

PERSPECTIVE

Placing the military in the degrowth narrative

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Information

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"The climate crisis is a code red for humanity." On the publication of the August 2021 IPCC Report UN Secretary-General António Guterres (2021) repeated the headline conclusion. As the planet experiences increasingly extreme weather, it seems ever more unorthodox ideas are able to break into the mainstream in search for solutions, and this extends to the naturally conservative IPCC. In their latest reports (IPCC Working Group II, 2022a; IPCC Working Group III, 2022b), they addressed the concept of degrowth and examined its implications.

The idea of economic growth has been at the heart of the global economy since the industrial age. To break with this dogma is to be perceived to be challenging the foundation of 21st century capitalist society. But as we reach the outer limits of the planet's ability to sustain all life (Steffen et al., 2015; Wang-Erlandsson et al., 2022), how can we *not* challenge it? After thirty or more years of ineffective window-dressing, and, as climate activist Greta Thunberg would say, "blah blah blah" climate politics, we have no choice but to start thinking the "unthinkable".

The authors of the recent IPCC report, *Climate Change: Mitigation of Climate Change*, pleaded for "prioritizing human well-being and the environment over economic growth" (IPCC Working Group III, 2022). We have to completely transform our economic system to "prosper without growth" (Jackson, 2016), transitioning to a "post-growth economy" that is zerocarbon and ensures a good life for all (Cassiers et al., 2019). "Prioritizing people and planet over profits means that regardless of how lucrative an activity is, its *raison d'être* should systematically be evaluated based on its social utility and ecological sustainability" (Parrique, 2022). Whether it is the oil industry, industrial farming, space tourism, private jets, SUVs or super-yachts, they all need to go. Every aspect of our lives needs to be re-evaluated.

But there is one sector notoriously neglected in almost all these discussions (Lorincz, 2014; Lin & Burton, 2019; Michaelowa et al., 2022). One so significant that it often overrides economic consideration in national priority-setting and government decision-making: the military and defence industry.

The U.S. Department of Defense alone is the biggest institutional greenhouse gas (GHG) emitter in the world, emitting on average around 66 million tonnes of CO2 equivalent (tCO2e) per year (Crawford, 2019). The UK's Ministry of Defence is also the largest single contributor to GHG emissions of all the departments in the government, with an annual total direct GHG emissions of around 3 million tCO2e (Parkinson, 2020a).

National militaries have not been required to report their GHG emissions to the UNFCCC, but the best estimate currently available indicates the global military carbon footprint accounts for between 1–6% of global emissions (Lin & Burton, 2019; Parkinson, 2020b; Parkinson and Cottrell, 2022). Despite its high (historical) climate impact, militaries around the world, backed by the global defence industry, have been overlooked during all climate negotiations. A growing number of researchers and campaigners are working to change this, for example, through tracking military emissions gaps or calling for an IPCC Special Report on the role of the military in climate change (Michaelowa et al., 2022).

Global annual military spending topped US\$2.1 trillion in 2021 during the midst of the COVID-19 pandemic (Béraud-Sudreau et al., 2022). Now, as a consequence of the Russian invasion of Ukraine, leading military powers have made it clear that they will continue increasing military spending. At \$2.1 trillion it is already more than at the peak of the Cold War. This is, coincidentally, almost the same amount of annual investment as the IPCC recommends is necessary to transition the global energy system and limit the global average temperature rise to within 1.5 °C above pre-industrial levels (Yeo, 2019).

Since the start of the Global War on Terror in 2001, more than \$30 trillion has been spent on militaries and weaponry (Peck, 2019). While one can debate the geopolitical value for money delivered, one thing is clear: the \$30 trillion also served to fuel an international arms race and decimate countries like Afghanistan and Iraq, which are on the frontline of climate change and ill-equipped for further climate emergencies (ICRC, 2021).

The evidence also indicates that military spending is the least effective way to create jobs. Public spending on health care, education, clean energy, and infrastructure instead of waging the "War on Terror" would have created millions more jobs in the United States (Garrett-Peltier, 2019). For example, \$1 billion invested in education will create over twice as many jobs as \$1 billion spent on the Pentagon.

The existential climate emergency has led many people and a growing number of politicians (Sanders, 2019; Global Alliance for a Green New Deal, 2021) to consider a Green New Deal (GND) as the route to a sustainable green and clean economy. However, progressive GND plans remain incomplete unless they also call for the break-up of the military-oil industry relationship and complete decarbonisation of the world's militaries (Lin & Burton, 2022). Since all areas of human activity must decarbonise, the oil-dependent militaries of the big military spending nations cannot be exempted to continue business as usual. As summarised by economic anthropologist Jason Hickel (2022): "A Global Green New Deal must address excess resource consumption in the North [...] SUVs, fast fashion, private jets, advertising, planned obsolescence, the military industrial complex [...] there are huge chunks of production that are organised primarily around corporate power and elite consumption and are actually irrelevant to human needs."

Degrowth applied to the big military spending nations inevitably means considerably fewer weapons, overseas military bases and wars; this also means, by extension, reduced military GHG emissions. As the biggest institutional users of oil in the world, the world's militaries are themselves a major driver of climate change, both in terms of day-to-day operations as well as conflicts and wars, often conducted for oil (Lin & Burton, 2019). Runaway global military spending enables this. Fossil fuels are not cheap and the more consumed, the higher the fuel bill. There is a strong positive correlation between military spending and carbon emissions, especially for top military spenders (Bradford & Stoner, 2017; Jorgenson & Clark, 2016); this is to be expected since higher spending reflects a larger proportion of big-ticket purchases such as Su-57, J-20 or F-35 fighter jets, which can use up to 5,600 litres of fuel per flight hour. To create a post-carbon world, governments have no option but to cut military budgets and simultaneously fully decarbonise any remaining military activity.

Since this is the case, it follows that there is a much needed and challenging discussion to be had on the nature and purpose of foreign and (decarbonised) defence policy in the post-carbon era — one that reaches for the paradigm shift in international relations necessary to change the unsustainable path we are on. As our planet overshoots its biophysical limits and the consequences of more extreme weather events such as heatwaves, forest fires, floods and droughts become commonplace this discussion will become ever more pertinent. Nor should decarbonising the military, defence and security sector be a means of delivering "greener ways to conduct war". Weaponry and war will always kill and maim, destroy and pollute. To create a post-growth post-carbon future that is essential to our long-term well-being, we have to challenge the dogmas of "national security" and "economic growth" together.

1. How can degrowth principles be applied to the military in practice?

Degrowth is a planned and democratic reduction of production and consumption in rich countries to lower environmental pressures and inequalities while improving well-being. How can this be achieved? The IPCC's latest report on the *Mitigation of Climate Change* (2022) discussed three ways: *avoid* (by consuming less), *shift* (by substituting one for another), and

improve (by greening the existing). The same model can be applied to transform our current way of thinking about national defence and international relations.

1. Avoid

Avoid carbon lock-in to deadly and fossil fuel intensive defence systems. The F-35 is a case in point: the whole programme is projected to cost the U.S. \$1.7 trillion over 70 years. When the whole world is expected to reach carbon net-zero by 2050, it is absurd that the F-35 will still be the backbone of the U.S. Air Force (and many other national air forces) at that time, releasing GHGs at a rate of 1 tCO2e per 80 km (Crawford, 2019).

Avoid military aggressions and interventions. After the humanitarian (and climate) disasters of invasions by some of the top military spenders into Afghanistan, Iraq, Syria, Yemen and Ukraine to name but a few in recent times, history has taught us that conflicts and wars are utterly incompatible with the new post-carbon (post-growth) world (Michaelowa et al., 2022).

2. Substitute

Substitute "great power competition" with "non-offensive defence" (Lin & Burton, 2022b). Non-offensive defence is best defined as "a defence strategy that is designed to have a minimum of offensive strength whilst maximising defensive capability," and therefore is, specifically, incompatible with the use of nuclear weapons (mutual assured destruction) as deterrence (Parkinson et al., 2013). Defence should be about collective human safety, not power projection and exploitation. All conflicts eventually lead to a negotiated settlement, so it would be prudent to go straight to diplomacy as soon as possible to reduce the human and environmental suffering. Trust and confidence are at an all-time low in international relations and this has to change if countries are to successfully find co-operative routes to deal with climate chaos.

Substitute the defence industry with the green, clean and sustainable economy. Many skills in the high-tech defence industry are interchangeable with those required by green industries. The continued growth of the production of weapons, whose sole purpose is

destruction of lives and environment, will instead only lead humanity to doom either before or during full-on climate chaos.

"War is an absurdity in the 21st century," declared UN Secretary General António Guterres (2022). Time is running out for the wholesale transformation of our economy, and we ignore the defence industry in this endeavour at our peril.

3. Improve

Improve, by electrifying, the existing defensive weapons, while prioritising the phasing out of offensive weapons, including nuclear weapons. We may never be able to get rid of all offensive weapons, but if we are well protected by defensive weapons, sometime in the post-growth future we will be able to start the conversation around how few offensive weapons we actually need to not only feel safe, but to be safe.

Improve our (energy, transport and health) infrastructure to make it more resilient to anthropogenic crises and natural disasters, in the understanding that protecting global social-ecological functioning is a fundamental pillar of national security.

2. Military power seen through the degrowth lens

Global military spending is now more than \$2 trillion a year, 87% of which is spent by the G20 and 85% by the top 20 military spenders, many of whom are the same nations. The "climate villains" and top military spenders are also largely the same countries (Evans, 2021).

Historically, military spending has been central to re-enforcing power, poverty and unjust distribution of resources. This damage done in war, conflict or occupation is mirrored in, and inextricably linked to, the longstanding destructive role of those same nations' corporate interests across the Global South, notably through the extraction of resources (Omeje, 2017). To place the military in this frame is to see clearly why we must include it in the climate justice and reparation frame: "Degrowth has roots in the anti-colonial movements[...][it] is about demolishing the imperial arrangement" (Hickel, 2022).

To apply degrowth to the military and the defence industry is to raise necessary and difficult questions about the rationing of resources in a warming world. But to cut military budgets in order to divert excessive spending to the myriad activities in need of funds (Lin & Burton, 2020), and which are about the protection of all life on earth, is a legitimate demand. This effectively creates a "double dividend" for our global society: to paraphrase Tim Jackson (2008), if the fossil-fuelled way of national defence is both ecologically damaging and psychologically flawed, then the possibility remains that we could live better and safer by spending less on militarism and reduce our impact on the environment at the same time.

The "peace of mind" secured by nations through foreign and defence policies that are reliant on fossil fuel dependent militaries was never fit for purpose, and outdated notions of national security must now be replaced by the concept of sustainable human safety (Lin & Burton, 2022b). The challenge now is how to ensure a good life for all within planetary boundaries.

The reports *Indefensible: The true cost of the global military to our climate and human security* (Lin & Burton, 2019) and *Military and Conflict-Related Emissions: Kyoto to Glasgow and Beyond* (Michaelowa et al., 2022) highlight the destructive merry-go-round of war, devastation and rebuilding. As we see in Ukraine now, war and conflict is madness heaped upon madness, adding to the profits of the big defence corporations who thrive in times of war. If we don't try to transform foreign and defence policy as a parallel effort to that required for the global economy, we will never achieve a peaceful post-carbon future. Towards the end of his life, such a reconceptualisation was envisioned by Mikhail Gorbachev (2020):

What we urgently need now is a rethinking of the entire concept of security. Even after the end of the Cold War, it has been envisioned mostly in military terms. Over the past few years, all we've been hearing is talk about weapons, missiles and airstrikes [...] The overriding goal must be human security: providing food, water and a clean environment and caring for people's health. To achieve it, we need to develop strategies, make preparations, plan and create reserves. But all efforts will fail if governments continue to waste money by fuelling the arms race [...] I'll never tire of repeating: we need to demilitarize world affairs, international politics and political thinking.

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