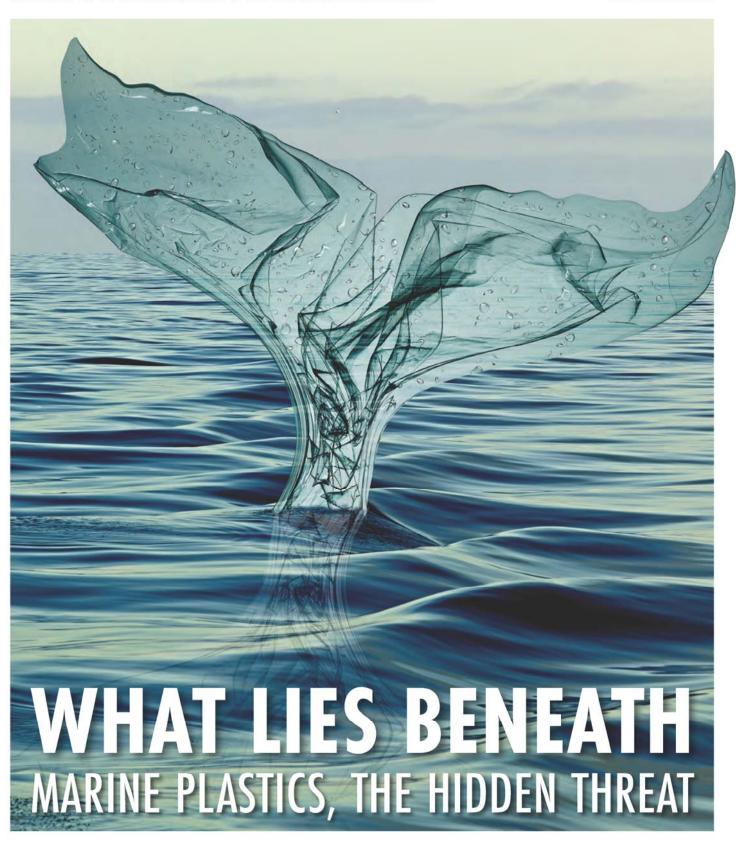
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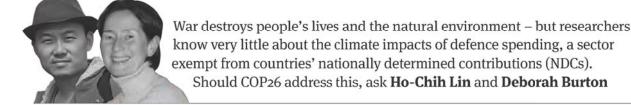
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SMOKING GUNS

how global defence spending hurts the environment



hy aren't the greatest
collective threats to our
human safety – climate
change and pandemic – at
the top table for defence and
national security?

Working for an organisation rooted in international-development campaigning – debt cancellation, trade, tax and climate justice – we have long argued that excessive military spending and its disastrous impact on development demands creates a structural barrier to meeting global development goals.

What wasn't immediately obvious to us, despite it hiding in plain sight, was the extent to which the global military contributes to climate change, doubly impacting the world's poorest who feel most the effects of war and conflict on people and the environment.

How can it be otherwise?

Governments, especially the big military spenders, have been locked for so long into self-interested, destructive foreign, security and defence-spending strategies that support endless war-for-oil conflicts, spending huge budgets on fossil-fuel dependent equipment operated by fossil-fuel reliant armies, navies and air-forces.

But there is a dearth of data on this. Unlike other carbon-intensive sectors, such as transport or agriculture, military fuel consumption and carbon emissions are exempt from national reporting to the United Nations Framework Convention on Climate Change (UNFCCC) or to the Intergovernmental Panel on Climate Change (IPCC) – at the behest of the US, but with other major military powers' tacit agreement.

And so, building on the data available and working with the few researchers investigating this issue, we set out to calculate the extent to which the military contributes to climate change.

HIDDEN IMPACTS

December 2020 saw the fifth anniversary

of the Paris Agreement. To mark it, we published *Indefensible: The true cost* of the global military to our climate and human security.

The report built on the US-based Costs of War project, which, in 2019, calculated that the Pentagon's greenhouse gas emissions would rank it the 55th largest emitter in the world – higher than Portugal. It also drew on UK-based research from Scientists for Global Responsibility, which calculates that the "carbon bootprint" of the world's armed forces and associated industries combined – including warfare – could be as high as 6 per cent of global emissions.

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With so little hard data on military fuel consumption and carbon emissions – ironically, with the exception of the US and, to an extent, the UK – the figures may not be precise, but they offer useful indications, especially when you bring together and compare estimates by different methodologies.

If income is a strong predictor of an individual's carbon footprint, how much a nation spends annually on its military is a good predictor of that sector's annual energy and fuel usage. From that premise, if we treated the world's combined militaries as a country, they would be the world's 29th biggest consumer of oil, ahead of Belgium or South Africa.

To put it another way, the world's military consumes half as much oil annually as the UK, the world's fifth-biggest economy.

When Greta Thunberg sailed to New York to avoid flying, she might have pondered that global military emissions are not far off those from civil aviation – and could be much more. Civil aviation accounts for some 2 per cent of global carbon emissions and is – rightly – a major climate-change focus of international public and political attention. The global military-industrial complex, accounting for more emissions, has escaped such scrutiny.

We need all aspects of human activity to reach net-zero; so what about the military? And so, for COP26, we are calling for the IPCC to produce a special report on how the global military contributes to climate change.

TRANSPARENCY

Can we scrutinise nations' or regional blocs' foreign and defence policies and spending? To ask the question risks being labelled unpatriotic or naïve. Which is how nations get away with excluding military emissions from their nationally determined contributions (NDCs).

It's why the military is not compelled to report its emissions, let alone the carbon footprints of war and of reconstruction; producing cement is among our most carbon-intensive processes. And yet this state of affairs is allowed to exist.

According to the US-based Climate Policy Initiative, in 2016 total global public expenditure on climate change, international and domestic, amounted to US\$141 billion.

At the same time, global military expenditure totalled US\$1.66 trillion. In other words, governments' average spend on climate change amounted to 8.5 per cent of their defence spending, a ratio of 12:1.

In 2015, the G7 and other industrialised countries committed to spend US\$100 billion a year under the UNFCCC to support climate action in developing countries. Not only did they not deliver that, their spend on international climate finance is completely overshadowed by their military spending; US\$21 billion versus US\$845 billion for the G7 in 2016.

Global military spending has soared since 2016 to some US\$1.9 trillion today. Twenty nations account for 85 per cent of this, the US alone for 38 per cent. Take out salaries and pensions, and we have to question defence's value for money.

Weapons and hardware procurement are a bottomless pit of increasing costs with appalling taxpayer value for money. Highly lucrative for defence-company directors and shareholders, the sector is arguably the greatest source of government corruption as investigative journalist and former ANC MP Andrew Feinstein spells out in *The Shadow World: Inside the Global Arms Trade*.

The figures reveal that governments do not make protecting people from runaway climate change anything like a priority. That prompted us to produce a second report, looking at security and value for money.

Global military spending, sustainable human safety and value for money argues for modernising defence and security thinking and spending, to deal effectively with the biggest threats to collective human safety; climate change, pandemic, mass species extinction, wars and poverty.

By way of example, we looked at the US-built F-35 jet.

The estimated global total lifetime cost of the F-35 programme is US\$2 trillion. Roll-out has struggled with major technical problems, production delays and cost overruns. Notwithstanding, the US has sold the jet to nations around the world.

Had we spent that US\$2 trillion tackling other, equally important defence and security concerns relating to human safety, we could have covered:

- o Climate finance for 20 years
- United Nations disaster response for the next 400 years
- United Nations disaster risk reduction for 4,000 years
- Global biodiversity conservation at US\$100 billion per annum for 20 years
- Funding for the World Health
 Organisation (WHO) at US\$2 billion a year for 1,000 years
- The WHO's COVID-19 Solidarity Response Fund for 2,963 years
- Global pandemic surveillance and control at US\$8 billion per annum for 250 years
- UN peacekeeping operations, currently US\$5 billion per annum, for 444 years.

PANDEMIC LET-DOWN

Covid-19 – like many viruses before and yet to come – is another consequence of our appalling stewardship of planet Earth, and our collective failure to respect and protect it.

So it's really no surprise that political leadership around the world has failed us all – in preventing the pandemic, preparing for it, controlling its spread and eliminating it – in the same way it is failing to grasp and tackle the climate emergency.

The UK government named pandemic as a Tier One security threat in its 2010 and 2015 National Security Strategies (NSS). The risk of human pandemic disease "remains one of the highest we face", reported the 2010 NSS.

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In the interim, government did little to turn the plan into action, not in infrastructure preparation and not in raising public awareness of the threat, in contrast to the Tier One threat of terrorism. Chief of defence staff General Sir Nick Carter mentioned neither pandemic nor climate change at the annual Royal United Services Institute lecture in December 2019.

Like many other nations the UK acted late at every step – from lockdown to track, trace and isolate, and to protection for care homes and key workers. The public and the NHS has paid a terrible price. The UK now has among the highest Covid death rates in the world – far exceeding its 70,000 civilian death toll during the Second World War.

WHERE NOW?

The sixth mass extinction is upon us. Amid a pandemic, Covid-19 screams the same critical message, albeit in a different context: we are all in this terrible mess together. This has led us to one simple, geopolitically challenging conclusion: we fail to transform defence thinking and spending at our peril.

Whether in Europe or Southeast Asia, North America or Russia, the Middle East, Africa or South America, we are one species facing simultaneous, entangled, human-made catastrophes.

Yes, geopolitical threats will probably always be with us; citizens need to know their governments are protecting them from those threats that are real.

But citizens must also be protected from the biggest, most socially and economically damaging threats we face collectively – climate change and habitat loss. These remain peripheral to defence and security policymaking, yet threaten us with social and economic instability, resource conflicts, poverty and ever greater inequality.

Our new initiative, Transform Defence for Sustainable Human Safety, describes the scale of the shift this climatechanged, post-pandemic world needs from defence, security, foreign and international development policies.

We invite civil society, NGOs and policymakers to join a practical, imaginative and brave discussion about how to remake and redefine nations' foreign and defence policies to make them fit for purpose.

The last word goes to Russian former leader Mikhael Gorbachev, speaking to *TIME* magazine a year ago about the pandemic. "What we urgently need now is a rethinking of the entire concept of security," he said.

"Even after the end of the Cold War, it has been envisioned mostly in military terms. Over the past few years, all we've been hearing is talk about weapons, missiles and airstrikes... The overriding goal must be human security: providing food, water and a clean environment and caring for people's health.

"To achieve it, we need to develop strategies, make preparations, plan and create reserves. But all efforts will fail if governments continue to waste money by fuelling the arms race... I'll never tire of repeating: we need to demilitarise world affairs, international politics and political thinking." •

Deborah Burton is co-founder of Tipping Point North South (TPNS), a co-operative founded by former senior Christian Aid campaigners for trade, tax and climate justice. Ho-Chih Lin is lead author of the Indefensible and Value for Money reports. Transform Defence is a TPNS project