploit climate stress through cyberattacks, economic pressure, and disinformation campaigns that deepen social divisions and weaken institutions.

Against this backdrop, speakers argued that wargaming, shared protocols, and interoperable networks are not only technical tools but also mechanisms for reinforcing trust by aligning expectations, clarifying constraints, and strengthening societal resilience at a time when it is being actively targeted.

Translating Climate Security Language Across Sectors

A central challenge in the climate-security field is ensuring that scientists, policymakers, and military actors can understand each other's language around risk, even if terminology differs across sectors.

From a scientific perspective, climate change is understood as a driver of cascading environmental disruptions such as resource scarcity, heat stress, and coastal degradation. When communicating with other sectors, these disruptions should be framed as factors that interact with political and social systems to create instability.

In defence circles, this understanding is applied by treating climate impacts as risks to operational readiness across all domains in which armed forces operate.

In the policy realm, climate change is primarily framed as a strategic governance issue that requires adaptation across institutions, dedicated budgets, and regulatory oversight. Policymakers must therefore interpret scientific assessments and military warnings not as isolated concerns but as inputs for national and collective security planning. Policies on procurement, infrastructure investment, and emergency management are only coherent when they integrate both the scientific evidence of accelerating hazards and military assessments of operational implications.

Climate Security Tools, Cross-Sectoral Data

Several tools have been developed to address the growing need for reliable data and analytical frameworks to assess and communicate climate security risks. A few of them were presented at the Summit.

The Climate and Environmental Security Data and Analysis (CESDA) Hub of the EU Satellite Center offers a centralized platform for validated climate services, risk assessments, and geospatial analytics. It integrates satellite data with modeling capabilities to support strategic foresight, operational planning, and policy development. Applications include flood risk assessments for military deployments and evaluations of water stress in regions such as Central Asia and Africa.

Other tools focus on human security by assessing climate hazards, exposure, and vulnerability. For example, the Climate Conflict Vulnerability Index (CCVI), jointly developed by the Center for Crisis Early Warning, the Potsdam Institute for Climate Impact Research (PIK) and the German Federal Foreign Office, uses the IPCC risk model and provides tiered indicators that allow users to analyze specific risk drivers. Its reliance on publicly available data ensures transparency and supports adaptation efforts across regions.

The Pathways to Instability Framework of the Global Water Security Center uses a qualitative approach to understand how water scarcity interacts with political instability. By tracing water-related disturbances through existing social conditions and actor responses, it identifies areas where interventions can help reduce conflict risks.

Finally, the Military Response to Climate Hazards (MiRCH) database of the Center for Climate & Security tracks global military deployments for disaster relief. It enables analysis of hazard types, geographic patterns, and trends in military involvement under climate stress.

Wargaming for Climate Security Decision-Making

Climate wargaming is an important tool for strengthening preparedness and decision-making in climate-related security contexts. Using scenario-based models common in defence planning, wargaming allows player decisions to shape evolving outcomes. Unlike traditional analytical exercises, wargaming introduces an adversarial element that forces participants to confront uncertainty and complexity in a structured environment.

During the Summit, participants engaged in several climate-security games led by the UK Defence Science and Technology Laboratory (Dstl) and Archipelago of Design. Dstl's "Ripple Effect" examined escalating tensions following the collapse of a transboundary water agreement in a climate-stressed region. Archipelago of Design's "Breakthrough: Arctic Albatross", a 2040 Arctic scenario, involved a failed infrastructure project affected by environmental and geopolitical risk. In "Inner Alliance", also developed by Archipelago of Design, teams managed a flood response while balancing humanitarian needs, community trust, and fragile local governance.

These tools act as learning mechanisms that help participants recognize biases, challenge assumptions, and understand how social, political, and environmental systems interact.

Wargaming encourages players to adopt perspectives outside their professional roles and engage with trade-offs involving competition, cooperation, and resource management. Summit participants highlighted the value of climate wargaming for stress-testing strategies, exploring plausible futures, and generating innovative approaches to resilience. Wargaming also provides a platform for integrating climate foresight into institutional processes, improving climate literacy, and strengthening collaboration across defence, civil society, and academic communities. However, institutional resistance, limited personnel capacity, and uneven understanding of climate dynamics restrict broader adoption in defence circles.

Operational Adaptation and Civil-Military Cooperation on Climate Resilience

NATO Allies and partners are adapting their defence institutions, operational planning, and domestic response systems to a rapidly changing climate. At the Summit, participants exchanged views on how to mainstream climate adaptation into defence spending, improve cooperation between military and civilian actors, and address the emerging concept of low-carbon warfare.

Mainstreaming Climate Change in Defence Spending

Speakers emphasized that climate change must be treated as a core defence planning factor, and defence spending decisions made today must account for the climate conditions of tomorrow. Militaries, they argued, need to "buy for the climate they will actually operate in" to avoid locking in future climate-related vulnerabilities and creating stranded assets. Climate adaptation should therefore be embedded directly into budget cycles, capability development, and procurement decisions, particularly as major platforms and infrastructure often remain in service for 40 to 50 years.

Participants noted that planning remains hampered by limited climate data, uneven risk literacy, and overreliance on anecdotal evidence. Clearer assessment of the costs and trade-offs between adapting and not adapting is essential for informed decision-making. Recent defence spending commitments – amounting to 5% of GDP overall, including 3.5% for capabilities and 1.5% for resilience – create opportunities to modernize forces, but also require governments to make difficult prioritization choices.

Above all, adaptation was described as a continuous process. Militaries must institutionalize iteration, standard-setting, and lessons-learned mechanisms. Modular and upgradable systems were identified as a practical way to reduce stranded assets and keep pace with evolving climate conditions.

Civil-Military Cooperation on Climate Resilience

Responding to climate-related disasters requires a whole-of-society approach. No single actor, military or civilian, has the capacity to respond effectively on its own. Effective resilience depends on trust-building, joint exercises, and strong cross-sectoral relationships established before crises occur.

Drawing on the Canadian experience, several speakers noted that the Canadian Armed Forces (CAF) provide essential logistics, mobility, and surge capacity after disasters, especially in remote or extreme contexts. However, their role should remain complementary to civilian authorities, rather than serving as a default substitute. Recent deployments in response to wildfires and recurring floods have revealed gaps in civilian capacity and uneven preparedness at the municipal and provincial levels.

Participants debated whether Canada should adopt a voluntary civil protection model similar to Germany's Technisches Hilfswerk (THW) to strengthen community-level preparedness. Some supported the idea of developing a nationwide volunteer system, while others argued that investments should focus on empowering municipalities, regional emergency management structures, and Indigenous-led response systems.

Persistent barriers, including bureaucratic rigidity, unclear communication pathways, and fragmented jurisdictional responsibilities, continue to hinder effective civil-military coordination. Panelists stressed that military involvement in domestic emergencies is ultimately a political decision requiring transparent, whole-of-society engagement.

Low-Carbon Warfare and Dual Adaptation

The concept of low-carbon warfare was introduced as a framework for understanding how armed forces can sustain operational effectiveness in a decarbonizing world. Speakers highlighted that militaries currently need to pursue dual adaptation: adapting to the impacts of climate change while simultaneously adapting to global energy transitions that will shape future logistics, supply chains, and technological ecosystems. This requires integrating energy efficiency, alternative fuels, and decarbonized technologies into capability development without compromising readiness or interoperability.

Closing Remarks

Ambassador Anthony Agotha, Ambassador-at-Large and EU Special Envoy for Climate and Environment, concluded the Summit with a powerful message that balanced optimism and realism, reframing climate security strategy around humility, foresight, and institutional adaptation. He characterized climate change as a distinct "enemy" – one that is unpredictable and cumulative in nature, requiring societies to move beyond denial and paralysis toward evidence-based optimism grounded in science and democratic governance.

Ambassador Agotha reiterated that military forces should serve to fill temporary gaps, not substitute for civilian capacity, reinforcing the central importance of resilient local institutions. Strategic investment in clean energy was presented as both irreversible and beneficial across security, health, and economic domains. At the same time, rising climate-related health risks underscored the cascading and systemic nature of vulnerability.

In closing, Ambassador Agotha called for sustained political courage and cross-sector cooperation, stressing that resilience is not built in moments of crisis but through deliberate, long-term commitment.

What it means for NATO and CCASCOE

The Summit reinforced CCASCOE's role as an international hub of expertise on climate change and security. The event gathered experts and practitioners across disciplines, sectors, and countries to support resilience in the face of climate risks. The wide breadth of discussions underscored the multifaceted nature of the challenge, but most importantly, the urgency to act. This calls for increasing the accessibility of expert knowledge to decision-makers in a way that aligns with operational imperatives. In that sense, the official launch of CCASCOE's Community of Practice during the Summit is both timely and valuable. Ultimately, the discussions held at this year's MCSS will directly feed into CCASCOE's activities translating scientific data into actionable military decisions, strategic foresight, and climate security wargaming.

What it means for Canada

The Summit highlighted Canada's key challenges, including managing widespread climate exposure across its defence assets—particularly in coastal and northern regions; strengthening resilient, dual-use infrastructure and low-carbon capabilities; integrating Canada's natural capital into defence planning; and addressing the growing domestic burden of climate-related emergencies through stronger partnerships and coordinated civil-military responses. Taken together, these discussions point toward a pathway in which investments in adaptation, resilient infrastructure, and collaborative governance not only mitigate risk but also help modernize Canada's defence capabilities while reinforcing broader national resilience.

Practically, it means defence policy must integrate climate risk management, Indigenous partnerships, infrastructure adaptation, and technological innovation. Safeguarding Canada's future is inseparable from safeguarding its ecosystems, as the nation's ability to deter threats, maintain readiness, and ensure stability ultimately depends on the continued existence of a livable and defendable territory.

Conclusion

The Montreal Climate Security Summit highlighted that climate change is a core security challenge, shaping military readiness, human stability, and geopolitical dynamics. Across sessions, participants stressed that adaptation must be fully integrated into defence planning, grounded in robust data, stronger institutions, and closer cooperation across civilian, military, scientific, and community actors. The Summit also underscored the value of emerging tools that enable leaders to anticipate cascading risks and test decisions before crises escalate.

The path ahead is clear: shared understanding must now translate into coordinated, decisive action, or accelerating climate threats will outpace our ability to respond.

Annexes

List of Speakers

We extend our sincere thanks to all speakers, keynote presenters, workshop leads, and moderators who contributed their time and expertise to this event:

Amb. Anthony Agotha
Mr. Nick Almstädt
Major-General Timothy Arsenault
Ms. Esther Babson
Ms. Caroline Baxter
Mr. Philippe Beaulieu-Brossard
Ms. Penny Beames
Ms. Laura Birkman
Ms. Lily Boland
Ms. Christina Bouri
Capt. Andrea H. Cameron, Ph.D., Ed.D., SPHR
Dr. Bruno Charbonneau
Dr. Lloyd Chubbs, Phd, MEng, EP
Dr. Tim Clack
Ms. Eva Cohen
Prof. Francesco Corvaro
Mr. Andrew Crooks
Colonel Sylvain Debarre
Dr. Tom Deligiannis
Dr. Duncan Depledge
Mr. Lennard de Klerk
Mr. Dan Doran
Ms. Donna Dupont
Dr. Joshua Elliot
Mr. Tom Ellison
Dr. Giovanni Fusina
Dr. Andrea Gilli
Mr. Emil Marc Havstrup
Dr. Andrew Heffernan
Mr. Marcus Hicken
Mr. Michael Joseph Hosken
Dr. Matthew Huber
Ms. Sarah Kapnick
Mr. Charles Klengenberg
Dr. Alex Kolker
Dr. Svitlana Krakovska
Ms. Caroline Larrivée
Ing. Jan Lukačevič
Dr. Cromwell Lukorito
Ms. Marie-Sophie Mayer
The Honourable David J. McGuinty
Dr. Kimberley Miner
Dr. Daniel Mittermaier
Dr. Christine Nam
Mr. Philip Newell
Mr. Tom Odell
Ms. Jessica Olcott Yllemo
Dr. Grazia Pacillo
Mr. Rikki Parsons
Dr. Benjamin Pohl
Dr. Elton Qendro
Ms. Madeleine Redfern
Ms. Kristina Rimkunaite
Mr. Paul Rushton
Dr. Aniello Russo
Lieutenant-General Peter K. Scott, CMM, CD
Ms. Erin Sikorsky
Colonel Giancarlo Turco
Dr. Yağmur Torul Yürek
Ms. Alessandra Ussorio
Dr. Daniele Visioni
Dr. Anselm Vogler
Mr. Dustin Whalen
Dr. Jessica West
Dr. Katie Woodward
Ms. Catherine Wong
Mr. Andrew Zolli
Mr. Georgios Zisis

Keynote Recordings

This annex provides access to the recordings of the keynote sessions, allowing readers to view the sessions in full.

- Keynote: The Honourable David J. McGuinty
- Keynote: Lieutenant-General Peter K. Scott, CMM CD
- Keynote: Major-General Timothy Arsenault
- Keynote: Dr. Svitlana Krakovska
- Keynote: Ambassador Anthony Agotha

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