



Informing a strategic response to climate change

A review of a workshop for
the British Army

February 2020

In July 2019, the University of Cambridge Institute for Sustainability Leadership (CISL) and Earth on Board ran a half-day briefing for the Board of the British Army.

Lindsay Hooper, an Executive Director at CISL, caught up with **Lieutenant General Richard Wardlaw OBE** to understand why he commissioned the course, why climate change is important to the Army and his own personal leadership experience.

Since the programme, Richard Wardlaw has taken up a new role as Chief of Defence Logistics and Support at the Ministry of Defence.

Theme: The strategic implications of climate change for the Army, and how the Army is responding

Lindsay Hooper (LH): How does sustainability - and particularly climate change - relate to the Army? What risks and opportunities does climate change pose for the Army and how is the Army responding?

Lieutenant General Richard Wardlaw (RW) My observation is that there are two key implications of climate change for the Army.

First, since the early 2000s, UK Defence and the Army have explicitly recognised climate change as the cause of a number of key ‘threat vectors’ which may require a military response. This principally relates to the destabilising impact of the changing climate on populations in parts of the world that are already fragile and unstable, including the consequent impact on migration into Europe and the UK. There is also the broadly destabilising effect that transition away from fossil fuels may have on the politics of the Middle East - a region that is not renowned for being stable - as nations across the regions will face profound economic changes because of global shifts to renewables.

Second is the implication for the ‘firm base’ of the Army and UK Defence institutions more widely – such as the way that we plan for and manage our bases, fleets, infrastructure and estate. It is increasingly clear and well-understood that the Army must play its part in contributing to the UK’s transition to zero carbon, which means the Army taking action to decarbonise its operations and reduce its dependence on fossil fuels. In my former role, I was responsible for the Army’s bases, estate and infrastructure. Within this context I recognised the importance of thinking about climate change in developing future estate requirements, considering the energy efficiency of buildings (both new and retrofit), and considering how we might exploit the Army estate to pilot and scale up renewable energy solutions.

As well as a responsibility to take action to ensure that our carbon emissions are not exacerbating the threat that the UK faces from climate change, we also need to consider the risk that climate change poses to our operations. To assess the materiality of these risks, we use a framework of physical, transition and legal risks (ie those outlined in the Task Force on Climate-Related Financial Disclosures, TCFD, framework¹). Examples of the physical risks we need to consider are the impacts of extreme weather events such as flooding on our bases and estate, and droughts and heatwaves resulting in training grounds being out of action because of fire risks. We face transition risks in relation to our vehicle fleet, which is currently primarily dependent on fossil fuels, and given its cost, complexity and purpose is expected to have a very long service life. And finally we need to prepare for potential legal risks as we see an appropriate tightening of regulation in the UK and internationally.

¹ Details of the TCFD framework are widely available, including: <https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Annex-062817.pdf>

Defence institutions internationally have been working for many years in response to the first set of risks relating to 'threat vectors' that affect national and regional security. However, many institutions - the Army included - are still in the early days of formulating strategic responses to the need to decarbonise their 'firm base' or the way they operate. Within the Army, this is now recognised as a critical strategic driver to which the Army must respond and is now subject to very detailed work. It is clear that there is an imperative to respond.

LH: How does action on climate change relate to the Army's purpose and role?

RW: The role of the Army is to protect the people of the UK, prevent conflict and be ready to fight our enemies.

Responding to climate change is completely congruent with this. When we canvas the UK population on threats to the nation, even in the context of global instability and associated risk of terrorism, climate change is a very high priority for UK citizens. It would therefore be extraordinary if the Army was not playing its role in responding to this risk.

LH: Beyond a commitment to decarbonisation, how does the Army see its role in relation to enhancing national resilience to sustainability-related risks?

RW: In relation to the threat vectors I outlined earlier which affect national security, our response is self-evident within the Army's work to contain or stabilise the consequences of global instability.

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In relation to the UK's resilience to the physical impacts of climate change, the impact on UK weather has been notable. For example, we have seen increased frequency and severity of floods and the Army and Defence have played a significant part in how the Government responds to those events. We can expect to see that role endure and, as conditions worsen, demand for Army support will grow.

LH: What hurdles or barriers is the Army anticipating in the execution of its strategy, and what opportunities will it seek to leverage?

RW: The key barriers to taking a strategic approach to climate change across our 'firm base' are currently internal, insofar as this is a relatively new line of thinking for Defence, and with all new lines of thinking, it could be perceived and approached as either a threat or an opportunity within the Army. The reality is that until the strategic response is more clearly defined, the extent to which the Army will face implementation barriers is unclear. However, the consensus of the Army is that, in order to get on the front foot, they are strongly in favour of seeing this as an opportunity and not a threat. They see significant opportunities to respond in a way that drives innovation and change, which is entirely consistent with the purpose of the Army and Defence in the UK.

Theme: Internal leadership and commitment

LH: How did you achieve internal leadership alignment behind the strategy?

RW: It is important to go back a step; I recognised the imperative to change myself before I was able to lead change across the Army. Over a relatively short period, I went from having a general interest and level of awareness to a much more focused and informed interest as a result of a course I attended at Cambridge Institute for Sustainability Leadership (CISL). The programme equipped me with the narrative and evidence base that I lacked. It also compelled me to lead action. Once I was armed with those insights, once I knew what I knew, I could not 'unknow' it. I had spent my entire career passionately committed to the defence of the nation and I recognised that if I was to be true to that purpose, I could not sidestep this challenge on the basis that it is inconvenient.

As a result, I felt duty bound – and privileged to have the opportunity – to start conversations and to lead discussions with my senior colleagues across the Army. I began through seeding this in discussions with senior leaders through one-on-one meetings. As I was equipped with such a compelling set of data and insights from the CISL programme, those discussions were very productive. It is important to note that they were occurring before the end of 2018, when levels of public consciousness were very much lower than they are today, before people were aware of Greta Thunberg, school strikes, Extinction Rebellion and protests in London. So those conversations felt personally uncomfortable as I was very aware that I was pursuing a line of thinking that was not well socialised and there was a real risk that I would be perceived as a zealot. However, the evidence is so strong and the logic so compelling that I never doubted that it was the right thing to do.

Those conversations led to me being able to secure support for my proposal to bring the Army Board together, to use some of its scarce and valuable time, to have an away day to think about the impact of climate change for our operations. In fact I secured two commitments from the professional head of the Army, the Chief of the General Staff: the first was to put this on the agenda for the Army Conference; the second was to work with CISL to design a deep dive session for the Board, to equip them to understand how the threat of climate change will manifest itself in relation to our operations. As a result of these endeavours, there is absolute consensus across the Board about the Army's ambition and commitment to develop a strategic response. This was acknowledged at the end of the away day and has subsequently been built upon and further progressed.

LH: What internal barriers have you had to overcome? How are you addressing these?

RW: First and foremost, it is important to note that the barriers I have encountered are not unusual and I understand that these are common across many organisations. I would characterise the challenges that I have encountered as:

- This isn't our responsibility;
- This challenge is too big for us, we can only take action alongside others; and,
- The risks are too distant and long term and are a distraction relative to our current priorities

Where colleagues do recognise the challenge and the imperative for us to respond, they are sometimes unclear on how we can play our part and what our response should be.

Like many major organisations, we also face challenges relating to the current economic and business case models that place primacy on achieving a return on investment within 10 years; this is the current lifecycle of defence planning. However, when we look at the interventions that are needed in response to climate change, these simply won't deliver a return on investment

within that timeframe. There is therefore an inevitable tension for the Army which faces short-term imperatives to invest in military capability, imperatives which are currently far more pressing in their manifestation relative to climate change, where the threats will mature over a longer-term timeline. Therefore, we face the challenge of making decisions that will deliver for the long term, while remaining credible in the short term.

Our response has been to educate the Board, to ensure that they are sighted on the very real threats of climate change and the extent to which these are accelerating and will have a very significant impact on the societies in which we operate. Equipped with this insight, the imperative for action becomes much clearer.

The process of engaging the Board also resulted in us coalescing around a recognition that we are a major institution in UK and, as such, there is no doubt we can play a significant role and have a duty to do so. We recognise that the challenge of 'it is someone else's problem' is a fallacy – which is not to say that we shouldn't try to influence others to move forward in this journey.

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In response to the economic challenge, when one sets out long term benefits, as I was able to do as I armed myself with arguments from Cambridge and asked my team to develop cases over a longer timeframe, the economic case for most major decisions become logical and viable.

When it comes to the need to balance long term and short term, it is important to ensure that discussion is informed by understanding of how the long-term threat will manifest itself. Informed by this, it became clear to the Army Board that a decision to defer action would be an abrogation of responsibility and would exacerbate the challenge for their successors. It is their responsibility as Board members to make the best decisions for the long term, and not to make decisions today that compound the future threat.

Theme: Engaging external stakeholders

LH: What external stakeholders are critical to the execution of your strategy, and how are you engaging them?

RW: We have a range of critical stakeholders, starting at very highest level within Government. In relation to climate change, we are seeing a greater political imperative across all parties than there has ever been, so we anticipate that our strategic response will be pushing on an open door.

Our allies are also critical stakeholders and we have already agreed that addressing climate change in our respective operations – and how we can collectively influence others to do likewise – will be an agenda item for regular staff talks between allies.

We are also engaging with key suppliers and making clear, public statements about our direction of travel. It is notable that General Mark Carleton-Smith, Chief of the General Staff of the Army made a bold statement in September 2019², stating that the current equipment programme will be the last generation to be dependent on fossil fuel and the drive is to replace it with alternative energy. This was reinforced in a speech in December by Chief of the Defence Staff, General Sir Nick Carter³, highlighting that the UK armed forces of the future will be markedly less dependent on fossil fuels. This is sending an important signal to our suppliers about our future approach to procurement. Interestingly, some suppliers were surprised we had not been more challenging on these matters at an earlier stage.

LH: What response have you received to these communications?

RW: Initially, we received a mixed response from colleagues who were concerned about the realism and achievability of these statements. But as public attention and concern has shifted, colleagues have increasingly recognised the imperative for action.

As with all public institutions, we will inevitably face struggles as we work to move forward on this agenda, and we will work with non-defence organisations to benefit from innovations and best practice across society. However, the Army has the huge advantage of a long track-record in R&D investment in alternative technologies, and we will leverage this to enable us to move forward as quickly as possible. It is important to recognise that we still have a huge way to go on many fronts, for example in relation to powering some of our fleet, as we don't yet have a fossil fuel alternative that addresses the necessary power to weight ratio challenge posed by our larger vehicles.

LH: Recruitment is a major priority for the Army. How does your ambition in relation to climate change relate to your recruitment strategy?

RW: Our recruits are already paying attention to our credentials on sustainability, and to how we operate the Army and wider Defence. Defending the nation is why we exist, it is our purpose, but to be a credible and attractive employer we must operate in such a way that the very action of the Army doesn't damage the nation.

As an employer of many thousands of recruits, we are in a very competitive market. There is no doubt that the corporate sector is giving a lot of thought to this, and to positioning themselves as employers of choice. In a competitive market, 'doing the right thing' in a way that is aligned to our core purpose is essential. In addition, having sustainability at the core of our thinking will unlock innovation, and motivate and drive those who joined the Army to play their role in securing the future.

Theme: Personal leadership

LH: What motivates and sustains you in your work to lead such an ambitious strategy?

RW: At the core of my intent in joining the Army was a drive to play my part in protecting the people of the UK, preventing conflict, and being prepared to fight our country's enemies. The strategic context we face today is more uncertain, complex and dynamic than I can ever remember in my 30 years of service. Within that mix of threats to our service, to our very core as a nation, and at the forefront of public consciousness is the threat posed by climate change. Defeating that threat is absolutely aligned with why I joined the Army and is what sustains me to lead such an ambitious strategy.

LH: How have you developed yourself as a leader to ensure that you are able to credibly drive this work?

RW: One of the most important lessons I have learned as a leader is that, as leaders we are incomplete; there is no 'complete leader', we are always developing and growing. One of the areas for personal development that I identified was that I needed to broaden and deepen my knowledge base to enable me to play my part in leading a strategic response to climate change. I recognised that I didn't have the facts, the understanding, and the arguments and narrative to drive this work forward. I knew I had the other skills to exploit these, but without the evidence and narrative at the core, I couldn't lead the strategic response. With that mind, I took part in the CISL Programme. The three days empowered me to drive this agenda forward across the Army.

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This journey hasn't required new capabilities, but at the front of my mind as I started on this journey was a desire not to be bracketed as a zealot but to be seen as a serious, credible leader on the strategic implications of climate change. This is such a critical challenge that we can't afford to compartmentalise it or bury it in a sub-strategy; my view is that it must sit at the core of the Army strategy and shape our decisions across a broad range of activities. I needed to equip myself with the knowledge base to achieve this outcome.

It is also important to acknowledge the value of the network that CISL gave me. There is no doubt that when one sets out on a journey of leadership in this area, it is a very lonely furrow that one is ploughing. One of the benefits that I gained through the programme was a network of fellow executives from a wide range of industries, who were all taking the same journey, baring their respective souls, and sharing their experience. This reinforced my confidence that I was on the right trajectory. It is clear that this network is playing an important role in galvanising ambition and action across industry sectors and governments internationally.

² Speaking at the Defence and Equipment event, DSEI in September 2019

³ <https://www.gov.uk/government/speeches/chief-of-the-defence-staff-general-sir-nick-carters-annual-rusi-speech>



The Cambridge Earth on Board Programme enables Boards to align profitability and sustainability.

It offers credible, independent and effective approaches to support inform Boards and individual directors about the implications of climate change and wider social and environmental issues for long-term corporate performance.

Through consideration of material risks, opportunities and impacts, and providing insight into transition pathways and commercially-viable solutions, we support Boards to support and challenge executive teams to contribute to progress towards sustainable economies.



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