Current Controversies

How Bad is the Military's Carbon Problem?

Huge or a Rounding Error?

By Robin Collins

he military, sometimes accused of greenwashing to justify budgets, is legitimately concerned that climate change will lead to population displacement, impoverishment, and competition for scarce water, food, and other resources. This can result in conflicts that foment wider wars.

In an article published in late 2021 in *Canadian Dimension* magazine, "How the Canadian military is fueling the climate crisis," Yves Engler writes that "the Canadian Forces' ecological footprint is immense. It ranges from decimating animal life to releasing substantial greenhouse gases into the atmosphere."

Activist and writer, now UBC academic, Naomi Klein once wrote that "wars hog money that could be spent helping countries adapt to climate change and shift to green energy." But do wars and the military itself significantly "deepen the climate crisis because they are themselves major sources of greenhouse gases", as she has said?

In a 2009 piece, "Fight Climate Change, Not Wars," Klein quoted Stephen Kretzmann who claimed the Iraq war, "with all its planes, trucks, missiles, and ships, emit[ted] huge amounts of greenhouse gases... [It was] responsible for at least 141 million metric tons of carbon dioxide equivalent" over four years.

But that carbon release, while measurable, was not "huge". It was about 0.1% of total CO₂ emitted globally in the same timeframe. At most, just a



rounding error. Engler has written that "[T]he Department of National Defence emits far more carbon than any other institution. According to the government's 2017 defence policy review, DND 'represents more than half of the Government of Canada's greenhouse gas emissions."

IS THAT A LOT?

We can look at the numbers in both absolute and relative terms, but it does also depend on what is meant by "any other institution". The military is an institution, just as fossil fuel-driven electricity generation, the heating fuel industry, farming and the transportation sector, are institutional culprits too.

Brown University's often-mentioned and highly regarded Costs of War project: "Significant reductions to the Pentagon's budget and shrinking its capacity to wage war would cause a huge drop in demand from the biggest consumer of liquid fuels in the world." Is that true? Partly. A huge drop in consumption of oil and gas by the US military would not put much of a dent in the overall US (nor global) carbon footprint but it would shrink capacity to wage war.

Not to mention that the global annual military budget (SIPRI 2021 figures) is US\$2.1 trillion, and is a massive expenditure and socio-economic distortion.

For comparison, global health spending is about US\$9 trillion. Global education costs US\$5 trillion (a tiny fraction of which is spent in low-income countries.)

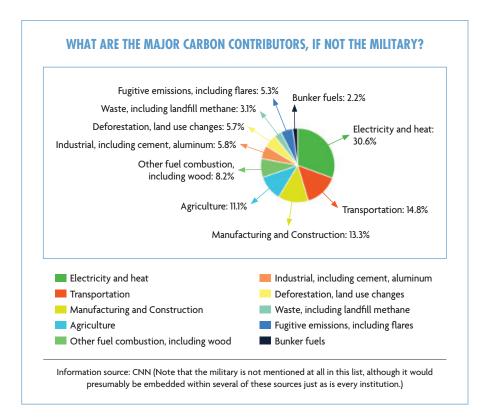
Yet, while the earth's atmospheric carbon problem is much worse than some think, it is not primarily a military/war problem.

HERE'S WHY

The worst carbon-producing countries are China: ~29% of global total, the USA, about half of China's: 14%, India: 7%, Russia: 4.7%, and Japan: 3.5%. (Canada, while large per capita, is quite small overall: 1.9%.) The top five are responsible for about 60% of the global greenhouse gas total.

However, the net carbon impact of the largest military in the world — and by a wide margin — is miniscule. Brown University estimates an average 75 million metric tons/year of carbon are expelled by the US military, including directly in war. That's only ~1.1% (Forbes) to 1.4% (Brown University) of the US national all-carbon-sources total.

And the combined global military footprint is estimated at only 5.5% of all human-caused carbon production (Scientists for Global Responsibility). That's "unignorable" or not a lot compared to the total, depending on how you look at it.



THE PROBLEM OF UNDER REPORTING

Even with Brown University's "worse" numbers, we do not know whether the global military carbon production estimates are accurate. The organization "Military Emissions Gap" (MEG), a collaborative effort of two British civil society groups, believes militaries are "huge energy users whose greenhouse gas (GHG) emissions are making a significant contribution to the climate crisis." They admit, though that "[We] still do not yet accurately understand the full contribution that militaries make to global GHG emissions. Better reporting is needed so that the scale of military emissions can be properly understood and managed."

The Canadian government reports that from 2021 to 2022, the National Defence "safety and security fleet emitted 608 kt CO2 equivalent, 81% from aircraft, 18% from marine vessels".

The US government reports 55 Mt of CO2 equivalent [compare to 75 Mt, Brown University] for 2019 for the Department of Defense, and "emissions from vehicles and equipment accounted

for 98 percent of operational emissions and 61 percent of total DoD emissions. Jet fuel accounted for approximately 80% of operational emissions."

So, how reliable are these numbers? MEG states there is a "very significant gap in reporting," with a "poor" score awarded for accessibility to data for both countries.

WHY THE CONFLATION?

However, the activist motivation (and temptation) for making doubt-ful claims about the climate impact of the weapons and war complex is likely two-fold. There is an (unproven) assumption that combining the peace and environmental movements will make both stronger. Climate change is both visible and "trendy" and a major focus of a new generation of activists, a key constituency that peace activists want to tap back into.

As well, a bias exists against militarism for obvious and legitimate reasons. But however well-intentioned may be the attempt to prove the military is both a bad actor and climate renegade, that

bias can warp the analysis. Engler's Canadian Dimension article, (the title of which implies a compelling military-climate crisis linkage), mostly outlines the many other environmental problems the military engages with or is partially culpable for (ozone-depleting substances, volatile organic compounds, heavy metals, depleted uranium, plastics, batteries, medicine, animal deaths, and unexploded ordnance, etc.)

More recently, Naomi Klein is inclined to take on unregulated capitalism, pipelines and tar sands (and geoengineered climate solutions). She now advocates for "an intersectional response" and sees the climate emergency as a catalyst for system change and ending overlapping social, pandemic and climate crises.

We should all be for solidarity, the efficient combining of effort, and a wholesome critique of militarism, but the analysis needs to be fact-based. The wider discussion of war's destruction and its prevention is the more important problem, and especially because there is diversion of resources, considerable funding and attention. For example, while the Ukraine conflict's killing and dying proceeds, attention to the nuclear weapon threat is marginalised. It hasn't gone away and arguably should be more worrying than ever. The climate problem is no less serious, as the world grapples with all-consuming, unnecessary violence in Ukraine.

On this subject, Engler can be on more solid footing. He argues, for instance, that both militarism and nationalism are "obstacles to internationalism."

A cooperative security framework will be critically important for both conflict prevention and climate crisis amelioration. But the immediate elimination of all militaries in the world — with the flip of a switch — would still not significantly affect the global carbon footprint. Absent the convincing evidence, we shouldn't claim otherwise.

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