Myth Busting

Nuclear weapons: cause harm now – suicidal risk for humanity

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https://www.sgr.org.uk/projects/nuclear-weapons-threat-main-outputs

Nuclear deterrence – a delusion

☐ **Proposition**: Nuclear deterrence has been keeping us 'safe for over 70 years' or 'works every day to keep us 'safe'; 'nuclear umbrella'

☐ Rebuttals:

- Extensive uncompensated impacts from testing and uranium mining
- 20 or more serious nuclear near misses over 70 years: equipment failure, false alarms, most dangerous during military exercises / conflicts. Nuclear threat makes crises *more* risky
- We've been lucky so far
- NW are no 'umbrella' an unstoppable mega death threat
- Ukraine war & Gaza bombardment taking place under this threat

Nuclear deterrence – a delusion

- ☐ **Proposition**: Nuclear deterrence has been keeping us 'safe for over 70 years' or 'works every day to keep us 'safe'; 'nuclear umbrella'
- ☐ Rebuttals:
- It is a very Western-Power-centric view
- Large areas are nuclear free zones Africa, South America, Polynesia
- There continue to be a whole series of intense conflicts
- Afghanistan, Iraq, Libya, Ukraine, Gaza none of these populations feel 'safe'
- Category error to think that by making others feel unsafe that you are safer
- More sustainable approach common security, human security

Latest UK military expenditure

Core military spending £bn	2021-22	2022-23	2023-24	2024-25
	45.9	53.1	50.9	51.7

Excluding £2.3bn/yr for Ukraine

Plus £0.5bn more announced July 2023 (and again post-2025)

£1.5 – 2bn / yr new nuclear weapon spending up to 2025

- new nuclear-armed nuclear-powered submarines (Dreadnought/ Trident)
- increased number of warheads 260 up from 180
- conventionally-armed nuclear-powered submarines (Trafalgar, Astute, and AUKUS)

Core military spending 7-8 times DEFRA (environment/ agriculture), DESNZ (energy/ climate) budgets

For comparison: £2.4bn to settle teachers pay; £2.5bn for doctors pay; £3.7bn subsidy for Rosebank

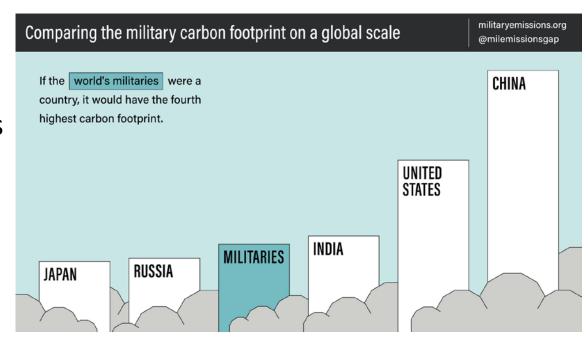
Military carbon emissions are huge (see later). MOD have no meaningful reductions targets.

UK approach

- UK military strategy now more nuclear weapon focused breaching NPT
- Only 2 out of 4 nuclear Vanguard subs working 6 month undersea nuclear patrols serious problems
 - Preparations for return of US nuclear weapons (B61-B drop bombs) to Lakenheath
 USAF 'surety' staffing planned for 2024
- so-called 'tactical' nuclear weapons in Europe & Belarus dangerous and at the same time useless militarily
 - Negotiation and peace is MUCH cheaper than war it is also effective
 - Multiple failures of militaristic policies: refusal to call even for ceasefire in Gaza (or Ukraine)
 - No discussion of Yemen, wars across Africa: Sudan, Ethiopia

Global estimate: military carbon footprint

- Global total (best estimate): 2,750 MtCO2e/ 5.5%
- Larger than Russia's total carbon footprint
- Uncertainty range
 - 1,600 to 3,500 million tonnes of CO2e
 - 3.3% to 7.0% of global GHG emissions
 - Significant obstacle to reducing emissions



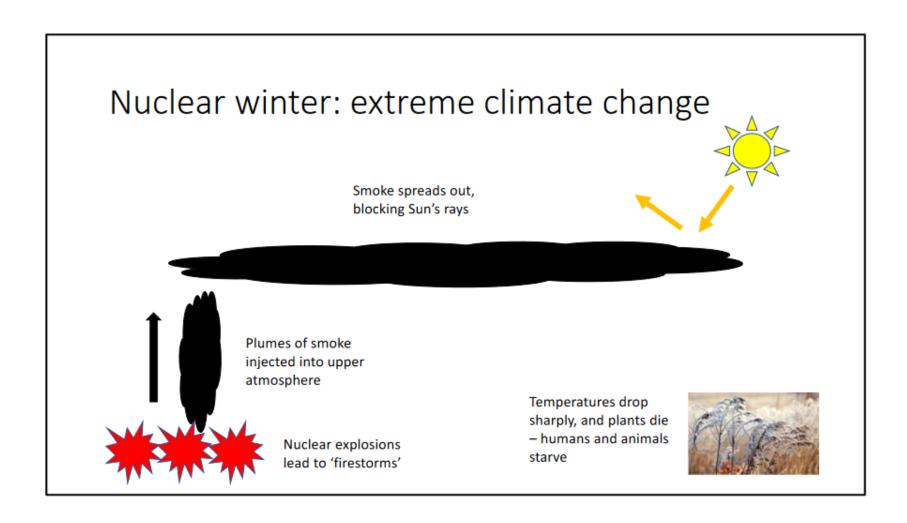
The extreme impacts of nuclear weapon use

Designed to be extremely destructive when detonated

- ☐ One weapon:
- Terrible immediate deaths & injuries: intense heat, blast, fallout
- Destruction equivalent to months of artillery shelling in a few seconds
- Medical facilities overwhelmed. Humanitarian assistance impossible
- 81,000 killed, over 200,000 injured some fatally
- Equivalent to about 6 months of Ukraine war (cf. Gaza casualty rate) but in minutes

The extreme impacts of nuclear weapon use

- ☐ Regional nuclear war:
- 100 Hiroshima size weapons hundreds of millions killed, injured.
- Terrible long-term impacts 10 year nuclear winter. 2bn+ at risk.
- ☐ Global nuclear war:
- 2000 4000 warheads mainly USA & Russia
- Hundreds of millions to over a billion killed and injured
- Radioactive fallout over large areas especially from nuclear reactors
- Even worse long term nuclear winter, ozone destruction, ecocide
- 'civilisation' at risk



- Extreme cooling (rather than heating from carbon emissions)
- Change would be faster and larger than that due to carbon emissions
- Robust evidence for impacts derived using modern climate models published in academic journals

Image credit: Alicja via Pixabay

UK nuclear weapons

- ☐ One UK submarine carries at least 40 Trident warheads
- ☐ At least 4 million fatalities and 10 million casualties across 10 or more cities
- ☐ Only 25 warheads would create a 1,300 km² fire zone (100x Hiroshima) and 5 million tonnes 'black carbon' leading to catastrophic climate cooling
- ☐ Total explosive power huge greater than 6 years of bombing during World War II!



Image credit: MOD

One Trident salvo!

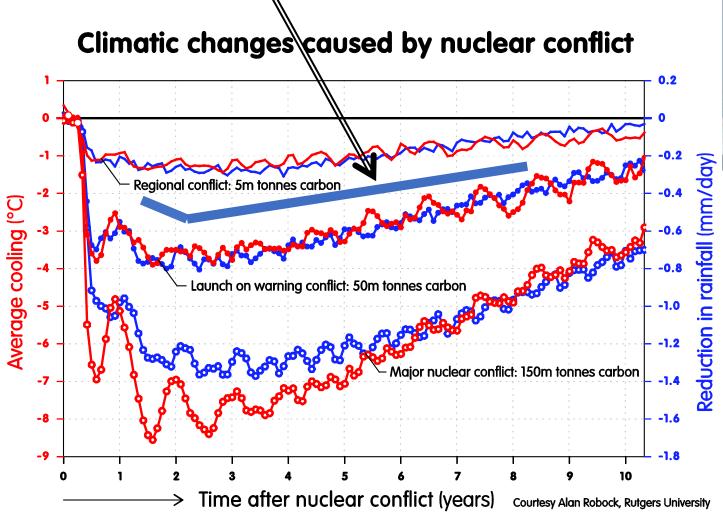




Image credit: MOD

'Launch on Warning'
260 times WWII bombing!

Nuclear-armed states - a dangerous minority

- Nuclear weapons are deployed by only 9 nations out of 198 nations in the UN
- China, France, Russia, UK, USA, White House January 2022: 'We affirm that a nuclear war cannot be won and must never be fought'. But they continue to build & deploy new nuclear weapons.
- Reneged on the NPT promise in 1968 to reduce nuclear weapons stockpiles & to disarm.
- TPNW signatories have concluded that nuclear deterrence has not and cannot prevent nuclear war but in fact poses an existential risk for all humanity.
- From 2017, the remaining UN nations opened a new nuclear ban treaty the TPNW now signed by almost half of the UN. New signatories continue to be added.

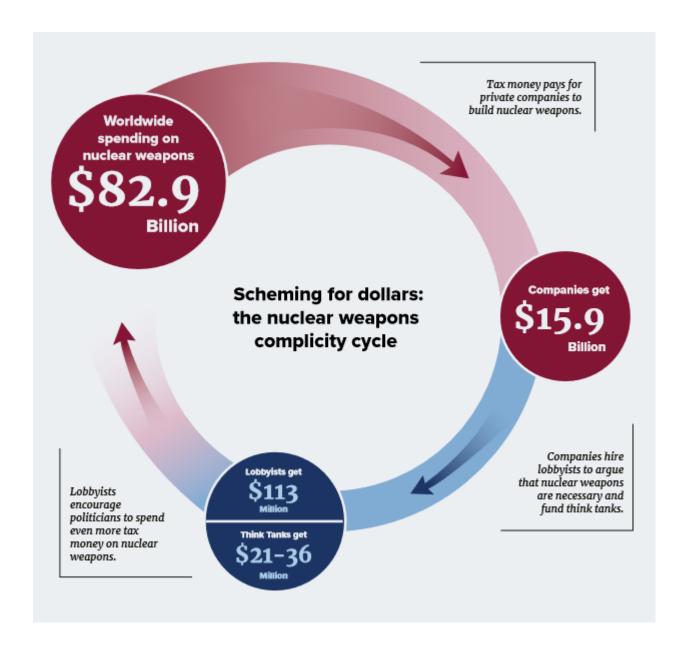
Why do the nuclear states keep unusable and militarily useless nuclear weapons?

- To deter the other nuclear armed states...
- O Power. Nuclear weapons confer status and power at the UN. The UN security council is set up with nuclear-armed nations having permanent seats and the power of veto.
- Powerful political lobbying utilising some of the extensive finances expended on nuclear weapons and nuclear power.
- The deployment of nuclear weapons a protection racket.

The Core Problem: deeply corrupt decision-making

Similar cycle applies to climate inaction via fossil-fuel subsidies / profit taking

From 2023 ICAN report: *Wasted: 2022 nuclear weapon spending*



Peak militarism – a suicidal risk for humanity

- Out of control militarism huge global arsenals
- Terrible ongoing atrocities of militarism in Gaza, Ukraine, Yemen, across Africa
- War doesn't solve anything and the end result is worse eg Afghanistan, Iraq
- China, France, Russia, UK, USA, White House January 2022: 'We affirm that a nuclear war cannot be won and must never be fought'. But they continue to build & deploy new nuclear weapons.
- Extensive fossil-fuel / arms lobbying and 'think-tanks' funded to misinform
- The public are way ahead of our political leaders we must work even harder to mobilise resistance to our extinction.
- \circ Better active today than radioactive tomorrow or on a burning earth