



CANADIAN GLOBAL AFFAIRS INSTITUTE
INSTITUT CANADIEN DES AFFAIRES MONDIALES

Greening Defence: British Perspective

By Matthew Barrett
December 2021

CONFERENCE REPORT

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Julia Powell – Head of Climate Change and Sustainability Policy, UK Ministry of Defence
Climate Change and Sustainability Directorate

QUESTION: *How does the UK define Green Defence and what types of targets are being set?*

Julia Powell

- This topic is something the UK has been looking at for over two decades. In the last year, the legal and public pressure has started us into action again. Our UK Net Zero 2050 legislation was passed this June, combining with new EU exit legislation and the building of public pressure to pushed us even further.
- Senior voices began to support the notion that the UK needs to adapt to in order to maintain a competitive advantage in a climate changing world. At the start of 2020, Lieutenant General Richard Nugee was commissioned to lead the National Audit Office report which was the impetus for this change in legislation. That culminated in the publication of our [*Climate Change and Sustainability Strategic Approach*](#), which sets ambitions.

QUESTION: *What role is the Ministry of Defence expected to play in the government's overall efforts to reduce emissions?*

Julia Powell

- In the past, the government has been focused on measuring only infrastructure emissions, of which Defence forms over 50 per cent. More recently, they have taken a much wider perspective beyond Defence, but the government does not seem to see Defence as critical to achieving broader success in reducing emissions.
- The MOD is working to demonstrate that Defence is just a subset of the British economy with industrial processes, infrastructure, steelworks, and vast influence. The UK Committee on Climate Change supports this angle and recommended that Defence adopt a more vocal leadership role.



QUESTION: *How do these individual objectives fit within the overall Ministry of Defence approach?*

Julia Powell

- The MOD has recently negotiated very specific elements of its strategic documentation to be fully embedded in the defence plan. It aims to make these objectives more specific by working with data on energy targets to disaggregate the baseline for each of the commands. This way, each sector is increasingly responsible for their own emissions.
- As for mitigation, the army manages a large portion of the training estate, and they are under targets pertaining to land management, tree planting, as well as sequestration opportunities.
- The Directorate also added guidance and policy direction into its strategic documentation. Policy planning organizations are now required to consider future climate assumptions, though there is still room for more work on defining those assumptions, particularly in the next five to ten years.

QUESTION: *What is the balance between trying to change and adapt behaviour versus creating mechanisms to offset the things you cannot fully eliminate?*

Julia Powell

- Until recently, the focus has been almost entirely on the more traditional energy reduction side. The Directorate has realized that with aviation and some other defence equipment, there will be a level of irreducible emissions due to their lifecycles.
- Simultaneously, the Directorate has started to look at offsetting those emissions through the use of land and more novel areas like carbon sequestration. Since a certain level of emissions is inevitable, net zero can only be achieved through increased attention to both these approaches.

QUESTION: *Can you talk about some of the areas of innovation where Defence funding can lead to some potential technological change?*

Julia Powell

- There are a number of them, but one area in particular is aviation fuel and synthetics. The Royal Air Force (RAF), for whom this poses a big issue for their baseline emissions, has introduced a percentage of synthetic fuel mix and is working on 100 per cent synthetic flights and drones. Currently, this is the most successful area of innovation.



- One area of improvement is the organization of a more centralized approach to research and funding in order to ensure it is directed at the fields of highest priority.

QUESTION: *How is the Ministry of Defence approaching collaboration with international partners?*

Julia Powell

- The MOD has established industry forums and are now setting up subgroups for starting conversations about Scope 3 emissions. Engaging with key industry partners is critical to understanding each actor's role and where the innovation opportunities lie. Already, BAE Systems and Rolls Royce have proven very ambitious in this area.
- Understanding and capitalizing on the influence Defence has over industry is essential. For this to happen, more conversations across government need to be held. Even something as basic as having the shared understanding of climate assumptions and how to operate over the next five to ten years can bring partners closer together.
- Internationally, the same is true. Those initial conversations are being held, but the challenge comes in moving to the next step. Again, it is about laying down those assumptions and determining what the tangible changes that need adapting to are.

QUESTION: *Are there one or two significant climate benefitting initiatives that you suggest are worth looking into?*

Julia Powell

- The MOD recently had its initial meeting of the Northern Group, and a lot of the conversation was on shared methodologies. This can apply to energy and net zero emissions, but it can also be for climate security. Increasing climate literacy and shared understanding of climate assumptions, how different regions are going to be affected, and what challenges ahead are, are most important.

QUESTION: *With Defence in particular, there is an obvious need to balance operational considerations with environmental ones. Is there a guiding ethos or high level approach to striking that balance?*

Julia Powell

- This is one point we make very clear in our Strategic Approach, that it cannot be at the detriment of that interoperability. We've heard this sensitivity from quite a few of our



partners, so we have been careful as that is a good way to lose momentum and the support of senior voices on the debate.

- It is like the sequestration point from earlier. We acknowledge that we will only be able to go so far until technology catches up, then allowing us to take another step forward. So, in parallel, we must look for ways of offsetting immediate environmental impacts.

► About the Author

Matthew Barrett recently graduated with an Honours BA in International Relations and History from the University of Toronto. He is currently an editor for the Canadian Centre for the Responsibility to Protect. His research interests include conflict prevention, the limits of military intervention, and cybersecurity. Matt intends to continue his studies in Fall 2022.

► Canadian Global Affairs Institute

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