"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 fueling the arms race... I’ll never tire of repeating: we need to demilitarize world affairs, international politics and political thinking."

Mikhail Gorbachev
**10 Talking Points for a Difficult Conversation** is one of Tipping Point North South's *Transform Defence* series of reports and briefings that offer fresh new thinking on how to redefine 'defence' as we seek *sustainable human safety* in the face of the climate emergency. *Transform Defence for Sustainable Human Safety* was launched in December 2020, marking the 5th Anniversary of the Paris Climate Agreement. It is a policy and advocacy project that brings together all Tipping Point North South’s military-related work.

This includes the Five Percent Proposal & military spending; climate change, global military emissions & UN reporting; and Green New Deal Plus. Our work is supported by Polden-Puckham Charitable Foundation, the Ratcliff Foundation, and Jam Today.

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**Tipping Point North South** is a ‘for the benefit of community’ co-operative, supporting and initiating creative, campaign-driven projects that advance the global justice agenda.

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INTRODUCTION — WHY WE NEED TO TRANSFORM DEFENCE ALONG WITH EVERYTHING ELSE AND WHY NEED TO START NOW

No human, economic or environmental transformation is complete without parallel progressive foreign policy and defence transformation. We are in the midst of the sixth mass extinction. Yet the most socially and economically damaging threat to our collective global safety – climate change – is but a poor relation when set alongside other ‘conventional’ threats. The foreign and defence policies of nations around the world – especially the top 20 nations which allocate large sums to defence spending – are preoccupied with a plethora of adversarial threats on land, air, sea and space; nuclear weapons; hypersonic missiles; cyber warfare; AI and killer robots. National budget allocations reflect this. From battlefield to nuclear wasteland; from outer space to cyberspace.

All the while ever more scientific evidence that tells us, the human family of 7 billion souls – and every single living thing we share this planet with – that we are engineering our collective species’ demise. It is heart-breaking, it is anger-making, it is disempowering. But as we hit ‘rock bottom’ and as the ‘Code Red for Humanity’ IPCC warnings finally, far too belatedly, hit home, governments will be forced to make the transformational changes because there will be no option.\(^1\) And they are nowhere near meeting this challenge yet.

It’s simple – they are stuck in a national or regional mindset. Pity, since rising sea levels or coronavirus or chemical pollution or nuclear radiation don’t care for your passports or borders.

Despite the best, indefatigable efforts of many departments within the UN, vaccine apartheid and climate injustice exists on a massive scale. Unprecedented climate change-induced natural disasters followed by pandemic have not been enough to bring the world’s political leadership to its senses and that also holds true in one especially totemic area – foreign and defence policy.

This oversight has proven catastrophic again when yet another nuclear armed military power invaded another country in the name of “national security,” and, this time, in the midst of another full-blown infectious wave of the (SARS-CoV-2 Omicron) COVID-19 pandemic with millions of daily cases a day.\(^2\)

The foreign and defence policy of our political leaders can be characterised thus: When our village is extensively damaged by an unprecedented flood, we’ll focus on taking the opportunity to settle historic grudges by burning down some buildings while threatening to indiscriminately burn down every building if there is any opposition.

This madness cannot continue.

As ever, it is the job of civil society to push for a new agenda on this hugely important aspect of human affairs as we face Code Red for Humanity.

How to Transform Defence for Sustainable Human Safety: 10 Talking Points for a Difficult Conversation is an attempt to offer up a framework that tries to envision how we get a much


\(^2\) Russian invasion of Ukraine started on February 24, 2022.
better deal for the world’s citizens from the abject failure of past and current foreign and defence policies that sees us stagger from one war to the next; the world carved up according to spheres of influence; stupid narrow mindsets prevailing over catastrophic climate change and more than 6 million dead due to the COVID-19 pandemic.

And with regard to the climate emergency, why the assumption that only matters relating to the economy are urgently addressed? Why not demand parallel roadmap to a new, humane, pragmatic global foreign and defence landscape?

What might that look like? And what might the benefits be?

This is not about greening war, putting solar panels on warships or more electric drones. It’s not about seeing any conflict (Russia’s invasion of Ukraine) as a cheap excuse to ramp up more alternative sources of oil and gas (more fossil fuel, just not Russian ones) for ‘energy security’.

One thing is for absolute sure. To call for a transformation of foreign and defence policy cannot fail us any more than the hugely costly abject failures of invasions of Iraq, Afghanistan and Ukraine; the wilful ignorance of a century worth of deadly climate warnings or indeed, the warnings of pandemic that were also utterly sidelined. Not to mention the colonial atrocities of the 18th-20th centuries and two world wars.

**AUDIENCES**

The purpose of this publication is to start as many conversations as possible in as many fora as possible whether you know nothing, something or a lot about international relations or foreign and defence policymaking.

We have been working on this topic for a few years now and the more we read and the more we write, the clearer it is to us that – for myriad reasons – there is no meaningful public or political discussion about the absolute lack of vision on how nations re-imagine international relations in the era of climate chaos, pandemic and now, again, the use of nuclear weapons in war.

It’s not unlike discussing how we get to zero-carbon future without discussing growth, or god forbid, capitalism. So it is with foreign and defence policy in the era of climate chaos.

*How to Transform Defence for Sustainable Human Safety: 10 Talking Points for a Difficult Conversation* aims to pull together some of the essential threads or themes necessary for us to try and point the way to a basic, coherent narrative that can act as a starting point for discussion.

We are not from the international relations discipline, rather the international development structural campaigning sector. This is why we seek to not only describe the problem but also offer some practical routes forward.

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As we are now in the eye of several entangled storms – climate change, pandemic, wars and rampant inequality – we hope we can draw some attention to this hugely important topic from civil society and advocacy organisations; public figures and opinion formers; UN departments; governments with an open enough mind to hear us out; Green New Deal advocates.

While we work on specific calls such as an IPCC Report into the role of the global military on climate change; 6 concrete proposals for cuts to military budgets to help plug SDGs and climate finance gaps; 7 and a high-level UN debate on Carbon Neutral Peace and Defence, 8 these are all but steps along the way to something bigger.

**How we transform defence for sustainable human safety is the debate we need to start – and sooner rather than later.**
HOW TO TRANSFORM DEFENCE FOR SUSTAINABLE HUMAN SAFETY: 10 TALKING POINTS FOR A DIFFICULT CONVERSATION

1. CHANGING THE MINDSET – TOUGH BUT NECESSARY

In a climate changed world ‘all change’ mindset must include foreign and defence policy

The scale of climate emergency is unprecedented. A total of 28 trillion tonnes of ice have disappeared from the surface of the Earth since 1994, contributing to sea level rises. To put this in context, “every centimetre of sea level rise means about a million people will be displaced from their low-lying homelands.”9 “If we did nothing at all to reduce emissions, we could get 5 metres of sea level rise just from Antarctica by 2200.”10 Climate change and global health are laying bare the magnitude and depth of the desperate state we are in. The post-pandemic global economy, coming not so long after the 2008 financial crash, will further compound this with ever greater poverty and inequality.

We have to get to zero carbon ASAP. Big oil is, at times, literally ‘in the dock’.11 Our global economy has to be transformed by Green New Deals with clean, green and sustainable jobs, energy and transport systems and other essential infrastructures. We need universal basic income and services (public health, education and transport); co-operatives not corporates; clean air, water and environment; and affordable eco-housing. We have to change from eating food produced by intensive industrial farming (based around oil) to a sustainable plant-based diet. Fast fashion, essentially fossil-fuel-based clothing, has to end. For those who can afford it, tourism has to change – we’ve got to move from long-haul holidays to stay-cation and from air travel to (electric) trains. And it has to be the case that none of this must be at the ongoing expense of the global south, continuously raided and exploited over centuries for its resources in order to further advance the development of the rich northern countries.

Foreign and defence policies of nations around the world – especially the top 20 nations which allocate large sums to defence spending – are light years away from contemplating such a parallel shift, preoccupied as they are with a plethora of adversarial threats on land, air, sea and space; nuclear weapons; hypersonic missiles; cyber warfare; AI and killer robots. From battlefield to nuclear wasteland; from outer space to cyberspace. From drones to “enhanced super soldiers”, it’s all covered.

Except it’s not all covered. From climate change to global pandemic, a suite of other, equally (or more) devastating yet deeply ‘unsexy’ hard defence threats are left in the wings.

As we try to develop transformative policies – at speed – that address all of these huge challenges, civil society and the wider public must not (conveniently) forget to include foreign and defence policy-making since it is profoundly interlocked with all these other issues. In truth, while nations have been busy declaring war or for that matter proxy wars, cold or hot, on others,

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10 https://www.theguardian.com/environment/2021/may/05/antarctica-ice-sheet-melting-global-heating-sea-level-rise-study
we have been led to this point: *we have collectively declared war on ourselves and our planet.*

No F-35 will stop New York City, Alexandria, Shanghai, Amsterdam, Rio de Janeiro, Tokyo, Venice, Bangkok, Mumbai and London going under water; no nuclear warhead will solve India and Pakistan’s disappearing water-table; no anti-terror AI will stop West Africa’s growing desertification.

And when even nuclear submarine bases are flooded, you know it’s time to worry. But as the climate threat escalates, the military response reflects an out-dated mindset

The US military is “obsessed with climate change”, and has been actively “planning for a new era of conflict governed by global warming”. In 2019, The Climate and National Security Forum (USA) presented its ‘Climate Security Plan for America’. It laid before its audience a dire scenario: climate change is here; it is costing the US military billions in mitigation and it is hindering its operations in myriad ways. The USA is not alone in facing such ‘threats’ – its adversary China was facing the same problems. The consensus is solutions need to be found, but only in order that U.S. armed forces can continue to preserve American interests in the face of climate change.

The scope of the problem is huge, but the solutions on offer are mind-bogglingly narrow.

Even if the defence establishment has recognised climate change as a “threat multiplier,” in practice, it is still largely business as usual for them: Yes, climate change has made the world more dangerous and a bit more difficult to manage, but it just means bigger budgets are needed for the same old things.

How is this possible? Well, it is no stretch to say foreign policy and subsequent defence spending is still rooted in 19th- and 20th-century framings of territorial and political enmity, whether national or regional. Climate change therefore has been dealt with firmly under the framework of ‘disaster management as national security’ – ever increasing numbers of desperate environmental and economic refugees; increased resource wars; or closer to home, militarising responses to climate disasters at the expense of climate prevention/mitigation, proper infrastructure and humanitarian relief. In truth, the $2 trillion annual global military budget speaks more to 19th- and 20th-century geopolitical occupations than 21st-century threats to our collective sustainable human safety.

And it's this framing that the global general public are encouraged to accept without question.

As humanity faces an existential threat, now is the time to redefine, redesign, repurpose the ‘terms of reference’ for our foreign and defence policy-making. To transform this situation and for defence policy-making to truly address 21st century needs, it now must include:

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14 https://www.youtube.com/watch?v=r3W9zBICGje
15 https://thebreakthrough.org/journal/no-16-spring-2022/the-guns-of-warming
16 The Secure and the Dispossessed: How the Military and Corporations are Shaping a Climate-Changed World, Edited by Nick Buxton, Ben Hayes, 2015, Pluto Press
**Climate Emergency:** we need urgent climate mitigation, climate finance, disaster risk reduction, habitat protection and conservation of biodiversity

**Pandemic Prevention and Universal Healthcare:** we need pandemic prevention and control and major investment in global public health;

**Conflict Prevention and Peace-building:** we need to save lives with properly funded conflict prevention, peace-building and peacekeeping, nuclear disarmament.

**Inequality and Poverty Reduction and Elimination:** the impacts of threats to human safety are exacerbated by inequality and poverty. The poor and marginalised are disproportionately affected by climate natural disasters, conflicts and unequal access to healthcare, education and wealth. The greatest lesson from the prolonged COVID-19 pandemics is that no one (country) is safe until *every* person (country) is safe (vaccinated).

The time is now for asking the (massive) question of the global military and its collective budget: Are you giving us the right answers to the scale of the problems we face? Are you spending our $2 trillion a year in the best ways?

This is a tough mindset to shift and a tough debate to have, challenging the limits of national security and identity - flags, national borders, refugees and immigration. But as we now tip into runaway climate change and as we are warned that COVID-19 will not be the last pandemic, the evidence is overwhelming. *Climate change and global health are hard defence & security issues and your flag, your passport, your border is only one part of your ‘security’ jigsaw.*

“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 fueling the arms race... I’ll never tire of repeating: we need to demilitarize world affairs, international politics and political thinking.”

*Former President of the Soviet Union, Mikhail Gorbachev*[^18]

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[^17]: Plural because unequal access to vaccines help to create virus variants, and some of these COVID-19 variants of concern (eg Alpha, Delta and Omicron) gave rise to new waves of global pandemics.

If “Code Red for Humanity” won’t shift the mindset, then maybe 3 degrees will

On the highway, speeding towards a 3-degree hotter world

The world is currently around 1.2°C warmer than pre-industrial levels and it is almost certainty that this year will be the coolest year of the rest of our lives. With current policies, we are on course to a 3°C hotter world by 2100.19

Not 1.5°C, 2°C but 3°C.

The tiny 1°C difference in average temperature will translate into real-world impacts of biblical proportions.

Societies break down

Catastrophic climate natural disasters will happen exponentially more often. According to Dr Michael E Mann, former lead author of IPCC Third Assessment Report, “a global temperature increase of 5.4 degrees Fahrenheit (3 degrees Celsius) or more could lead to a collapse of our societal infrastructure and massive unrest and conflict, which, in turn, could lead to a future that resembles some Hollywood dystopian films.”20

Lloyds of London’s 2015 report ‘Food System Shock’ predicted that there was over 0.5% per year, or more than an 18% chance over a 40-year period that a catastrophic scenario of extreme droughts and floods hitting multiple major grain-producing “breadbaskets” simultaneously would happen; global production of rice, wheat, maize and soybean fell by around 10%.21 In a 3-degree hotter world, such a disastrous global crop failure became almost certain to happen over a 40-year period and with much greater extent and even more calamitous reduction in crop yield.22 And if we get anywhere near close to this, imagined scenarios such as these below become not so far-fetched:

Food riots break out in urban areas across Europe and the Middle East, North Africa and Latin America. Water wars, civil wars erupt; famine kills millions of people across the already climate impacted global south. As essential resources such as water and food become ever more scarce, and the general conditions of living become much, much worse, the threat of nuclear war becomes much higher.23 Even a ‘local’ nuclear conflict between just India and Pakistan could kill hundreds of millions of people and significantly affect global climate and environment, further threatening global food production.24

Oceans become ‘hot soup’ as we cook planet Earth

19 https://climateactiontracker.org/global/temperatures/
21 http://www.eenews.net/assets/2015/06/19/document_cw_02.pdf
24 Rapidly expanding nuclear arsenals in Pakistan and India portend regional and global catastrophe, https://doi.org/10.1126/sciadv.aay5478
As the world getting hotter, the ocean would become a hot soup, effectively cooking marine wildlife alive. The ocean is absorbing the majority of the excess heat trapped in the atmosphere by greenhouse gases. The world can expect 16 times more marine heat waves each year at 1.5°C of warming, 23 times more at 2°C, and 41 times more at 3.5°C. All of these scenarios would devastate marine life. And it is not just marine life facing catastrophe as we continue cooking the Earth; habitat loss for all species would double or triple if temperature increases went from 1.5°C to 2°C. If the planet warms beyond 4.5°C, the sixth mass extinction is complete and the majority of the planet would no longer be able to host life.25

In the face of all these, we are on course to 3°C heating by 2100.

**Sea levels rising – we are unprotected**

In such a 3°C hotter world, where is the evidence to show that the UN Security Council (whose permanent five members happen to be five of the most highly (nuclear) armed nations of all) are able to protect us, especially if they have ‘skin in the game’? In what way is the UN P5’s collective current foreign, security and defence policies remotely relevant in addressing this alien 3-degree hotter world? Are they anywhere near making decisions that act in the best interests of all those represented in the UN family of states?

No.

And that’s despite knowing they themselves are in deep-water trouble. Literally.

A 3°C of heating would ‘lock in’ more than 6 metres of sea level rise.26 Sea level rise, once set in motion, will be irreversible for hundreds to thousands of years (IPCC AR6); therefore, once 3°C is reached, the sea level rise of 6m will be reached, whether 200 years from now or 2000 years in the future. The complex cascading effects of climate change also means that 4°C becomes almost inevitable if we so carelessly heat up the world beyond 3°C, and at that point, a third of Antarctica’s ice shelves could become destabilized and at risk of collapse.27 And we really would not want to see that happen. Antarctica contains 70% of Earth’s fresh water; the global mean sea level would rise by 58 metres if we managed to melt all that ice – enough to submerge the Statue of Liberty.28

To make matters worse, the IPCC predicts as much as 4.5°C of heating by 2100 is a realistic possibility. The last time the Earth was heated by 5°C as a result of too much carbon dioxide in the atmosphere, 96% of life went extinct.29

On this highway to hell, where is the speeding ticket when we need one?

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25 https://www.globalcitizen.org/en/content/the-difference-in-global-warming-levels-explained/
28 https://www.nature.com/articles/s41561-019-0510-8
29 https://www.lrb.co.uk/the-paper/v41/n15/francis-gooding/all-the-news-is-bad; https://www.nature.com/articles/s41467-021-25019-2
2. UPGRADE THE LANGUAGE: MOVE FROM ‘DEFENCE’ TO ‘SUSTAINABLE HUMAN SAFETY’

Defence planners are fiddling while Earth burns

If we do not put ‘sustainable human safety’ front and centre in defence and security policy-making, we will be not only be unable to handle another global pandemic but also unable to deal with the consequences of climate emergency. The reality is that, despite the unprecedented impact on society and the economy by the Covid-19 virus, it will be tiny in comparison if we fail to prevent full-on climate breakdown.

Every person, community, society, nation, region needs protection from aggressors and terrorists and it is the job of government to defend its citizens from such threats. Currently, the world spends $2 trillion annually on defence. This is primarily spent addressing Russia/West enmity; the new West vs China era; Israel and the West vs Iran. After Russia used NATO expansion and encirclement as the pretext to invade Ukraine, it deserves a thoughtful debate whether there is an alternative way for the US to coexist with China, other than continuing the current path of relentlessly pursuing the ‘first island chain’ military alliance stretching from South Korea and Japan, Taiwan to the Philippines at China’s door step but 10,000km away from West Coast U.S.

And concurrent to all this, the never-ending ($8 trillion and counting)30 ‘War on Terror’ is as live now as ever, albeit altering course with the Taliban now in government in Afghanistan – yet one more illustration of the unforgiveable and abject failure of western foreign and defence policy.31

Military ‘Full Spectrum Dominance’ in the face of climate chaos – to what end?

The USA accounts for 40% of global military expenditure32, more than the next 10 top military spenders combined, and invariably sets the ‘tone’; in other words, when it decreases spending, the rest of the world follows suit, when it increases, the rest do likewise. We are currently in a new arms race, as spending on both conventional (land, sea, air), nuclear weapons and now space, is on the rise. When the U.S. military’s doctrine aims to achieve ‘full-spectrum superiority,’ defined by the Pentagon as “the cumulative effect of dominance in the air, land, maritime, and space domains; electromagnetic spectrum; and information environment (which includes cyberspace) that permits the conduct of joint operations without effective opposition or prohibitive interference”33, its perceived ‘near-peer competitors’ (eg China and Russia), in order to compete, will (whether willingly or be forced to) follow suit. (One example is China’s recent modernisation of its relatively modest nuclear arsenal (currently 300 stored), in direct response to the United States’ own nearly $2 trillion nuclear triad modernisation (1,800 deployed, 5,800 in total).)34

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30 https://watson.brown.edu/costsofwar/figures/2021/BudgetaryCosts
31 https://transformdefence.org/2021/09/10/unforgiveable/
The COVID-19 pandemic and the climate emergency has exposed our current civilisation’s upside-down priorities. Annual military spending has been increasing year on year and exceeded $2 trillion a year in 2021. In comparison, those same governments have utterly failed to fund the global COVID-19 vaccination programmes ($66 billion); nor did they fund an annual investment in the energy system of $2 trillion, advised by IPCC to limit temperature rise to below 1.5 °C.35

So, given we are facing a global species wide climate – and health – emergency, what the hell are we spending $trillions on upgrades and plans for nuclear wars (that, however limited, will catastrophically damage the world)? Or land war with China? Or space dominance? And the USA and Russia building doomsday planes for leaders to fly around in post-nuclear apocalypse, managing exactly what, God alone knows.36

**How Much of the ‘Defence’ Narrative Is a Ruse for Ever-More Money Going into to Military Budgets and Defence Corporations’ Bank Accounts?**

“Rosa Brooks, a Counselor to Under Secretary of Defense for Policy in the Obama Administration, suggests the US military’s future leaders agree national security threats are centered on the economy and the environment rather than threatening global powers with massed battalions. She reports a session with majors and lieutenant colonels at the Army’s School of Advanced Military Studies at Fort Leavenworth, where she asked what they saw as the most serious threats facing the US in the next two decades. When she offered North Korea, Iran, or Al Qaeda, no hands went up, Islamic terror more generally elicited only one or two in agreement, along with weapons of mass destruction. The far more popular answers were resource scarcity and conflict driven by climate change alongside global economic collapse. This suggests that many officers must be suffering some existential doubts: the big threats are not ones the military can do much about.”37

We fail to challenge the levels of investment in present-day military defence spending at our peril. These budgets are set to address threats of terrorism, conventional or nuclear conflict while funding allocated to the defences of that in which we are evidently in greater need – that of putting in place all and every measure necessary, wherever needed, to address through early warning and disaster risk reduction the ever-present threat from human-made climate change – is lamentably inadequate.38

**Apart from a nuclear accident or deliberate nuclear warfare, climate breakdown is by far and away the greatest security threat to the world’s population.**39 It far outweighs any threats from terrorism or conventional national security (noting that terrorism and perceived or real threats to national security are themselves often intrinsically linked to oil or natural resources).

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35 https://www.theguardian.com/world/2021/jun/06/covid-global-leaders-urge-g7-to-help-vaccinate-worlds-poorest; https://www.nature.com/articles/d41586-019-02712-3
37 Close the Pentagon: Rethinking National Security for a Positive-Sum World, Charles Kenny, 2020
38 Global military spending, sustainable human safety and value for money, https://transformdefence.org/publication/value-for-money/
ONE EXAMPLE: Disaster risk reduction

"Measures to adapt the inevitable impacts of climate change are just as important as cutting greenhouse gases. The world requires an integrated approach to disaster risk reduction and tackling climate change."

A joint statement for the International Day for Disaster Reduction by Special Representative of the Secretary General for Disaster Risk Reduction, Ms. Mami Mizutori and the Executive Secretary of the United Nations Framework Convention on Climate Change, Ms. Patricia Espinosa.40

Between 2000 and 2011, 2.7 billion people were affected by disasters and $1.3 trillion was lost as a result of storms, heat waves, extreme cold, landslides, tsunamis, wildfires, cyclones, volcanoes, earthquakes and tsunamis.41 Since 2011 we have seen an ever-increasing number of extreme weather events with terrible human loss of life and livelihoods, often wiping away years of development. The increasing number of extreme weather events, though seemingly taking the public by surprise, epitomised by the unprecedented devastating flash floods in Europe (particularly west Germany), China (Zhengzhou) and USA (New York City) and wild fires in Siberia and the Russian Far East (even the North Pole), Pacific Northwest (Canada) and the Mediterranean (Greece) in 2021, was consistent with scientists’ prediction for climate change trends.42 And it got worse in 2022, one-third of Pakistan was under water, following an intense heatwave and a long record-breaking monsoon, and China experienced the most severe heatwave ever recorded in the world.43

The reality on the ground is that way more money is spent ‘after the fact’ on post-disaster reconstruction than funding efforts on early warning and disaster risk reduction. In the 20 years between 1998 and 2018, $107bn was spent on disaster response. This was just 0.4% of overall investments in development aid. “This [sum] is inadequate and markedly inequitable, with little consideration of the potential magnitude of risk and realised risk – or actual losses and damages. Since 2003, the financing of DRR [Disaster Risk Reduction] has been roughly at about 10 per cent of overall financing on disasters each year. The investments are driven by few large post-disaster projects rather than by systematic DRR that include local community preparedness and capacity development for risk informed development,” says Sanny Jegillos of UNDP Asia and the Pacific.44

Meantime, the UN Office for Disaster Risk Reduction (UNDRR) rightly wants to see a ‘culture of prevention and not just a culture of reaction’. DRR is a multi-faceted complex human activity that needs far more investment if it is to be truly preventative rather than reactive. The most notable element of UNDRR’s mandate is “to serve as the focal point in the United Nations system for the coordination of disaster reduction and to ensure synergies among the disaster reduction

41 https://www.unisdr.org/archive/28204
42 https://www.theweek.co.uk/news/environment/953574/worlds-most-extreme-weather-events-2021
44 https://medium.com/@UNDPasiapac/the-future-of-disaster-risk-reduction-is-in-better-financing-1605454bf1bd
activities of the United Nations system and regional organisations and activities in socio-economic and humanitarian fields”.45

This is a huge global task that only becomes more demanding with each climate-change affected year. Not only is disaster risk reduction and response under-funded, but also the office of UNDRR itself. Over the course of the 2016–2017 biennium, UNDRR could only raise $58 million to meet its meagre financial target of $75 million.46

While the international community spent $107 billion on disaster response (not risk reduction) between 1998 and 2018 (an average of approximately $5 billion annually), the F-35 Joint Strike Fighter programme is expected to cost over $1.7 trillion over its 66-year lifespan for the United States alone.47 Costing £100 million each, the UK government planned to buy 138 F35s. Adding up all the planned purchases, the total lifetime cost for all the countries that bought F-35s could be as high as $2 trillion.48

We have been told we have a decade or so to save our planet. We have a climate emergency declared.49 UNDRR estimated the world would experience 560 disasters each year by 2030, or 1.5 disasters per day; the ‘broken perception of risk based on optimism, underestimation, and invincibility’ is ‘setting humanity on a spiral to self-destruction’.50

We need a quantum shift in redefining ‘defence’ needs and ‘defence’ spending aligned to the ever-greater threats to human life and habitat from man-made climate change. Just as the F-35 was deemed worth the expenditure to meet USA and UK governments’ (and defence contractors’) needs, so expenditure for disaster risk reduction is essential to global human safety and must also be framed as a ‘defence’ issue. And for DRR read pandemic prevention or conflict prevention or poverty eradication.

Meantime, militaries know what’s coming down the road, but the military ‘solutions’ to climate change are inadequate, anchored in pre-climate chaos defence planning,

“I really believe that security and climate, that is two sides of the same coin... We need to make sure that we have the technologies, which are reducing emissions. But of course we cannot choose between either green or strong armed forces. We need strong and green at the same time... And with more extreme weather, our armed forces have to be able to tackle that. Everything from extreme heat. We have a training mission in Iraq. Our forces are met or are facing more than 50 degrees Celsius, of course - approximate that is here now in this room...- so that matters for equipment, for uniform, the way they do their military operations.”

NATO Secretary General Jens Stoltenberg at COP2651

47 https://responsiblestatecraft.org/2021/04/27/would-you-pay-1-7-trillion-for-a-plane-that-couldnt-fly/
49 https://www.bbc.co.uk/news/uk-politics-48126677
51 https://www.nato.int/cps/en/nato_{quote}h/opinions_188262.htm
The language around climate security is dominated by the perceived ‘threat’ of mass migration and calls for military solutions. This focus on military solutions “rather than structural or even compassionate solutions has led to a massive increase in funding and militarisation of borders worldwide in anticipation of a huge increase in climate-induced migration. And military forces are ever more engaged with responding to migrants both at national borders and increasingly further from home. The US frequently deploys navy ships and US coastguard to patrol the Caribbean, the EU has since 2005 deployed its border agency, Frontex, to work with member states’ navies as well as with neighbouring countries to patrol the Mediterranean, and Australia has used its naval forces to prevent refugees landing on its shores. India has deployed increasing numbers of Indian Border Security Force (BSF) agents permitted to use violence on its eastern border with Bangladesh making it one of the world’s deadliest.”

Climate chaos and pandemic shows us that ‘national security’ – or rather sustainable human safety – policies need to be drawn from a much wider remit if they are to truly rise to the challenge of combating the greatest threats to our collective human safety.

As Nick Buxton of the Transnational Institute argued, “It is clear that without change, the impacts of climate change will be shaped by the same dynamics which caused the climate crisis in the first place: concentrated corporate power and impunity, a bloated military, an increasingly repressive security state, rising poverty and inequality, weakening forms of democracy and political ideologies that reward greed, individualism and consumerism. If these continue to dominate policy, the impacts of climate change will be equally inequitable and unjust. In order to provide security for everyone in the current climate crisis, and especially the most vulnerable, it would be wise to confront rather than strengthen those forces. This is why many social movements refer to climate justice rather than climate security, because what is required is systemic transformation – not merely securing an unjust reality to continue into the future.”

“We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly, affects all indirectly.”

Rev Martin Luther King Jr

When is defence not defence? When it’s a Tier One security threat that isn’t taken seriously enough.

“We have all been up against the same enemy. The same tiny opponent threatening everyone in much the same way, but members of the UN have still waged 193 separate campaigns, as if every country somehow contains a different species of human being... Unless we unite and turn our fire against our common foe, we know that everyone will lose... Our second step should be to develop the manufacturing capacity for treatments and vaccines so that the whole of humanity can hold them like missiles in silos ready to zap the alien organisms before they can attack... Never again must we wage 193 different campaigns against the same enemy.”

British PM Boris Johnson’s speech to UN General Assembly, 2020

52 https://www.tni.org/en/publication/primer-on-climate-security
It’s a wonderful speech calling the world to unite. But it’s disingenuous to say the least. Pandemic was a tier one security threat and nothing was done.

“Humiliation was caught napping. We have been scrabbling to catch up, and with agonising slowness we are making progress.”

No. Politicians and defence planners were caught napping and the rest of us were left at risk.

COVID-19 has shed yet another strong, bright light on how many of us have been let down by our defence planners. The most illuminating example is the United States where President Donald Trump cancelled his predecessor Barack Obama’s pandemic planning, enabling pandemic financing to become yet another trough from which the defence contractors can feed. All this as the USA has one of the highest COVID-19 deaths in the world and in the first two years of the COVID pandemic, there was more than 1 million excess deaths, more than twice the total number of all U.S. war casualties since WWI.

Meantime, the UK government identified pandemic as one of the top 4 (Tier 1) security threats in successive ‘National Security Strategies’ (NSS) 2010 and 2015. The risk of human pandemic disease “remains one of the highest we face”, reported the 2010 NSS. Yet nothing was done in practice to prepare or mitigate it – instead it landed on the National Health Service (NHS) facing unsustainable funding cuts and privatisation, all in the name of austerity. In the UK more people have died as a result of COVID-19 than in the Blitz – and in a shorter time period.

We are now in desperate need of a paradigm shift on how we define ‘defence.’ Our present day collective foreign, security and defence policies are rooted in 19th-century politics and economics. Today, climate change is our greatest collective threat. And it has been a virus, not a foreign adversary, that has brought fear to the human family and the global economy to the brink. An invisible virus managed to achieve the unprecedented feat of grounding all non-essential flights throughout the world and confined people inside their homes in all major cities (for a period of time, albeit brief, in 2020).

The COVID-19 pandemic started around late 2019; by the end of 2021, there were officially (and arguably underreported) nearly 300 million cases and 6 million deaths globally. A more accurate figure would be excess deaths and for this period, it was estimated to be up to 18 million excess deaths. And the pandemic, despite the roll out of effective vaccines (against fatality), showed no sign of ending: after the emergence of the Alpha, Beta, Gamma and Delta variants of concern.
(VOCs) one after the other, the Omicron variant started to ravage the world, especially the global south (who do not have equal access to vaccines), in 2022.

For our leaders and defence planners to be fully unprepared for the original COVID-19 pandemic may be regarded as a misfortune, but to make the same mistakes and suffer compatible or even more devastating social and economic consequences again and again looks like wilful disregard for human life. Three years into the COVID pandemic, we can no longer count the number of global pandemic waves on one hand.

Instead, what have our leaders decided to do to prevent the unthinkable scenario – running out of Greek letters to name the VOCs?

“Living with COVID-19” and stopped naming the VOCs.

Yes, that’s right. They are ordering us to “Let it rip.” Never mind around 10% of all COVID infections lead to “long COVID” that has more than 200 documented persistent symptoms indicating permanent damages to brain, lung, heart and immune system among others.60 Despite multiple significant pandemic waves in 2022 caused by distinct variants of the SARS-CoV-2 virus, they were all officially ‘Omicron’ waves.

Masking, testing, quarantines, transparent full data reporting and all other protection measures against pandemic were got rid of while the pandemic was still in full swing.61 They gave up and decided the best way to defend human safety is to pretend ‘everything is fine and the threats will just disappear.’ Six million dead. That’s what war looks like when you’re undefended because human safety wasn’t the priority. Nor will it be for the next pandemic, when it comes, unless we modernise the language and replace ‘defence’ with ‘safety’.

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60 The four most urgent questions about long COVID, https://doi.org/10.1038/d41586-021-01511-z
3. DEMAND REAL ‘DEFENCE AND SECURITY’ VALUE FOR MONEY

A new widened defence remit » reapportion budgets » deliver ‘full spectrum’ value for money

Nowhere on planet earth is going to escape the consequences of climate change. So, over the next 50 years, how much do we expect will be made available to disaster risk reduction? Or even post-disaster response, as we enter the age of climate breakdown? Over that same time-frame of fifty years, at the present annual spending rates, we will spend more than $100 trillion on global militaries. If we take the $5 billion annual average for post-disaster response spending (1998–2018) by the international community, that comes to $250 billion over half a century – a mere 0.25% (a quarter of one percent) of global military spending.

To interrogate current defence spending (higher now than at peak of the Cold War) is to see ‘WASTE’ written everywhere. To seek true value for money – in a post COVID-19, climate changed world – affords us a once in a lifetime opportunity to rethink and repurpose military spending.62

More numbers speak for themselves. Public climate finance was estimated to be $321bn in 2020,63 less than one sixth of the $1981bn sum spent by global militaries in the same year. Oxfam estimated that rich countries contributed even less in reality to the global climate finance annual $100bn target; $20bn in 2018, one third of the OECD’s official (inflated) figures.64 $20bn, that’s one hundredth of the amount governments spent on weapons and wars, fuelling climate heating; there is a strong case to be made that we demand better value for money and some military spending can be diverted for our benefits without endangering human safety.

Global military spending in 2021 was $2.1 trillion.65

Since 2015, the G7 and other industrialised countries have committed to spend $100bn a year under UNFCCC to support climate action in developing countries.66 The pledge was never fulfilled. One-year’s global military spend will fund climate finance for 21 years. Twenty-one years.

On average, around $5 billion is spent on UN disaster response every year, and 10% of that was for disaster risk reduction. One-year’s global military spend will fund UN disaster response for the next 420 years, but since prevention is better than treatment, UN disaster risk reduction can be funded for the next 4200 years by one-year’s worth of global military spending.

Currently, just $4 billion to $10 billion was spent globally each year for biodiversity conservation. To stop the sixth mass extinction, scientists estimated around $100 billion a year would be needed to conserve Earth’s current irreplaceable biodiversity.67 One-year’s global military spend will fully fund global biodiversity conservation for 21 years.

64 https://oxfamilibrary.openrepository.com/handle/10546/621066
66 https://www.odi.org/blogs/9611-g7-take-climate-finance
67 How to pay for saving biodiversity, 2018, Science, https://doi.org/10.1126/science.aar3454
WHO’s funding is currently $2 billion a year. Even for this pitiful amount, it relies on private donors to make up the short fall. One-year’s global military spend alone will fund WHO at this level for the next 1050 years.

WHO asked the international community to raise $675 million for its COVID-19 Solidarity Response Fund but had great difficulty reaching the target. Consider that just 0.03% (that’s 3% of 1%) of one-year’s global military spend can cover this – and not even be missed. Arms trade expert Andrew Feinstein estimated 40% of all corruption in world trade is in the arms trade.

WHO estimated that the cost of planning for a pandemic is around $1 per person per year so we need around $8 billion a year. One-year’s global military spend would fund global pandemic surveillance and control for the next 262 years.

One-year’s worth of global military spend will provide enough money (universal basic income, UBI, for the 700 million poorest people) for 4 years to lift the poorest people in the world above extreme poverty.

The UN spends around $4.5 billion a year on peacekeeping; at this level, one-year’s global military spend will fund UN peacekeeping operations for the next 466 years. To properly fund peacekeeping with strong mandates, the UN will need $15 billion a year; for this, one-year’s global military spend can provide the funding for the next 140 years.

Looked at these in another way, one single year’s worth of world military expenditure would ‘procure’ any of the above, and 20 years’ worth of world military expenditure would procure all of them. Furthermore, to do all of the above requires $740bn a year (and $500bn of this is UBI for 700m people), equating to mere 35% of annual global military spending.

**Lockheed Martin F-35 Lightning II, the most expensive weapons system in history**

The F-35 is as good as any to make the ‘value for money’ case. Had the $2 trillion estimated global total lifetime cost of F-35 programme been applied to the activities/areas/agencies listed above, this is what the global community would be receiving any one of these instead:

- Climate finance for 20 years
- UN disaster response for the next 400 years
- UN disaster risk reduction for the next 4,000 years
- Global biodiversity conservation at $100bn per annum for the next 20 years
- WHO funding at $2bn per annum for the next 1,000 years
- WHO’s COVID-19 Solidarity Response Fund for 2,963 years
- Global pandemic surveillance and control at $8bn per annum for the next 250 years

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70 [https://youtu.be/zhe7JZ0K0xo](https://youtu.be/zhe7JZ0K0xo)
71 [Global military spending, sustainable human safety and value for money,](https://transformdefence.org/publication/value-for-money/)
• Money for 4 years to lift the poorest people in the world above extreme poverty (UBI for the 700 million poorest)
• UN peacekeeping operations at current $4.5bn per annum for the next 444 years
• UN peacekeeping at $15bn per annum for the next 133 years

**Global Nuclear Weapons Spending**

According to the International Campaign to Abolish Nuclear Weapons (ICAN), the ‘nuclear nine’ blew $73 billion on their arsenals — $7 billion more than 2018. ICAN’s Executive Director Beatrice Fihn spoke for all of us when she said, “It is absurd to be spending $138,700 every single minute on weapons that cause catastrophic human harm rather than spending it to protect the health of their citizens. They are abdicating their duty to protect their people.” The annual global spending on nuclear weapons would fund

• 70% of annual climate finance
• UN disaster response for the next 15 years
• UN disaster risk reduction for the next 146 years
• 70% of the needed $100bn-per-annum funding for the global biodiversity conservation
• WHO at $2bn per annum for the next 37 years
• WHO’s COVID-19 Solidarity Response Fund for 108 years
• global pandemic surveillance and control at $8bn per annum for the next 9 years
• UN peacekeeping operations at current $4.5bn per annum for the next 16 years
• would provide proper funding for UN peacekeeping at $15bn per annum for the next 5 years

**PEACEKEEPING**

“Under the E.U.’s current global strategy, conflict prevention risks being little more than an afterthought. Only by addressing the underlying reasons why people fight can we sustainably end conflict. But the current policy debate appears to focus almost entirely on hard security responses... Yet the E.U., arguably the last woman standing with a belief in values-based multilateral action, human rights and inclusion, has the credibility to emphasize an ambitious conflict prevention and peacebuilding agenda, weaving in defense, diplomacy and development.”

*Harriet Lamb, CEO of International Alert*

And the evidence that investment in peacekeeping works is clear. In a 2018 study, it is estimated that if the UN had invested $200 billion in peacekeeping operations with strong mandates during the period 2001-2013, major armed conflict would have been reduced by up to two-thirds (relative to a scenario with no peacekeeping operation) and 150,000 lives would have been saved. The researchers concluded that “UN peacekeeping is clearly a cost-effective way of increasing global security.”

Don't ever be told 'there's no money'. It's sitting in national defence budgets and is being thrown away on expensive yet pointless projects such as nuclear weapons and space dominance; fighting...
asymmetrical (proxy) wars where the rich world get to use their expensive military hardware in developing country with devastating impact on civilians and development.

And finally, it’s thrown away on projects that make defence companies ever richer.

**WORLD HEALTH ORGANISATION**

"It is possible to imagine a world in which every nation respects the WHO's authority, follows its advice and lets it coordinate the flow of information, resources and medical equipment across national boundaries to areas of greatest need. That is not the world we live in.” "There is a simple reason for this,” wrote science journalist Stephen Buranyi. 75 “For all the responsibility vested in the WHO, it has little power. Unlike international bodies such as the World Trade Organization, the WHO, which is a specialised body of the UN, has no ability to bind or sanction its members. Its annual operating budget, about $2bn in 2019, is smaller than that of many university hospitals, and split among a dizzying array of public health and research projects. The WHO is less like a military general or elected leader with a strong mandate, and more like an underpaid sports coach wary of 'losing the dressing room', who can only get their way by charming, grovelling, cajoling and occasionally pleading with the players to do as they say.”

He went on, “Richard Horton of the Lancet said that after the WHO declared a public health emergency, ‘countries, especially western countries, didn’t listen. Or didn’t seek to understand what was actually taking place in China.’ On 5 February, the WHO asked for $675m to fund its Coronavirus response through to April. Anthony Costello of UCL said that when he met with Tedros on 4 March, the WHO had received only $1.2m. ...

The WHO is battling against a breakdown in international cooperation that is far beyond its capacity to control. ‘Governments have retreated to national policies, and this problem predates this crisis,’ said Clare Wenham, the health scholar. States have been turning away from international institutions for a long time. The WHO hasn't driven globalisation in the same way as the WTO or IMF, but in a way it has administered it – quietly promising to take on the outbreaks that arise in an industrialised and interconnected world, and relying on the often unspoken norms of international collaboration that underlie it.'

**At current level, WHO’s annual $2 billion is only 0.1% of annual $2 trillion we spend globally on militaries. Diverting just 1% of global military spending in one single year can fund the WHO for 10 years; 10%, the next 100 years. If we were to divert all $2tr of one-year global military spending, the WHO will be funded for the next 1000 years.**

"The main takeaway for me... is that cooperation is needed. There are vaccination problems, there are financial issues, and there is the issue of military spending. In the current circumstances, military expenses seem even more extravagant. Back in the spring, I urged for an agreement to cut them by 10% to 15%. Environmental issues are now more urgent than ever. ...The UN needs to be safeguarded, developed, and of course, reformed, adapting it to the changes that have taken place globally. But to do this, trust needs to be restored between major powers. This trust has been destroyed.”

Mikhail Gorbachev76

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Defence industries are a parasite on the tax-payer’s body

“Do we need weapons to fight wars? Or do we need wars to create markets for weapons?”

Arundhati Roy

PROFITS FROM WARS

The US finally ended the war in Afghanistan after 20 years, and it ended as it started, the Taliban returned to power almost simultaneously. With hindsight, this war is a massive failure, judged by any kind of metric, bar one – that is, the measure of profits from wars. The Cost of War Project estimates that the war in Afghanistan cost U.S. taxpayers $2.3 trillion to date.77

Where did the money go? The military industrial complex.

The top defence contractors enjoyed a bonanza in federal contracts over the course of the war in Afghanistan; the top five weapons companies alone (Raytheon, Lockheed Martin, General Dynamics, Boeing and Northrop Grumman) pocketed $2 trillion between 2001 and 2021.78 For every dollar these weapon makers spent on lobbying, they received nearly $2000 back in Pentagon contracts.79 War is business and wildly profitable, according to The Intercept: 80 “$10,000 of stock evenly divided among America’s top five defense contractors on September 18, 2001 – the day President George W. Bush signed the Authorization for Use of Military Force in response to the 9/11 terrorist attacks – and faithfully reinvested all dividends, it would now be worth $97,295.” Much better return on investment (an ROI of nearly 900%) than if the exact same amount were invested in general economy, e.g. an S&P500 index fund.

And Afghanistan is only one of the many ‘wars on terror’. Institute for Policy Studies found that “over the 20 years since 9/11, the U.S. has spent $21 trillion on foreign and domestic militarization... including at least $7.2 trillion for military contracts.”81 Nearly one-third of all Pentagon contracts in recent years have gone to just five top weapons companies, but weapons makers like Lockheed Martin and Raytheon were “far from the only beneficiaries... logistics and reconstruction firms like Kellogg, Brown and Root (KBR) and Bechtel, and armed private security contractors like Blackwater and DynCorp” all made massive war profits.82

THE MILITARY INDUSTRIAL COMPLEX

The best example of the power of the military industrial complex and the absurdity of our defence policies is the Lockheed Martin F-35 Lightning II, the most expensive military weapons system in history and possibly the single most successful programme of public wealth extraction

78 https://stephensemler.substack.com/p/the-top-5-military-contractors-ate?
79 https://responsiblestatecraft.org/2021/09/02/top-defense-firms-see-2t-return-on-1b-investment-in-afghan-war/
80 https://theintercept.com/2021/08/16/afghanistan-war-defense-stocks/
82 https://watson.brown.edu/costsofwar/files/cow/imce/papers/2021/Profits%20of%20War_Hartung_Co
sts%20of%20War_Sept%2013%2C%202021.pdf
ever devised by a private company — moving (tens of) billions of dollars every year from ordinary taxpayers into the pockets of a single corporation Lockheed Martin and its subcontractors and huge army of lobbyists. The programme’s costs keep rising and with never-ending new problems and delays, it is currently projected to cost more than $1.7 trillion during its lifetime for the United States alone. It is the poster child of the "too big to kill" behemoth. It is supposed to be good at everything but turns out to be pretty rubbish at anything it is supposed to do. — for one thing, the F-35 has been repeatedly prohibited from flying in thunderstorms, somewhat ironic for a plane nicknamed ‘Lightning’. It is even every bit as dangerous to its own pilot as the foes it will face. Why does the USA and its allies, notably the UK, put such a big stake (in the case of the USA, all in) on the unproven, untested, error-prone, ineffective and mostly unavailable F-35s for their national (air) defence in the time of austerity and dangerously rising hawkish defence strategy?

THE SUPER-RICH CONTRACTORS OF WAR

The Pentagon, with its $800 billion annual budget and tens of thousands of contractors (ranging from manufacturing to professional, scientific and technical services to construction (many of which have been found to make ‘wilful or repeated safety, health or fair labour standards violations’), offers a clue as to why northern Virginia has some of the richest counties in the nation.

The top three wealthiest counties in the United States are all in suburban Virginia; there are 4 Virginia counties in total in the Top 10. The richest county Falls Church is only 20 minutes away from Lockheed Martin’s headquarters by car; the second richest Loudoun County 47 minutes; and the third richest Fairfax County only 19 minutes. Falls Church is also where the other big defence contractors, General Dynamics and Northrop Grumman (a F-35 subcontractor), are based. This is not surprising, considering that CEOs of the top 5 defence contractors received nearly $90 million in compensation and their companies spent more than $114 billion on share buybacks, that artificially inflated share prices and by extension, executive compensation, rather than on investments.

The Poor People’s Campaign noted that “Corporate military contractors now account for more than half of the Pentagon’s budget. One contractor alone, Lockheed Martin, took in more than $35

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83 https://thefivepercentcampaign.org/2016/03/15/how-i-learnt-to-stop-worrying-and-love-the-lightning-jet/
85 Even by Pentagon terms, this was a dud: The disastrous saga of the F-35, https://www.salon.com/2021/02/27/even-by-pentagon-terms-this-was-a-dud-the-disastrous-saga-of-the-f-35/
87 https://thefivepercentcampaign.org/2016/03/15/how-i-learnt-to-stop-worrying-and-love-the-lightning-jet/
88 https://sirota.substack.com/p/the-pentagon-is-giving-billions-to
billion in Pentagon contracts in 2018 — nearly as much as the entire $40 billion budget for the State Department and USAID combined.”

**TAX**

The Tax Justice Network has proposed that “national tax systems should be adjusted to cope with the COVID-19 pandemic: a large fiscal stimulus, with spending running far ahead of tax revenues — but no blank cheque. The poor and vulnerable should pay less and receive more, while rich people and strong, highly profitable corporations should pay more – a lot more.”

We would argue that their recommendations can be applied to the military-industrial complex, should global society wish for another much needed revenue stream. Tax Justice calls and Transform Defence additions:

- **A HARD crackdown on tax havens**, and more resources for tax authorities. **Additionally we argue that** it is hard to see where the loyalty of multinational defence companies lie. It is time for them to put their money where their mouth is. Defence companies should be banned from creating subsidiaries in tax havens. Governments should review and stop unnecessary, or even corrupt, subsidies and tax credits to defence companies.

- **Implement huge — maybe 50-75 percent annual — “excess profit taxes”**, targeting only highly profitable firms, and sparing fragile firms. The tax haven crackdown will help stem leaks. **Additionally we argue that** if defence companies sold their products and services with appropriate prices in a transparent and accountable way (to the citizens not just politicians), it is difficult to see how they can make ‘excessive’ profits so it is fitting to tax them heavily.

- **Tax wealth**. Hefty wealth taxes, land value taxes, capital gains taxes, and more, with only modest reliefs where appropriate and truly needed. **Additionally we argue that** executives in defence companies are some of the richest people. Their salary and bonus are people’s taxes - they are meant to enrich our collective security not their personal financial security.

- **Don’t bail out investors or large corporations**. Bail out people. **Additionally we argue that** as we showed earlier, defence companies have been spending all their time working to profit from the coronavirus crisis rather than helping their fellow citizens in the time of need.

- Put unemployed people back to work in a climate-friendly **Green New Deal**. **Additionally we argue that** don’t forget the military-industrial complex’s role in the climate breakdown. This is why we need Green New Deal Plus.

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96 [https://thefivepercentcampaign.org/green-new-deal-plus/](https://thefivepercentcampaign.org/green-new-deal-plus/)
**Ban stock buybacks.** Not that long ago, they were illegal in many countries, as market manipulation. Additionally we argue that defence companies spend more on stock buybacks than on investments.97 This is why they no longer know how to make good products - cases in point: Lockheed Martin’s F-35s and Boeing’s 737 Max.

**THE ARMS TRADE DOESN’T MAKE US SAFE AND IS A MAJOR DRIVER FOR CORRUPTION**

“So how does the arms trade and the Coronavirus crisis intersect? Very simple. We're wasting hundreds of billions of dollars of public money on defense while neglecting public health and disease control. The most expensive weapon system ever built is a jet fighter called the F-35. Built by the United States of America and which has been sold around the world. This jet fighter didn’t just fail its first couple of test flights. It failed its first 14, leading one defence aerospace analysts to suggest that the only person who would be endangered by the F-35 were test pilots.

The American Government Accountability Office announced that the center piece, the brain if you will, of this jet fighter has never functioned properly. The whole thing is going to have to be redesigned. The American taxpayer spent one and a half trillion dollars on a jet fighter its own government now admits doesn't work. The same government spends $11 billion on combating disease. In the case of the United Kingdom, we spend 141 million pounds according to Declassified UK, on our foreign military bases that would double the amount of life saving equipment that the NHS could buy during this Coronavirus crisis.

Our patterns of spending show that our defense industry, the arms trade are actually making us far less safe. It’s not just the people are being killed in pointless wars, be it in Iraq, Afghanistan, Yemen, but now people are dying in their homes because we would rather invest in defense than in public health. And why are we doing that because of an out of control militarism that is promoted by our politicians and senior corporate executives. And the reason that they do that is because the arms trade keeps money circulating in the political process from which they all benefit.

Think of the size of our armies or navies, or air forces. Our governments spend around $1.75 trillion every year on wars, on weapons on conflict. And this industry of war is the most corrupt trade that we've ever come across in human history accounted for around 40% of all corruption in world trade, wasting billions of dollars every year. If we could deploy that sort of resource to address the Coronavirus crisis that we're currently living through.

Imagine what else we could be doing. Imagine how we could be fighting the climate crisis, how we could be addressing global poverty, inequality, our priority should never be war. Our priorities need to be public health, the environment and human wellbeing. So as we give praise to our health workers and other public servants who are putting themselves on the frontline of this health crisis, let’s remember who are the truly important people. Perhaps this is an opportunity. Let’s embrace our global humanity, which is how we’re going to get through this crisis. Let’s put aside our obsession with enemies. With conflict. This is an opportunity for peace, it is an opportunity to promote our common humanity.”

Andrew Feinstein,  
Author of 'Shadow World: Inside the Global Arms Trade' and former South African MP98

98 https://youtu.be/zhe7JZ0K0xo
**BAE**

*Human Rights, Corruption, Climate Change and a Load of CSR Empty Words*

It’s hard to know where to begin when one reads the CSR reports coming out of any defence company. **They are documents written with breathtaking double standards such as BAE supporting UK school sports days while manufacturing bombs to fall on Yemeni children.**

Here is just one small climate related example from one of BAE’s CSR reports.99

> “As a major manufacturer, we recognise that our operations have an impact on the environment – from the energy and resources we use to the waste that we generate. We are committed to minimising the environmental impact of our operations and products, reducing our environmental footprint and in turn, decreasing our operational costs. ... We work to improve energy efficiency and de-carbonise our energy supply. This is a constant challenge as we operate many different processes, from large-scale, complex manufacturing operations over long lead times to intense digital services. Consequently, each of our businesses are tasked with setting their own efficiency and reduction targets. In the twelve months to 31 October 2017, Group-wide greenhouse gas (GHG) emissions have decreased by 8%.”

**Reality Check**

Fossil fuels are the lifeblood of all modern militaries and the business of war is an entirely fossil fuel dependent enterprise. Thus, when governments talk about carbon reduction in the military, they are primarily addressing the civil/administrative part of their activity. The same applies to a company like BAE – they are allowed to only report on a portion of their activities that can be made more efficient. And when they refer to their ‘impact on the environment’ and ‘waste that we generate’, are they reporting on the post-conflict reconstruction that ensues from BAE made bombs dropping on buildings – building that require cement, the production of which is one of the most intensive emitters of GHGs? No, this is not part of their reporting.

BAE’s climate change contribution, deriving from its both direct and indirect links to many varied overseas military operations deploying BAE weapons, is significant.

BAE Systems is by far the MoD’s top supplier of weapons, equipment and services. Between 2014 and 2017, UK forces had dropped at least 3,482 bombs and missiles in the battle against the Islamic State (ISIL), including 2,089 Paveway IV bombs and 486 Brimstone missiles from BAE-manufactured Typhoon and Tornado jets. None of the environmental impacts and greenhouse emissions from the bombs and jet fuels are accounted for in BAE’s supposed ‘management.’

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5. NEW ‘DOCTRINES’ NEEDED: CARBON NEUTRAL PEACE AND (NON-OFFENSIVE) DEFENCE

GLOBAL MILITARY IN A CARBON NEUTRAL WORLD = CARBON NEUTRAL PEACE AND (NON-OFFENSIVE) DEFENCE

The world’s militaries are the biggest institutional users of oil in the world. They are fossil fuel reliant and their GHG emissions reporting to UN processes are voluntary only.

We have collectively and consistently ignored the massive yet unaccounted for historic and present-day responsibility of the world’s militaries for climate change, from their day-to-day operational activities to the wars and conflicts of which they are part (and post-conflict carbon burden of reconstruction).

While some nations are aware that the climate change imperative impacts on their military, the solutions on offer are far from adequate.

A carbon-neutral world demands we fully decarbonise our militaries.

Vitally, a decarbonised military, defence and security sector is not about delivering ‘greener ways to conduct war’: weaponry and war will always kill living beings, will always destroy and pollute environments. Instead, this is the starting point for much needed if challenging discussion that can lead us to a paradigm shift in national and international defence and security policy-making for a carbon-neutral world.

We need a transformed and transformative doctrine fit for purpose in this century of climate breakdown and pandemic – one based on revisiting and updating earlier work on the concept of non-offensive defence and prioritising sustainable human safety through social, economic and environmental justice and placing Carbon Neutral Peace and Defence at its heart.¹⁰⁰

THE MOOD IS CHANGING

At the UN Security Council, where all matters of international security are debated, calls are starting to be made for a review of how security itself is defined and addressed.

Informal Group of Experts of the Security Council

*Climate change is the defining issue of our time and a multidimensional challenge. Its security dimension remains to be addressed comprehensively and systematically by the United Nations and particularly by the Security Council, for the Council to live up to its primary responsibility for the maintenance of international peace and security...*

*Millions of people around the world today already experience the effects of climate change which exacerbates, prolongs or contributes to the risk of future conflicts and instability and constitutes a key risk to international peace and security...*

*The ten members of the Security Council also announced that they will convene an Informal Group of Experts of the Security Council in order to assist the Council to achieve a more comprehensive and systematic approach on climate-related security risks in situations on its Agenda.*

¹⁰⁰ https://transformdefence.org/carbon-neutral-defence/
Joint statement by 10 members of the United Nations Security Council (Belgium, the Dominican Republic, Estonia, France, Germany, Niger, Tunisia, St. Vincent and the Grenadines, the United Kingdom, Vietnam) and 3 incoming members of the United Nations Security Council (Ireland, Kenya, Norway) on the Open Debate of the Security Council on Climate and Security, 24 July, 2020

Group of 51 Friends of Climate and Security

We encourage the Security Council to continue mandating peacekeeping operations as well as Special Political Missions to consider climate-related risks in their activities. We sometimes hear that peacekeeping missions have more pressing issues to focus on than climate change. While this may seem true at a first glance, in many ways the effects of climate change make it harder to keep the peace. It is hardly a coincidence that eight out of the ten countries hosting the largest multilateral peace operations are located in areas highly exposed to the impact of climate change.

Item 2 from the plan of action included in a Statement by the 51 members of the Group of Friends of Climate and Security, presented at the United Nations Security Council Open Debate on Climate and Security, 24 July, 2020

CARBON NEUTRAL PEACE AND DEFENCE

A concept like Carbon Neutral Peace and Defence can help nations – and citizens – to fully see, and assess the carbon burden of their respective militaries in the round and therefore, devise the ways in which they must, like every other aspect of human activity, fully decarbonise.

It would enable visibility and action on:

- the impact of the global military on climate change, inadequate emissions reporting in National Inventories and no carbon-reduction plan for militaries and defence industries in current NDCs;
- the attendant vicious circle that the role of the military on climate change imposes on the world’s poorest: the impact of conflict and post-conflict reconstruction on climate change added to the impact of conflict and violence on people and environment;
- the impact of runaway military spending on all economies – developed world and developing world; and the undermining of many of the SDGs.
- it would also enable/collate new thinking/frameworks to enhance – and better still finance – global human safety. Ideas such as Carbon Neutral Peace and Defence and the Transform Defence approach to re-apportioning of defence spending such that climate mitigation/adaption; peacekeeping and conflict prevention; and pandemic preparedness are included as items inside national ‘defence’ spending.

NON-OFFENSIVE DEFENCE

Non-Offensive Defence is a defence strategy that aims to have a minimum of offensive strength while maximising defensive capability. Under this framework, a range of varieties can be further developed:

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Defensive Defence, where the maximum defensive force is prioritised;

Structural Inability to Attack, where the structure of the armed forces is concentrated upon defensive capabilities to such extent that neither strategic nor operational offensive and counter-offensive operations are practicable;

Non-Provocative Defence, where the focus is on minimising the offensive force’s perceived capabilities;

Confidence Building Defence, where impact of the force structures on international trust is analysed.

Fundamentally, non-offensive defence focuses on defensive equipment, structure, deployment and tactics, while offensive and force projection capabilities are minimised.

Furthermore, non-offensive defence focuses on territorial defence and a contribution to an international peacekeeping and reconstruction force that can carry out UN endorsed humanitarian interventions. Under this defence framework, major offensive platforms, including the U.S. or Russian nuclear triads, the British Trident ballistic missile system, aircraft carriers and conventional nuclear submarines would be cancelled and dismantled. And a new international security architecture based on global disarmament should be actively pursued by world’s leading powers.104

**THE SUSTAINABLE HUMAN SAFETY QUADRANT?**

‘Sustainable human safety’ builds on the concept of ‘human security’ (introduced by UNDP in 1994)105 and differs from the traditional notion of defence in that it does not put ‘national security’ over all other concerns of human safety:

- A nation pursuing ‘sustainable human safety’ will not erode environmental, economic, community or political security of its citizens (and immigrants) in the name of ‘national security.’

- A nation pursuing ‘sustainable human safety’ to ensure ‘national security’ will not sacrifice economic, food, health, environmental, personal, community and political security of people of other nationalities.

‘Sustainable human safety’ focuses on the interconnected, long-term threats to collective human safety.

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**AND WHY DO WE NEED NEW IDEAS?**

*Where the USA goes we all, more or less, follow*

It’s no exaggeration to say that the USA (and to a much lesser extent UK) sets the terms of reference for the global approach to military spending, and spending reflects ideology.

If the USA’s national security defence paradigm is not fit for purpose, then the rest of the world has a problem. To spend or not? To compete or not? To adopt their thinking or not?

*BOB SCHIEFFER:* Do you, I take it you do not see, though, Russia as posing the greatest national security threat to this country at this point?

*SECRETARY ROBERT GATES:* I think the greatest national security threat to this country at this point is the two square miles that encompasses the Capitol building and the White House.

*BOB SCHIEFFER:* How do you mean that?

*SECRETARY ROBERT GATES:* If we can’t get some of our problems solved here at home, if we can’t get our finances in a more ordered fashion, if we can’t begin to tackle some of the internal issues that we have, if we can’t get some compromises on the Hill that move the country forward, then I think these foreign threats recede significantly into, as far as being a risk to the well-being and the future of this country.

_Formal U.S. Secretary of Defence Robert Gates, Face the Nation, CBS News, May 11, 2014*

**The failed ‘National Security’ USA defence paradigm**

American national security experts Michael A. Cohen and Micah Zenko in their 2019 book *Clear and Present Safety* argued that the United States despite facing no plausible existential threats, no great-power rival, no near-term competition for the role of global hegemon and having the world’s most powerful military — in other words, “America is unusually safe and secure from foreign threats”— this reality is barely reflected in U.S national security strategy or foreign policy. Furthermore, “There is also a pernicious feedback loop at work. Because of the chronic exaggeration of the threats facing the United States, Washington overemphasizes military approaches to problems (including many that could best be solved by non-military means). The militarization of foreign policy leads, in turn, to further dark warnings about the potentially harmful effects of any effort to rebalance U.S. national security spending or trim the massive military budget — warnings that are inevitably bolstered by more threat exaggeration.” And this is not just a recent phenomenon, the United States has a long history of focusing on and exaggerating the wrong threats. For example,

“During the Cold War, although the United States faced genuine existential threats, American political leaders nevertheless hyped smaller threats or conflated them with larger ones. Today, there are no dangers to the United States remotely resembling those of the Cold War era, yet policymakers routinely

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talk in the alarmist terms once used to describe superpower conflict. Indeed, the mindset of the United States in the post-9/11 world was best (albeit crudely) captured by former Vice President Dick Cheney. While in office, Cheney promoted the idea that the United States must prepare for even the most remote threat as though it were certain to occur. The journalist Ron Suskind termed this belief ‘the one percent doctrine,’ a reference to what Cheney called the ‘one percent chance that Pakistani scientists are helping al Qaeda build or develop a nuclear weapon.’ According to Suskind, Cheney insisted that the United States must treat such a remote potential threat ‘as a certainty in terms of our response.’”

Cohen and Zenko warned in 2012 in *Foreign Affairs* that109 [emphasis added]

“Indeed, the most lamentable cost of unceasing threat exaggeration and a focus on military force is that the main global challenges facing the United States today are poorly resourced and given far less attention than “sexier” problems, such as war and terrorism. These include *climate change, pandemic diseases, global economic instability, and transnational criminal networks* -- all of which could serve as catalysts to severe and direct challenges to U.S. security interests. But these concerns are less visceral than alleged threats from terrorism and rogue nuclear states. They require long-term planning and occasionally painful solutions, and they are not constantly hyped by well-financed interest groups. As a result, they are given short shrift in national security discourse and policymaking.”

It is therefore hardly surprising to see that pre-COVID, the majority of Americans did not consider a pandemic a major threat to the United States whereas “86% of Americans view Russia’s military power as either an important or a critical threat to America, even though Russia is hemmed in by NATO, has a moribund economy, and has no enduring military partnerships in South Asia, the Middle East (outside of Syria), or the Western Hemisphere. Nor should it be surprising that 87% of Americans are concerned about China’s military power even though China faces its own pressing social, economic, and environmental challenges — and its primary near-term interest is maintaining Communist Party rule, not directly challenging the United States. Nor should it be surprising that 75% of Americans called the development of nuclear weapons by Iran a ‘critical threat’ — even though Iran has surrendered its nuclear fuel and has allowed invasive inspections of its nuclear facilities through to at least 2030. Finally we should not be surprised that half the American people believe that U.S. armed forces are not the No. 1 military in the world, even though the United States spends more on national defense than the next nine nations combined, is allied or has mutual defense treaties with five of those countries, enjoys long-term security partnerships in every region of the world (outside Antarctica), and is, quite simply, the world’s most dominant nation and more secure than any other great power in history.”110

**Groundhog Day: The Cold War is alive and well in 2022**

After decades of to and fro concerning Ukraine’s membership of NATO, Russia invaded Ukraine on the pretext of making Donbass regions safe, but it’s clear the intention was to do all it could to scupper the Ukraine/NATO plans. It is a strategy that has catastrophically backfired for Putin. But what is also crystal clear is that the Russia/West enmity – a century old – is alive and well and great business for the weapons industries on all sides.

While Russia conducts its brutal war on Ukraine, it has been unable to prevent the continuing arms supply into Ukraine by the NATO members. It has however issued the verbal warning of a tactical nuclear retaliation against any ‘existential threat’.

To do a cursory review of expert analysis of the longstanding matter of Ukraine’s membership of NATO is to be left feeling much the same as the warnings of pandemic, before coronavirus (COVID-19) took the world over. The consensus (including Henry Kissinger) seemed to be that WW3 could well be a likely outcome. So how on earth have we got here? Monumental miscalculation on the part of leadership across the board, going back decades?

**WW3:** The ultimate ‘doctrine’ failure (as if climate chaos wasn’t enough)

> “Since World War II, the United States has been at war in Korea, Vietnam, Cambodia, El Salvador, Nicaragua, Grenada, Libya, Panama, Somalia, Haiti, Bosnia, Herzegovina, Iraq, Afghanistan, and many others. Almost constantly since World War II, our nation has been at war. I would like for our country in the future to have a reputation as a champion of peace.”

*Former U.S. President Jimmy Carter, Nobel Peace Laureate*

A country’s national strategic doctrine is highly influential, it determines “the orientation and the deployment of a nation’s armed forces, including when, where and how they are likely to go to war, and against whom this doctrine is used, also, to rationalize the weapons that a nation buys, and in what quantities.” American security expert Michael T Klare noted that the Pentagon has recently shifted its military doctrine from “Global War on Terror” to “Great Power Competition” – “from a strategy aimed at fighting relatively small bands of militants to one aimed at fighting the military forces of China and Russia on the peripheries of Eurasia.” This is of profound significance. He went on, “every weapon that’s purchased has to satisfy the need to be useful in a war against Russia, and China. And we have to have enough of them to win a war against Russia and China, which is an extraordinary requirement in terms of cost... now they’re talking about using nuclear weapons on the battlefield as instruments of war, because the conventional forces are so powerful... we’re talking about a war that would inevitably start world war three – a nuclear Armageddon... So we have to expose the folly, the absurdity, of planning for a war that can only result in mutual annihilation.”

> “The scale of the threats to the biosphere and all its lifeforms – including humanity – is in fact so great that it is difficult to grasp for even well-informed experts... the mainstream is having difficulty grasping the magnitude of this loss, despite the steady erosion of the fabric of human civilization... Ours is not a call to surrender – we aim to provide leaders with a realistic ‘cold shower’ of the state of the planet that is essential for planning to avoid a ghastly future.”

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111 [https://transformdefence.org/2022/03/10/russian-invasion-of-ukraine-articles-digest/](https://transformdefence.org/2022/03/10/russian-invasion-of-ukraine-articles-digest/)


113 [https://youtu.be/i6UgOiU6vO8](https://youtu.be/i6UgOiU6vO8)

114 [https://tomlispach.com/trumps-pernicious-military-legacy/](https://tomlispach.com/trumps-pernicious-military-legacy/)

115 [https://youtu.be/i6UgOiU6vO8](https://youtu.be/i6UgOiU6vO8)
17 top scientists warn of ghastly future of mass extinction, declining health, climate-disruption upheavals and resource conflicts in a review of 150 studies of the world’s environmental challenges, ‘Underestimating the Challenges of Avoiding a Ghastly Future’, 2021116

WHAT OF CHINA, USA AND OUR COLLECTIVE FUTURE?

Unless the United States and China, the world’s two largest economies by far, cooperate, the global goal of carbon net-zero by 2050 goal remains a pipe dream. And these two countries will not cooperate in any meaningful sense if they along with Russia and EU are stuck in the Cold War Redux.

“Forget geopolitics, save the climate,” argued international relation expert Anatole Lieven.117 “Realists are supposed to pride themselves on recognising the facts, and the fact is that the threat of climate change vastly exceeds the danger of great power competition from China and Russia.”

Maybe a paradigm shift in geopolitics is exactly what will save the climate.

The U.S. sees China, a regional superpower in East Asia, as the No.1 competitor for global military, political and economic dominance. As a result, “The United States today is on a course in East Asia that threatens the peace and prosperity of a region that is vital to a wide range of American interests,” argued Quincy Institute for Responsible Statecraft in their report ‘Toward an inclusive & balanced regional order: A new U.S. strategy in East Asia’.118 According to them, the U.S.’ vital national interests in East Asia include:

1. Peace and stability, including the avoidance of major wars and arms races;
2. Cooperative action to combat the existential threats of climate change and pandemics;
3. Open shipping lanes and robust economic relations with countries in the region; and
4. Space for each country in the region to choose its own political order.

In order to protect these interests in East Asia, “the United States needs a transformed strategy that bolsters America’s engagement in the region while rejecting an effort to restore all-aspects military dominance as an ill-advised dream.” This is sensible. No country’s national interests are valuable enough to risk nuclear confrontation – just 100 nuclear bombs are enough to devastate the whole world.119

When humanity is facing multiple unprecedented collective threats to all aspects of our lives, a militaristic and confrontational approach is the last thing we need. Medea Benjamin and Nicholas J S Davies of CODEPINK opined,120

“China is investing in infrastructure all over the world. As of March 2020, a staggering 138 countries have joined China’s Belt and Road Initiative (BRI), a massive plan to connect Asia with Africa and Europe

120 https://www.juancole.com/2020/08/china-policy-isolate.html
via land and maritime networks. China’s international influence will only be enhanced by its success, and the U.S.’s failure, in tackling the COVID-19 pandemic...

China and Russia are both deadly serious about defending themselves, but we should not misinterpret that as enthusiasm for a new arms race or a sign of aggressive intentions on their part. It is U.S. imperialism and militarism that are driving the escalating tensions. The sad truth is that 30 years after the supposed end of the Cold War, the U.S. military-industrial complex has failed to reimagine itself in anything but Cold War terms, and its “New” Cold War is just a revival of the old Cold War that it spent the last three decades telling us it already won...

Governments all over the world are collaborating with China to stop the spread of coronavirus and share the solutions with all who need them. The U.S. must stop pursuing its counterproductive effort to undermine China, and instead work with all our neighbors on this small planet. Only by cooperating with other nations and international organizations can we stop the pandemic—and address the coronavirus-sparked economic meltdown gripping the world economy and the many challenges we must all face together if we are to survive and thrive in the 21st century.”
All roads lead to the UN and we should double down on all the ways the military works against the principles of the UN – four examples and solutions

In 1945, after two devastating world wars, which included the use of the unforgivable – nuclear weapons – we arrived finally at the United Nations. It was and remains an incredible human achievement. A place where the peoples and nations of the world can come together to work, debate, argue. It does the best it can under the constraints put upon it – notably the clash of national, regional or superpower interests. And all too often, that’s when things fall apart.

But even at this 11th hour, we can do more. We can go further, to build on the human family as embodied by the best of the UN. To do that, we need leaders – including our military – to think the unthinkable, think different, think the obvious. The UN was the manifestation of the need to find a new way, something better that entailed breaking with the old ways. While nations – led by the UN – try to grapple with the climate emergency, the pandemic emergency and the economic emergency that will flow from both (not having yet recovered from the 2007/8 global financial crisis), we cannot give a free pass and exempt from equal transformation the matter of global foreign, security and defence policy. For it affects everything too.

War is one of the chief causes of poverty; the global military a major contributor to climate change. And as we see ever greater movement of peoples due to conflict and climate change this creates yet another opportunity for an even greater military ‘security’ presence. As we are spending $2 trillion a year globally on militaries, we must ask: is this ‘security’ really value for money? Who really benefits from the big-ticket weapons systems paid for with taxpayer dollars, juans, roubles, yens, pounds and euros?

MARKING 100 YEARS IN 2045

If we are to rise to the 1945 UN challenge and have an even greater transformation in international relations by 2045, the ways in which the global military work against the guiding principles of the UN needs to be put under a very bright spotlight. Whether it’s the P5, the top 20 military spenders or the G20 economies, it’s the same handful of nations that need to be put in that spotlight. How do we do this?

Transform Defence suggests the following to be considered at UN Level:121

- Call for rigorous evidence-based value-for-money approaches to military spending. For example, the $2 trillion lifetime cost of the F-35 weapon programme could fund any one of the following:
  - Climate finance for 20 years
  - Global biodiversity conservation at $100bn per annum for the next 20 years
  - WHO funding at $2bn per annum for the next 1,000 years

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UN peacekeeping operations at current $4.5bn per annum for the next 444 years

Part-fund the $2-4 trillion SDGs 2021-2030 funding gap from escalating military budgets 2023-30 and beyond.

We have just 10 years to go before the end of 2015-2030 SDGs cycle. The world's estimated financial needs for achieving the SDGs are between $5 and $7 trillion a year. Having found approximately $3 trillion so far, an extra $2-4 trillion a year is still yet to be found.122 There is no question that on grounds of morality as well as security, diverting significant sums from defence budgets to help fill these outstanding SDG commitments is a totally sensible call.

Create a new UNFCCC TOPIC ‘Carbon Neutral Peace and Defence’ and fill the ‘Knowledge Gap’ across UN and national processes on the global military’s greatly underestimated carbon footprint.

It is a deliberate choice on the part of those nations, which comprise the world’s top military spenders, that the formulation of urgent international treaties on climate change faces one great omission: the problem of the gaping data hole (and hence by extension a serious knowledge gap) concerning the global military carbon footprint and associated environmental and societal impacts. Citing ‘national security’ as a reason, only a few countries submitted limited and inadequate data on military emissions to the UNFCCC in their annual GHG emissions inventories. The military and defence sector has also been excluded from any IPCC assessment so far, and as a consequence, there has been minimal public debate on the military and defence sector in our march towards a net-zero world.

Make SDG 16 ‘Peaceful Societies’ much more challenging in its remit in relation to the global military and spending.

SDG 16 needs to go much further in addressing the consequences of runaway military spending and take account of its relationship to

- **Power:** Runway military spending is every bit as central to understand power, poverty, economic crises and unjust distribution of resources as other structural issues (and civil society campaigns) such as debt, trade, tax and climate change.
- **Hypocrisy:** The P5 nations to be called out on this. Approximately 80% of global arms sales are made by the Permanent 5 members of the security council (USA, UK, Russia, China, France) plus Germany123 – the same nations charged with keeping the peace of the world. All this while the majority of their arms sales go to the global south.
- **Waste:** Many of the world’s poorest countries and fastest growing economies (both measured in terms of GDP per capita) spend much more on their military than either on education or on health; excessive military spending impedes economic development (SDG 8) and significantly impacts on the efforts to

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reducing poverty (SDG 1) and hunger (SDG 2) and improving health (SDG 3) and
education (SDG 4).

- Hold a Security Council high-level open debate on the impact of the global military on
climate change and under-development and the concept of ‘Carbon Neutral Peace and
Defence’.

**UNFCCC & MILITARY EMISSIONS IN PEACETIME AND WAR**

It has been the war in Ukraine that has brought the world’s attention – belatedly – to conflict
related emissions in a way that Afghanistan, Iraq, Syria, Libya and Yemen has not. Getting this
topic onto the UN agenda is not easy but the recent TPNS commissioned report by Axel
Michaelowa et al, *Military and Conflict Related Emissions: Kyoto to Glasgow and Beyond*, lays out a
roadmap for action to take military greenhouse gas emissions in peacetime and war into the
UNFCCC negotiation process. It calls for:

- **The Paris Agreement** rules for reporting of military and conflict-related emissions to be
developed.
- **The Paris Agreement** to be strengthened to deal with conflicts
- **The IPCC National Inventory Guidelines to be revised** to ensure that not only a narrow
definition of such emissions prevails. National inventories need to ensure that all the
different types of military emissions are duly reported
- **An end to confidentiality** regarding the reporting of fuel consumption for military
purposes is necessary.
- **Global Stocktake & COP28.** Military emissions should play a relevant role in the Global
Stocktake due to be finalized by COP28
- **A department of the UNFCCC Secretariat to engage** in remote sensing of high intensity
destruction of carbon reservoirs like fossil fuel deposits, cities and forest fires reported in
a separate “conflict account” in the transparency regime
- **An IPCC Special Report on climate change and global military in peace and war** on
the agenda of the AR7 cycle.
- **To advance Principles for an Accountancy Framework: Military Emissions in Peace and
War.**

The COP26 in Glasgow saw a huge step forward for civil society getting military emissions onto
the agenda. COP27 and beyond will see this success built upon, critically, with the help of
countries that appreciate the need for this difficult topic not to be swept under the carpet.

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7. CONSIDER CONCRETE PROPOSALS FOR DEEP EQUITABLE CUTS TO MILITARY BUDGETS

(I) FIVE PERCENT PROPOSAL – AN AMBITIOUS, EQUITABLE ROUTE TO PARING BACK DEFENCE BUDGETS

The G20 countries (Argentina, Australia, Brazil, Canada, China, Germany, France, India, Indonesia, Italy, Japan, Mexico, the Russian Federation, Saudi Arabia, South Africa, South Korea, Turkey, UK, USA and the European Union) comprise 87% of annual global military spending. Moreover currently, the global military is exempt from compulsory reporting of GHG emissions to the UN and IPCC. Some countries, including the USA, the UK and Germany, voluntarily report, but this is a bare-minimum disclosure as the IPCC template and codes have only a handful of items mentioning domestic military-related activities.

The Five Percent campaign proposal grew out of the conviction that runaway military spending should be regarded as a 'structural' campaign issue by international development NGOs, working alongside partners in the global south and North America. We are spending $2 trillion annually on global military expenditure, not including the (long-term) 'costs' of military operations and wars (ie veterans, pollution, environmental and infrastructure destructions, etc). It is doubly scandalous that in these times of climate emergency, pandemic and austerity, nations are increasing military budgets.

Inevitably, definitions of 'defence' are ever more central to this proposal since the question of whose interests are really served by the ever-increasing global military expenditure is at the heart of this matter. Ultimately, it fundamentally challenges us to see military spending as every bit as central to understanding power, poverty, economic collapse, unjust distribution of resources no different from, indeed complementary to, structural campaigns such as debt, trade, tax, climate change and most recently the so-called 'war on drugs'. It is not an adjunct to any of these issues – it is implicated in each and every one of them. Andrew Feinstein, author of ‘The Shadow World: Inside the Global Arms Trade’ argued that neoliberalism needs the war machine. And as we see ever greater movement of peoples due to conflict, economic collapse and climate change, this is doubly true as the movement of peoples creates an opportunity for an even greater military 'security' presence.

THE 5% FORMULA

The 5% formula is a two-part mechanism to achieve major, year-on-year cuts to global military spending over 10 years and beyond. It is a long-term, sustainable formula that works for every country.

The first decade calls on the top 20 military spenders (accounting for 85% of $2 trillion world spending) to cut their military spending absolutely by 5% each year for decade. This equates to compound cut of 40% to global military spending over the decade, back to mid-1990s spending levels ie around $1 trillion dollars, the lowest in recent history ('lowest' still being far too high).

(NOTE: It would also, by extension, result in significant cuts to military greenhouse gas emissions.) The sum saved over this first decade of absolute cuts would deliver an estimated $800 billion to be redirected to core urgent human and environmental needs.

After the first 10 years, we call upon all nations to adopt the 5% threshold rule to sustainably restrain the global military spending – no country allows any increase in military spending to outstrip economic growth.

**For example:** 0% economic growth = 5% cut to annual military spend; 2% growth = 3% cut to annual military spend; 5% growth = no increase; 7% growth = only 2% increase on annual military spend. *Most economies grow less than 3% annually; this effectively translates as 2% annual reduction to their military spending.* These savings are then divided equally to fund both domestic and international needs.

**NOTE:** The 5% Formula is not a call for a one-off absolute cut (eg U.S. Senator Bernie Sanders’ 2020 call to cut the military budget by 10% and spend the $74bn in savings on creating jobs, improving education and making housing more affordable to counter the disastrous effects of the coronavirus pandemic and economic meltdown) since the ‘savings’ (eg $74bn) could be recouped in future budgets, benefiting no one.128

It is also not about a call for say, an annual 10% cut to a given defence budget in any year without a baseline since any supposed redirected saving could be nullified by an even bigger increase (say 12%) to the size of the baseline defence budget. The 5% formula creates the means to drive spending down year on year. Lastly, 5% formula is not about absolute year on year percentage cuts with the aim of zero military spending. Whilst it’s unrealistic to think we will get to zero military spending, nevertheless, the 10% calls by IPB and others, set the bar high. One recent practical but ambitious example is U.S. Congresswoman Barbara Lee's proposal to cut the Pentagon annual budget by up to $350bn.129

**Five Percent Formula Savings**

After a decade of applying the Five Percent Formula (a mere 5% annual cut over 10 years), annual global military spending will be $1.2tn rather than the current $2tn.

The total saving over the first decade amounts to $800bn which would fund

- climate finance for 8 years
- UN disaster response for the next 160 years
- UN disaster risk reduction for the next 1,600 years
- global biodiversity conservation fully for 8 years
- WHO at $2bn per annum for the next 400 years
- WHO’s COVID-19 Solidarity Response Fund for 1,185 years
- global pandemic surveillance and control at $8bn per annum for the next 100 years

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• would provide enough money for just under 2 years to lift the poorest people in the world above extreme poverty (UBI for the 700 million poorest)
• UN peacekeeping operations at current $4.5bn per annum for the next 178 years
• would provide proper funding to the UN peacekeeping at $15bn per annum for the next 53 years

(II) THE GLOBAL PEACE DIVIDEND: 2% ANNUAL CUT FOR 5 YEARS IMPLEMENTED BY TREATY

In 2020, more than 50 Nobel laureates, the presidents of several Academies of Sciences, and other leading intellectuals appealed to all peoples and their governments to support the idea of a 2% annual cut to global military spending.130 Half of the resources freed up by this agreement to be allocated to a global fund, under UN supervision, to address humanity’s grave common problems: pandemics, climate change, and extreme poverty. The other half to remain at the disposal of individual governments. All countries will therefore have significant new resources. Some of these can be used to redirect the strong research capacities of military industries towards urgently needed peaceful applications.

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130 https://peace-dividend.org/
8. TRANSFORMING DEFENCE FOR GREEN ECONOMY

GREEN NEW DEALS - DON'T FORGET THE MILITARY

Evidence shows that high defence spending inhibits economic and social development. Current defence policies and budgets of all major economies (primarily G20) are both socially and environmentally incompatible with the spirit of Green New Deals.\textsuperscript{131}

We need not just green prosperity, but peaceful green prosperity.

All progressive and ambitious GND planning must take military emissions into account. Some in the USA – which spends more than $800bn annually on defence – have made the connection. U.S. Senator Bernie Sanders in his Green New Deal offer during the presidential race included this courageous, paradigm-shifting pledge,\textsuperscript{132}

"Bring together the leaders of the major industrialized nations with the goal of using the trillions of dollars our nations spend on misguided wars and weapons of mass destruction to instead work together internationally to combat our climate crisis and take on the fossil fuel industry. Bernie recognizes that the Pentagon is the largest institutional emitter of greenhouse gases in the world and that the United States spends $81 billion annually to protect oil supplies and transport routes. We are uniquely positioned to lead the planet in a wholesale shift away from militarism."

This is a (peaceful!) call to arms we should still look to addressing.

GND Plus is a way of bringing GND thinking to meet the hidden reality of military emissions.\textsuperscript{133}

Military spending is the least effective way to create jobs. Spending on health care, education, clean energy, and infrastructure instead of ‘War on Terror’ (Iraq and Afghanistan) would have created a net increase of 1.3 million jobs in the United States.\textsuperscript{134}

$1 billion invested in education will create over twice as many jobs as $1 billion spent on the Pentagon. After the COVID-19 pandemic, there are no better initiatives to kick start the economy like the Green New Deal – creating good and green jobs while tackling the biggest threat to sustainable human safety, climate emergency, what's not to like?

Progressive GND plans must call for the break-up of the military-oil industry relationship and complete decarbonising of the world’s militaries. The world’s militaries are the biggest institutional users of oil in the world and are therefore a major driver for climate change, both in terms of day-to-day operations as well as wars, many of which are conducted for oil. Runaway global military spending enables all this. A carbon-neutral world demands we fully decarbonise our militaries.

Moreover, a decarbonised military, defence and security sector is not about delivering ‘greener ways to conduct war’: weaponry and war will always kill living beings, will always destroy and pollute environments. Rather, this idea is the starting point for much needed if challenging

\textsuperscript{131} https://transformdefence.org/publication/military-emissions-military-spending-green-new-deals/
\textsuperscript{132} https://berniesanders.com/issues/green-new-deal/
\textsuperscript{133} Green New Deal Plus, https://transformdefence.org/green-new-deal-plus/
\textsuperscript{134} War Spending and Lost Opportunities, Heidi Garrett-Peltier, Costs of War, 2019, https://watson.brown.edu/costsofwar/files/cow/imce/papers/2019/March%202019%20Job%20Opportunity%20Cost%20of%20War.pdf
discussion, one that can lead us to a paradigm shift in national and international defence and security policy-making for a carbon-neutral world.

**DEGROW THE MILITARY**

It has become increasingly clear to scientists that it is necessary to ‘degrow’ in rich economies if we want to achieve the 1.5 °C target without relying on ‘pie in the sky’ and risky negative emissions and geo-engineering schemes.135 Degrowth is a planned reduction of energy and resource throughput designed to bring the economy back into balance with the living world in a way that reduces inequality and improves human well-being... degrowth is not about reducing GDP, but rather about reducing throughput [the rate of production]. From an ecological perspective, that is what matters,” economic anthropologist Jason Hickel explained.136

Degrowth can be compatible with the chief objectives of a Green New Deal: public investments for financing the energy transition, industrial policies to lead the decarbonisation of the economy, the socialisation of the energy sector to allow longer investment horizons, retraining and employing workers under the Just Transition framework, decommodification and universal access to basic services, and the expansion of social security to citizens in the context of heightened environmental vulnerability and any economic contraction. Easily accessible public services are shown to be associated with higher satisfaction for human needs and lower energy requirements whereas economic growth is linked to lower human need satisfaction and higher energy consumption. In other words, it is practical to degrow to significantly reduce our consumption of non-renewable energy in keeping with limiting global heating to 1.5 °C while sustainably satisfying human needs.137

Fossil fuel is the key energy source for the world’s militaries since it is essential not just for personnel and estate but also for equipment and operations. Put it simply, fossil fuels are the lifeblood of all modern militaries. Fossil fuel is not cheap and the more we use, the higher the fuel bill. There is therefore a strong positive correlation between military spending and carbon emissions, especially for top military spenders.138 This is to be expected since higher spending reflects larger proportion of big-ticket purchase, such as F-35, J-20 or Su-57 fighter jets, that are massive gas-guzzlers. In short, higher global military spending means higher greenhouse gases emissions.

Global military spending is now more than $2 trillion a year, 85% of which are spent by the top 20 spenders alone. The ‘peace of mind’ secured by nations through foreign and defence policies derived from fossil fuel dependent militaries is – on many critical counts – no longer fit for the

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135 1.5 °C degrowth scenarios suggest the need for new mitigation pathways, Nature, 2021, [https://doi.org/10.1038/s41467-021-22884-9](https://doi.org/10.1038/s41467-021-22884-9)


21st century, and outdated notions of national security must now be replaced by the concept of sustainable human safety. The challenge now is how to turn it around for the good of everyone.

For the same reasons we have to degrow our economies, we have to degrow global military spending.\textsuperscript{139}

The report Indefensible: The true cost of the global military to our climate and human security highlights the destructive merry-go-round of war where devastation and rebuilding combined result in ever more greenhouse gas emissions. It makes the case that until or unless runaway military spending is reduced, we will never achieve the deep cuts required for military emissions. To this end, it presents the Five Percent Formula – a two-part mechanism to help countries progressively convert their military spending into funds for meeting environmental and human needs also resulting in drastic reductions to military carbon emissions.\textsuperscript{140}

\textsuperscript{139} https://transformdefence.org/publication/degrow-the-military-economy/
\textsuperscript{140} https://transformdefence.org/publication/indefensible/
9. EVERYONE IS A STAKEHOLDER

Join up the dots and connect with everything else

This issue – foreign, security and defence policy – is embedded in war, poverty, economy. It impacts profoundly across human rights – especially those of women and children. It impacts on climate change. It connects with corporate accountability, resource theft and justice-related campaigns including tax justice and the failed war on drugs. It also includes the manipulation of foreign policy hype (even war) at times of elections.

This is why we believe it is an entirely legitimate call for military budgets – paid for by taxation – to be cut back, with savings rightly redirected to human need including SDGs, climate finance, loss and damage.141

And why we believe military emissions must be called out and acted on – we need an IPCC Special Report into the role of the military on climate change.142 As the IPPC Sixth Assessment Report ‘Impacts, Adaptation and Vulnerability’ made absolutely clear, climate change has deeply impacted on everyone. Why should the military be let off the hook?143

It’s clear too, that the business of war is a gendered one – the weapons industry, the militaries of the world and the leaders who make the decision to engage in conflict are predominantly male. And all wars care not for the most precious of all – our children.

The green economy – the GND – cannot be whole without including a nation’s military. The GND is where economy and militaries meet and it cannot be swept under the carpet: we need peaceful green prosperity.144 Nor can we allow the corruption and untaxed wealth of the big defence corporations to go relatively unnoticed.

Critically, the debate around reparation and decolonisation is hugely relevant to this topic: it should be framed by the foreign policy and military force applied in the first place, for without both, no nation can head to another country and occupy, oppress, kill those people by using force and then proceed to strip it of them of their natural and human resources and set in motion a cycle that reaps financial/commercial rewards to this day.

To transform defence for sustainable human safety is an enormous task, it’s a huge issue. Had we time on our side, we would say it’s yet another ‘justice’ marathon run that civil society needs to undertake, passing the baton on most likely, from one generation to the next, in striving to reach the finish line.

We don’t have time. We have to build a massive global coalition that fully understands why this issue is central to our collective survival – if we can turn the tide on this, we can be sure humanity has set itself a much better, safer course.

141 https://transformdefence.org/publication/stockholm50-and-global-military-emissions/
142 https://transformdefence.org/publication/military-emissions-advocacy-briefing/
143 https://www.ipcc.ch/report/sixth-assessment-report-working-group-i-
144 https://transformdefence.org/publication/military-emissions-military-spending-green-new-deals/
“In a crisis, what was once unthinkable can suddenly become inevitable. We’re in the middle of the biggest societal shakeup since the second world war. And neoliberalism is gasping its last breath. So from higher taxes for the wealthy to more robust government, the time has come for ideas that seemed impossible just months ago,” remarked historian Rutger Bregman in the midst of the global coronavirus crisis.145

This sentiment was widely shared. Many people around the world wanted to turn unprecedented crisis into once-in-a-lifetime opportunity to transform our world for much better, fairer, kinder and greener. Post COVID they do not want life return to ‘normal’.

Why?

There is more unites us than divides us.

We are all in this together.

No man/woman/child is an island.

We all live together on what Carl Sagan called ‘the pale blue dot’ – planet earth, a tiny blue speck in the universe.

The vast majority of people on this planet – given an equal chance – inherently understand all this.

Yet – thanks more to some than others – we have trashed our home planet, trashed space, created breathtaking poverty and inequality, killed and maimed beyond the imagination of most people and the majority of us seem forever made-to-be-trapped in systems that produce benefits for a few and harm for the rest.

And it wasn’t just never-ending wars and trillions upon trillions poured into the defence feeder troughs; it wasn’t even catastrophic climate change; it certainly wasn’t unbearable levels of gross poverty, gender inequality, or racism that pushed us to this realisation.

It was the coronavirus pandemic that started in 2019.

Deep fear took hold of every village, town, city on earth.

Fear of touching your family member. Fear of going on a bus or train, to the shops, barbers, sports game – or worse, the hospital, a funeral – was from a virus. Not an army, not a cyber attack. An invisible virus.

Six million dead so far.

145 https://thecorrespondent.com/466/the-neoliberal-era-is-ending-what-comes-next/61655148676-a00ee89a
And $28 trillion was the price tag cost to the global economy.\footnote{146 Global Economic Effects of COVID-19, Congressional Research Service, July 2021, \url{https://sgp.fas.org/crs/row/R46270.pdf}}

And when it was over it felt like the end of a world war. We would build a just economy fit for the heroes who had saved us and in memory of those who had died – many unnecessarily. We would make that economy fairer and greener than anyone before could have dreamed of – just, green, diverse, female, co-operative, re-built to last, sustainably, for people and planet.

The pyramid would be upturned and the 99% would, at last, see the change that had been long overdue.

And in keeping with all this, there was a 21st century ‘wind of change’ that blew across international relations.

We actually came to our senses. Love and patience, tolerance and co-operation sharing were seen as strengths.

At the 11th hour, we would get there.

Wouldn’t we?

\textbf{WRESTLING WITH THE DARK TRIAD\footnote{147 https://doi.org/10.1016/S0092-6566(02)00505-6} – Narcissism, Machiavellianism, and Psychopathy}

\begin{center}
\begin{quote}
\it Human beings are members of a whole,
\par
\it In creation of one essence and soul.
\par
\it If one member is afflicted with pain,
\par
\it Other members uneasy will remain.
\par
\it If you have no sympathy for human pain,
\par
\it The name of human you cannot retain.”
\end{quote}
\end{center}

\textit{inscribed on the UN building entrance, Saadi (سعدی), the great Persian poet}\footnote{148 https://ifpnews.com/zarif-narrates-story-iranian-carpet-hung-uns-wall}

If you have lived in ISIS controlled territory; war-ravaged Syria or Yemen; if you lived under the reign of Saddam, Pol Pot, Stalin, Hitler – or countless other leaders who have mass-murdered their own citizens, then you know, clearly, what a psychopathic regime looks and behaves like.

It may not be so obvious in other scenarios, but it’s becoming clearer – all citizens need to be vigilant and pay attention to the clues that are on display from those who would want your vote.

The psychopathic/narcissistic personality is more commonplace than we think\footnote{149 https://time.com/32647/which-professions-have-the-most-psychopaths-the-fewest/} – they are drawn to power, they are charming, they are self-interested, they lack empathy. Research by Polish psychologist Andrew Lobaczewski demonstrated the profound and far-reaching impacts
on the functioning of society and our well-being by this type of leaders, as explained by British psychologist Steve Taylor:150

"After spending his early life suffering under the Nazis and then Stalin, the Polish psychologist Andrew Lobaczewski devoted his career to studying the relationship between psychological disorders and politics. He wanted to understand why psychopaths and narcissists are so strongly attracted to power as well as the processes by which they take over governments and countries. He eventually came up with the term "pathocracy" to describe governments made up of people with these disorders — and the concept is by no means confined to regimes of the past...

It’s not really surprising that people with personality disorders are drawn to political power — narcissists crave attention and affirmation, and feel that they are superior to others and have the right to dominate them. They also lack empathy, which means that they are able to ruthlessly exploit and abuse people for the sake of power. Psychopaths feel a similar sense of superiority and lack of empathy, but without the same impulse for attention and adoration.

But pathocracy isn’t just about individuals. As Lobaczewski pointed out, pathological leaders tend to attract other people with psychological disorders. At the same time, empathetic and fair-minded people gradually fall away. They are either ostracised or step aside voluntarily, appalled by the growing pathology around them... pathocrats hate democracy. Once they attain power they do their best to dismantle and discredit democratic institutions, including the freedom and legitimacy of the press. This is the first thing that Hitler did when he became German chancellor, and it is what autocrats such as Trump, Vladimir Putin and Hungarian prime minister Viktor Orbán have been attempting to do...

In the US, there has clearly been a movement towards pathocracy under Trump. As Lobaczewski’s theory predicts, the old guard of more moderate White House officials — the “adults in the room” — has fallen away. The president is now surrounded by individuals who share his authoritarian tendencies and lack of empathy and morality. Fortunately, to some extent, the democratic institutions of the US have managed to provide some push back... the danger of democracy transitioning into pathocracy is always real. It is always closer to us than we think, and once it has a foothold, will crush every obstacle in its way."

These psychopathic/narcissistic leaders build on their popularity to create so called ‘mafia states.’ German political philosopher Jan-Werner Müller explained,151

“... there is also a political logic: involving others in criminality binds them to the regime, compelling loyalty; mass clientelism – rewarding supporters with patronage – tends towards mass allegiance. And threatening those who may not support populist rule with losing jobs or benefits solves the problem of how to exert control over a society without too much direct repression.

Such dynamics are what the sociologist Bálint Magyar has in mind when he refers to the rise of a ‘mafia state’ in Hungary. He isn’t talking about envelopes full of cash changing hands under the table, but the use of state structures and legal means for corrupt ends. A remarkable number of government contracts, for example, are awarded to an uncontested bidder. Mafia states are controlled by what Magyar calls ‘political families’. (These usually include rulers’ actual families, as with Trump, Orbán, Bolsonaro and Erdoğan; especially nefarious roles are reserved for sons-in-law.) Absolute loyalty is given in exchange for material rewards in the present and, equally important, protection in the future. ‘The main benefit of controlling a modern bureaucratic state,’ a Hungarian observer has noted, ‘is not the power to

151 https://www.lrb.co.uk/the-paper/v41/n10/jan-werner-mueller/populism-and-the-people
persecute the innocent. It is the power to protect the guilty.’ Going along with the leader’s provocations and outrageous norm-breaking is proof of acquiescence among those who might otherwise be suspected of having retained a belief in proper democratic standards. What’s more, since violating norms compromises members of the political family, they have to stick together for mutual protection, which helps establish reliability and trust – a defining feature of the original form of the mafia.”

Those who have framed our world have not led us to a good place. Many are elected, many are not, but they go hand in hand.

Those who enabled gross inequality and poverty; those who profited from climate chaos; who threw millions of vulnerable people under the Covid-19 vaccine apartheid bus; those who funded and enabled warfare – they have led us to the cliff edge and still, they pushed us. Why? Because they are safe from the havoc they knowingly create: they have their parachutes – wealth, isolation, and yes, even space rockets.

You don’t have a parachute. Your kids don’t. Your grandkids definitely don’t.

Not the oceans or the Amazon or the Antarctica.

“People who don’t understand the importance of co-operation and disarmament shouldn’t go into politics...there should be no place for such people in politics. But they’re very much there...in the defence industry and politics.”

Mikhail Gorbachev

If you sense it, smell it, see it – vote out the ‘dark triad’, boycott ‘the dark triad’.

Better still, look to elevate ‘light triad’ leadership where you can.

BACK TO THE PALE BLUE DOT: THE ASTEROID QUESTION

The Sustainable Human Safety Sovereign Fund

While some may be looking for full spectrum dominance and others wishing the ‘good old days of empire’ could somehow be revived (Make America/Russia/England etc Great Again), there are other perspectives on securing a good long-term outcome for citizens and society.

One model to look to from the past (fossil fuel era) is the Government Pension Fund Global of Norway. Also known as the Oil Fund, it is now valued over $1 trillion in assets and is the world’s largest sovereign wealth fund established in 1990 to preserve wealth from Norway’s oil and gas for future generations.

Couldn’t we apply the same model to preserve sustainable human safety for future generations? After all, since global military spending at $2 trillion is almost twice that of the Norway Oil Fund, it shouldn’t be that difficult to redirect a few cents to invest for our children’s future safety.

Let’s round up the numbers for convenience. Annual global military spending is $2 trillion. Divert only 1% of that to set up the Global Sustainable Human Safety Fund (Global SHS Fund), amounting

152 Meeting Gorbachev, Directed by Werner Herzog & Andre Singer, https://www.imdb.com/title/tt8811382/
154 https://www.prospectmagazine.co.uk/essays/how-to-stop-a-new-cold-war
to $20 billion. After initial set-up, we will continue to divert $20bn from global military spending to top up the Global SHS Fund every year. The SHS Fund will be invested in such a way that it will make (let's be conservative and say) 1% return above inflation — any additional profits will be cashed out to fund global/regional sustainable human safety defence related expenditure. In other words, the Global SHS Fund will grow 1% inflation-adjusted every year on top of regular annual contributions of $20bn from global militaries. How much will the Global SHS Fund worth in 100 years? 250 years? Or 500 years?

Diverting a very modest 1% of global annual military spending every year (i.e. $20bn per year) to the Global Sustainable Human Safety Fund and making sensible investments will make the Global SHS Fund worth $1.3 trillion after 50 years. After 100 years, it will be worth $3.4 trillion; $22 trillion after 250 years; and $290 trillion after 500 years.\footnote{\textit{Global military spending, sustainable human safety and value for money}, https://transformdefence.org/publication/value-for-money/}

This does not mean we have to leave the Global SHS Fund alone in order to accumulate such an astronomical amount of wealth. It simply means that if we put it aside until real emergencies threaten sustainable human safety, there is always enough money available to defend ourselves.

\textbf{What are these real emergencies to speak of?} Let's say filmmaker Adam McKay's brilliant 'Don't Look Up' movie is more than just a metaphor for climate change. Let's say it's an additional, real threat.

NASA's Near-Earth Object Office estimated that, on average, a Tunguska-sized asteroid (i.e. capable of destroying a city) will enter Earth's atmosphere once every 300 years.\footnote{https://science.nasa.gov/science-news/science-at-nasa/2008/30jun_tunguska; https://cneos.jpl.nasa.gov/sentry/} With our Global Sustainable Human Safety Fund, we know that after just 50 years we will have more than $1 trillion available to build up our defence against a potential Tunguska-sized asteroid. As a reference, the Apollo program (1961-1972) costs only $150 billion in today's money.

And if it's a false alarm and no Tunguska-sized asteroid strikes Earth in the next 250 years, we will still have $22 trillion left to build an outer-space defence against not just a Tunguska-sized asteroid but also a Chicxulub-sized asteroid (the one that killed off the dinosaurs).

Can we afford to wait?

\footnote{\textit{Global military spending, sustainable human safety and value for money}, https://transformdefence.org/publication/value-for-money/}
CONCLUSION

Any plan to address the climate emergency must address *all players and all factors*. To be addressing all these issues without attention to the $2 trillion per annum on global military spending; the contribution of the global military to climate change; interrogation of the $2tr ‘value for money’ case in light of the enormity of the threats of climate chaos and pandemic to actual human safety; and the impossible task of poorly funded peacekeeping up against the deadly combination of conflict and climate, is to be talking around a very big elephant in the room.

We are already well into the 21st century, facing ‘modern’ man-made threats of climate chaos, a sixth mass extinction, global pandemic and potential nuclear apocalypse, ‘armed’ with an out-of-date 20th-century defence and security paradigm, based on a 19th-century model of extractive and exploitative capitalism.

It’s not working.

We need a practical, imaginative, brave discussion about redefining and re-making foreign and defence policy – and critically, the attendant budgeting – such that it is truly fit-for-21st century purpose. This will help frame a deeper understanding of its role to date in climate change, pandemic, economic, racial and gender injustice. In this way, foreign and defence policy transformation will be a vital part of the system change process which people and planet are crying out for.
The global military, climate change and human safety.

Key findings on the destructive merry-go-round of war, devastation and rebuilding:

- **The carbon footprint of the global militaries and associated defence industries** is 445 million tonnes of CO2 equivalent (2017); this is larger than the annual greenhouse gas emission of the entire country of Italy, and not much smaller than the total GHG emissions by UK (505 million tonnes of CO2 equivalent) and France (482 million tonnes of CO2 equivalent) respectively.

- **The global militaries and defence industries account for at least 1%** of the total global greenhouse gas emissions, and the figure could be as high as 5%.

- For comparison, **civil aviation accounts for approximately 2.1% of global GHG emissions**.

- If we rank the world’s militaries together as a single country, they would be the 29th biggest oil consumer in the world, just ahead of Belgium or South Africa. To put it another way, this is half the oil consumption of the world’s 5th biggest economy, the UK or the 6th biggest, France.

- The total GHG emissions of the nine-year Iraq War (between 2003 and 2011) were approximately 254 million tonnes of CO2. That’s **slightly more CO2 released than the 14th biggest economy in the world, Spain**, in 2016, and only a quarter less than the 6th biggest economy, France.

### WAR SPENDING AND CONFLICT

- Global military spending is currently $2 trillion per annum and twice as much as at the height of the cold war.

- Conflicts hit a record high in 2020, with more active conflicts than at any time since 1945. Internationalised internal conflicts have tripled in the last decade with a significant increase of third-party state military interventions.158

### THE GUILTY PARTIES

- The G20 nations account for 87% of annual $2 trillion military spending. In 2021, the U.S. defence budget was $800bn – more than the next 10 top spending nations combined.

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157 If not otherwise specified, references for this chapter can be found: https://transform defence.org/publication/indefensible/ & https://transformdefence.org/publication/value-for-money/

G20 military budgets are locked into fossil fuel dependent hardware like tanks, warships and the F-35 fighter jet, which itself drinks 5600 litres (1480 gallons) of fuel per flight hour.\(^{159}\)

The UK MoD is the largest single contributor to GHG emissions within the UK central government responsible for half of the total.

According to the 2020 report by Scientists for Global Responsibility, the UK military sector emitted at least 6.5 million tonnes of CO\(_2\) equivalent in 2017-2018.\(^{160}\)

- Of these, the report estimates that the Ministry of Defence’s (MOD) total direct GHG emissions in 2017-2018 were 3.03 million tonnes of CO\(_2\) equivalent, similar to the emissions of the UK’s vehicle manufacturing industry.
- UK military and defence industry combined carbon footprint could potentially be as high as 13m tonnes CO\(_2\)e (3% of national total emissions).

The Costs of War Project (2019) estimated the total US military’s carbon emissions for 2017 to be 339 million tonnes of CO\(_2\) equivalent, consisting of 59 million tonnes of CO\(_2\) equivalent emitted by the Pentagon and 280 million tonnes of CO\(_2\) equivalent emitted by the US defence industry.\(^{161}\)

- The Pentagon would be the world’s 55th largest CO\(_2\) emitter if it was a country, more than many industrialized nations including Portugal, Sweden and Switzerland.
- US defence industry emissions for ≈ 280m tonnes CO\(_2\)e, higher than Egypt.

The US Air Force is the largest user of fuel energy in the US federal government, consuming more than 2 billion gallons of jet fuel per year, and accounts for around 10% of total aviation fuel use in the United States.

A modern military typically consumes more than half of its total fossil fuel consumption on aviation fuels (e.g. over two thirds in the UK and around 60% in the USA).

Global carbon footprint of the military-industrial complex (i.e. global militaries and defence industries) = around 5%

- This is higher than carbon emissions from global civil aviation = 2%
- Transport (including cars, trucks, airplanes, ships and other vehicles) account for 25% of global carbon emissions
- Agriculture = 10%
- In other words, the global military-industrial complex carbon foot-print is one half and one fifth respectively of the global emissions from the everyday activities of food production and transport.

\(^{159}\) https://www.streamnews.net/article/Norway-worries-that-F35-pollutes-the-environment-m8v2khNHT
\(^{160}\) https://www.sgr.org.uk/projects/climate-change-military-main-outputs
\(^{161}\) https://watson.brown.edu/costofwar/papers/ClimateChangeandCostofWar
**DEFENCE CONTRACTS + WAR = MONEY MAKING TROUGH**

- **HARDWARE & SERVICES** The global defence market size is nearly half a trillion dollar ($453bn in 2021).162
  - The gas-guzzling Lockheed F35 Fighter jet (just completed, partially built in the UK and now being sold around the world) was projected to cost $2tr in total around the world over its expected lifetime – a massive public to private wealth transfer.
  - The US accounts for 37% of all global arms sales, followed by Russia (20%).163
  - The top 5 U.S. defence contractors received $150bn a year from the Pentagon. Lockheed Martin alone received $75bn for federal contracts, more than the entire budget of the U.S. State Department.164

- **WAR** "$10,000 of stock evenly divided among America’s top five defense contractors on September 18, 2001 — the day President George W. Bush signed the Authorization for Use of Military Force in response to the 9/11 terrorist attacks — and faithfully reinvested all dividends, it would now be worth $97,295.” Much better return on investment (an ROI of nearly 900%) than if the exact same amount were invested in general economy, e.g. an S&P500 index fund.165
  - “I make no apology for that, I think, again, recognizing, you know, we are there to defend democracy. And the fact is, eventually we will see some benefit in the business over time. Everything that’s being shipped into Ukraine today, of course, is coming out of stockpiles, either at DOD or from our NATO allies. And that’s all great news. Eventually we’ll have to replenish it, and we will see a benefit to the business over the next coming years.”166 Gregory Hayes, CEO of Raytheon

**SDGs, CLIMATE FINANCE, LOSS & DAMAGE**

- Between 720 and 811 million people faced hunger in 2020 (161 million more than for 2019). UN Secretary-General said the world is ‘tremendously off track’ to achieve the Sustainable Development Goals by 2030.167

- The SDGs as a whole face a shortfall of something in the order of $2.5 trillion annually (UN pre-Covid estimate).168

- The annual $100bn climate finance target to support developing countries still has yet to be fully met.

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163 [https://sipri.org/sites/default/files/2021-03/fs_2103_at_2020_v2.pdf](https://sipri.org/sites/default/files/2021-03/fs_2103_at_2020_v2.pdf)
164 [https://www.democracynow.org/2022/4/15/pentagon_russia_ukraine_800_million_arms](https://www.democracynow.org/2022/4/15/pentagon_russia_ukraine_800_million_arms)
165 [https://theintercept.com/2021/08/16/afghanistan-war-defense-stocks/](https://theintercept.com/2021/08/16/afghanistan-war-defense-stocks/)
166 [https://hbr.org/2022/03/raytheon-ceo-gregory-hayes-how-ukraine-has-highlighted-gaps-in-us-defense-technologies](https://hbr.org/2022/03/raytheon-ceo-gregory-hayes-how-ukraine-has-highlighted-gaps-in-us-defense-technologies)
- COP26 dismal failure to get Loss and Damage taken up.

**MILITARY SPEND VS CLIMATE SPEND**

- Global military spending to public climate spending is 6:1. Total public expenditures on climate change (international and domestic) was estimated to be $321bn in 2020,169 less than one sixth of the $1981bn sum spent by global militaries in the same year.

- International climate finance to support developing countries ($20bn) is completely overshadowed by military spending ($900bn spent by G7) in 2018.170

**GAZ GUZZLERS**

- The Lockheed Martin F-35 Lightning II, with a projected service life up to 2070 and partially (10%) built by Britain’s BAE Systems, has a fuel capacity that at least doubles the F-16’s fuel capacity (3900 litres).
  - Drinks 5,600 litres fuel per flying hour
  - Lockheed Martin expected to sell more than 3,000 F-35s worldwide.
  - Carbon emissions of F35 fighter jet per mission (28 Tonnes CO2e) = One person’s emissions (living in the West) over 2 years

**VALUE FOR MONEY: MILITARY SPEND VS EVERYTHING ELSE**

TPNS Value for Money report (2020) looked at various ‘value for money’ comparative examples, including the $2 trillion cost of the Lockheed Martin F-35 weapons system.171

The $2 trillion for F-35 could have funded any one of the critical agencies/activities below:

  - Climate finance for 20 years
  - UN disaster response for the next 400 years
  - UN disaster risk reduction for the next 4,000 years
  - Global biodiversity conservation at $100bn per annum for the next 20 years
  - WHO funding at $2bn per annum for the next 1,000 years
  - WHO’s COVID-19 Solidarity Response Fund for 2,963 years
  - Global pandemic surveillance and control at $8bn per annum for the next 250 years
  - Money for 4 years to lift the poorest people in the world above extreme poverty (UBI for the 700 million poorest)
  - UN peacekeeping operations at current $4.5bn per annum for the next 444 years
  - UN peacekeeping at $15bn per annum for the next 133 year

The global military spending was $2.1 trillion in 2021.

- 20 years’ worth of world military expenditure would procure **ALL** of the items mentioned.

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170 https://oxfamilibrary.openrepository.com/handle/10546/621066; SIPRI.
171 https://transformdefence.org/publication/value-for-money/
Furthermore, to fund all of this list requires $740bn a year ($500bn of this is UBI for 700m people). This equates to mere 35% of annual global military spending. Take out the UBI, a mere 11% of annual global military spending can fund all the remaining items.

**CONFLICT PREVENTION, PEACE BUILDING AND PEACEKEEPING**

*underfunded yet needed more than ever*

- A 2018 study estimated that if the UN had invested $200 billion in peacekeeping operations with strong mandates during the period 2001–2013, major armed conflict would have been reduced by up to two-thirds (relative to a scenario with no peacekeeping operation) and 150,000 lives would have been saved. The actual budget over these 13 years was $59 billion. The researchers conclude that “UN peacekeeping is clearly a cost-effective way of increasing global security.”

- As of December 2020[^172]:
  - 10 out of 21 ongoing UN peace operations were located in countries ranked as most exposed to climate change.
  - 6 of the 10 biggest UN peace operations (by total international personnel) were in countries ranked most exposed to climate change.
  - Of a total of 92,159 personnel deployed to UN peace operations, 80 per cent (74,396 personnel) were deployed in such countries.

**GREEN NEW DEALS: POLICIES MUST INCLUDE MILITARY SPEND AND EMISSIONS**

U.S. Senator Bernie Sanders in his Green New Deal offer during the presidential race included this courageous, paradigm-shifting pledge,

*Bring together the leaders of the major industrialized nations with the goal of using the trillions of dollars our nations spend on misguided wars and weapons of mass destruction to instead work together internationally to combat our climate crisis and take on the fossil fuel industry. Bernie recognizes that the Pentagon is the largest institutional emitter of greenhouse gases in the world and that the United States spends $81 billion annually to protect oil supplies and transport routes. We are uniquely positioned to lead the planet in a wholesale shift away from militarism.*

**WRONG**

- The US Congress has approved a mere $1 billion in international climate finance for 2022 – falling far short of Joe Biden’s pledge to provide $11.4bn a year by 2024.[^173] The budget is only $387 million more than Trump-era spending.

Analysis by the Overseas Development Institute found the US should be providing $45-50 billion of international climate finance every year under a “fair share” calculation that includes the size of its economy and historical emissions. The $1bn voted by Congress is just 2% of its fair share.

**WARS, EMISSIONS, BOMBS, DESTRUCTION**

- According to “very conservative” estimates published by Oil Change International in its 2008 *The Climate of War* report, the Iraq War was responsible for at least 141 million tonnes of CO₂ equivalent from the start of war in March 2003 up to December 2007 – 28.2 million tonnes of CO₂ equivalent per year.
  - If the Iraq war were ranked as a country in terms of GHG emissions, it would rank above 139 of the world’s countries.
  - And if this annual emissions figure were multiplied by the number of years of the Iraq War, total GHG emissions for the war would be approximately 254 million tonnes of CO₂ equivalent – more than the 2016 emissions by Spain (the 14th biggest economy in the world), and only a quarter less than France (the 6th biggest economy in the world).
  - At the height of the Iraq War in 2005, the Pentagon alone consumed daily the same amount of oil as the whole of Iraq – consumption that would rank the Pentagon 34th in the world ahead of Pakistan (with a very big population) and Sweden (with an advanced industrial economy).

- The US coalition dropped 4,000 bombs in Afghanistan in 2017 and more than 7,000 bombs in 2018.

- The Saudi coalition carried out 19,000 airstrikes, dropping British and American made bombs between March 2015 and January 2019 in Yemen.

- The US-led coalition (including the UK, France, the Netherlands and Iraq) has launched more than 15,000 airstrikes in Syria – in the battle for Raqqa alone, at least 21000 munitions were dropped – while Russia conducted 9,000 airstrikes between October 2015 and March 2016.

- During Israel’s seven-week Operation Protective Edge in 2014, more than 6,000 airstrikes were carried out in Gaza, the 3rd most densely populated place on earth.

- Cement production is one of the largest industrial sources of GHG emissions in the world – contributing an estimated 8% of total global CO₂. In the World Bank’s 2017 *Toll of War* report on the consequences of war in the 10 worst-affected Syrian cities, it was estimated nearly 900,000 housing units were (partially) destroyed in 2017. The cement required to rebuild these units will release approximately 22 million tonnes of CO₂.
ABOUT TRANSFORM DEFENCE

Transform Defence for Sustainable Human Safety works to put sustainable human safety at the heart of fit-for-purpose 21st century foreign, defence, security and international development policy-making. We must question the limits of 20th-century national self-interest if we are to address the single greatest threat to our collective survival – runaway climate change.

Transform Defence for Sustainable Human Safety describes the paradigm shift we will need to meet this monumental challenge.

All Transform Defence reports and briefing can be found at:

https://transformdefence.org/publication/

**Indefensible: The True Cost of the Global Military to Our Climate and Human Security**

https://transformdefence.org/publication/indefensible/

“[This report] is an important addition to the growing evidence on the significant role of military emissions in causing climate change. Using a novel methodology, it widens the analysis to all the world’s militaries... it connects the dots between military fuel use, military spending, war, and the burden of climate change on development... it [also] offers important solutions. It is essential reading for all those concerned with climate change and the path to a sustainable and secure future.”

Neta C. Crawford, Professor and Chair of Political Science Boston University and Co-Director of the Costs of War Project

**Global Military Spending, Sustainable Human Safety and Value for Money**

https://transformdefence.org/publication/value-for-money/

“[TPNS’s] Global military spending, sustainable human safety and value for money report... demonstrates how deeply inadequate the concept of ‘national security’ is in light of the ongoing pandemic and the rapidly unfolding threats of climate change,” “It asks what we can learn by looking at the policy and spending priorities of governments, and argues that, unquestioned and at our peril, governments are massively outspending on weaponry compared to the climate emergency or global health protection.”

Jen Maman, Senior Peace Adviser, Greenpeace International

**Stockholm+50 & Global Military Emissions**

https://transformdefence.org/publication/stockholm50-and-global-military-emissions/

“This briefing from Tipping Point North South, published as the Stockholm+50 Conference gets underway, seeks to tell a parallel story and it is one that connects military spending, emissions,
accountability and re-distribution. It is yet one more lens through which to understand the intersection of power, money, climate change and historic responsibility. Its ‘ideas for discussion’ are ambitious, yes, but worthy of attention as the climate emergency gets ever closer to home.”

Professor Saleemul Huq, Chair of the Expert Advisory Group for the Climate Vulnerable Forum (CVF); a lead author of the third, fourth and fifth assessment reports of the Intergovernmental Panel on Climate Change (IPCC); advisor to the Least Developed Countries (LDC) group in the United Nations Framework Convention on Climate Change (UNFCCC)

**Military and Conflict Related Emissions: Kyoto to Glasgow and Beyond**


“This report is a valuable aid in mapping out the steps to achieve important goals such as an IPCC Special Report into military carbon emissions. Through my work at Scientists for Global Responsibility, I see the momentum around this topic is growing rapidly. The report recommendations give a clear direction for action through the formal UN climate convention processes.”

Dr Stuart Parkinson, Executive Director of Scientists for Global Responsibility

**Transform Defence piece on ‘From Poverty to Power’**

"If it is right to address the damage of Western finance, on development through the lens of indebtedness or tax havens, then surely the time has come to look at the impact on the global south of rich nations foreign and defence policy as manifested through insane ever rising levels of military spending."

“I wholeheartedly endorse that... Think back to the Overton window... What do you have to do to shift military spending into a legitimate discussion rather than security is for big boys ie there's no way we're going to let you climate change people get your hands on that.... (But) this is how things move into the Overton window, through this kind of forward thinking so I hope it’s part of a longer-term shift.”

Duncan Green From Poverty to Power, Oxfam Strategic Advisor