

Nuclear Weapons, military & climate overheating

Dr Philip Webber, Chair



Scientists
for Global
Responsibility

<http://www.sgr.org.uk/>

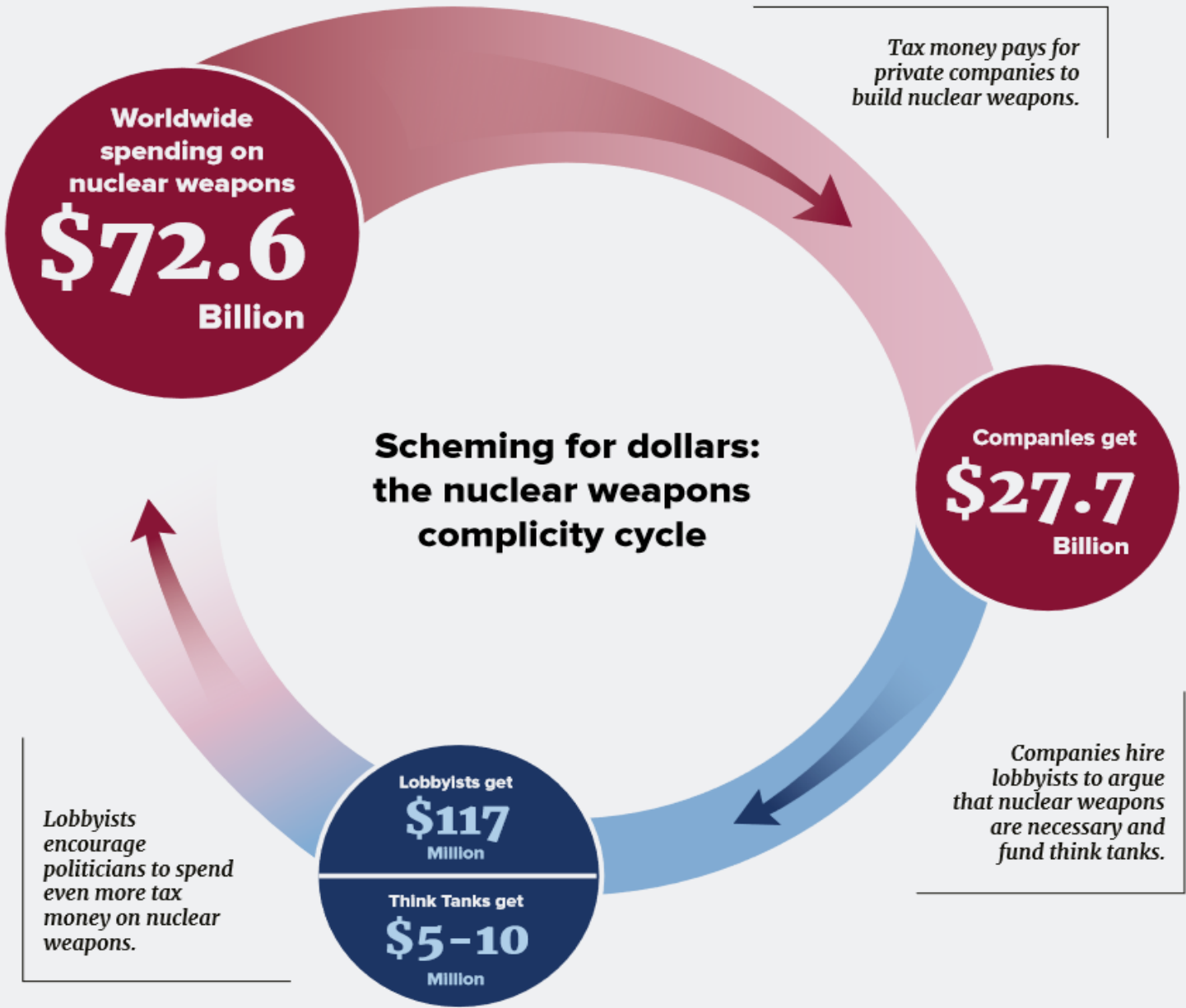
Military spending hits record levels, while climate finance falls short

The Intergovernmental Panel on Climate Change (IPCC) warns that climate heating can destabilise societies, increasing the risk of violent conflict

Many examples: eg Syria, Afghanistan

Global military spending 2020

- ❑ Just under \$2trillion – (\$2000 billion) (SIPRI)
- ❑ Climate investment required: \$1000 billion
- ❑ Actual climate spending \$400 bn
- ❑ **Shortfall = 1/3 of military spending**



UK Military/ climate –spending

- November 2020, UK PM Boris Johnson announces extra spending for military & climate – quotes two prominent numbers...
- Extra **£16.5bn** for Ministry of Defence
- **£12bn** for ‘10 point plan for a Green Industrial Revolution’
- Sound similar - but numbers misleading...

UK: The reality...

- ❑ Ministry of Defence

Total extra spending over 4y: **£24bn** (£6bn/y)

- ❑ 10 point plan for 'Green Industrial Revolution'

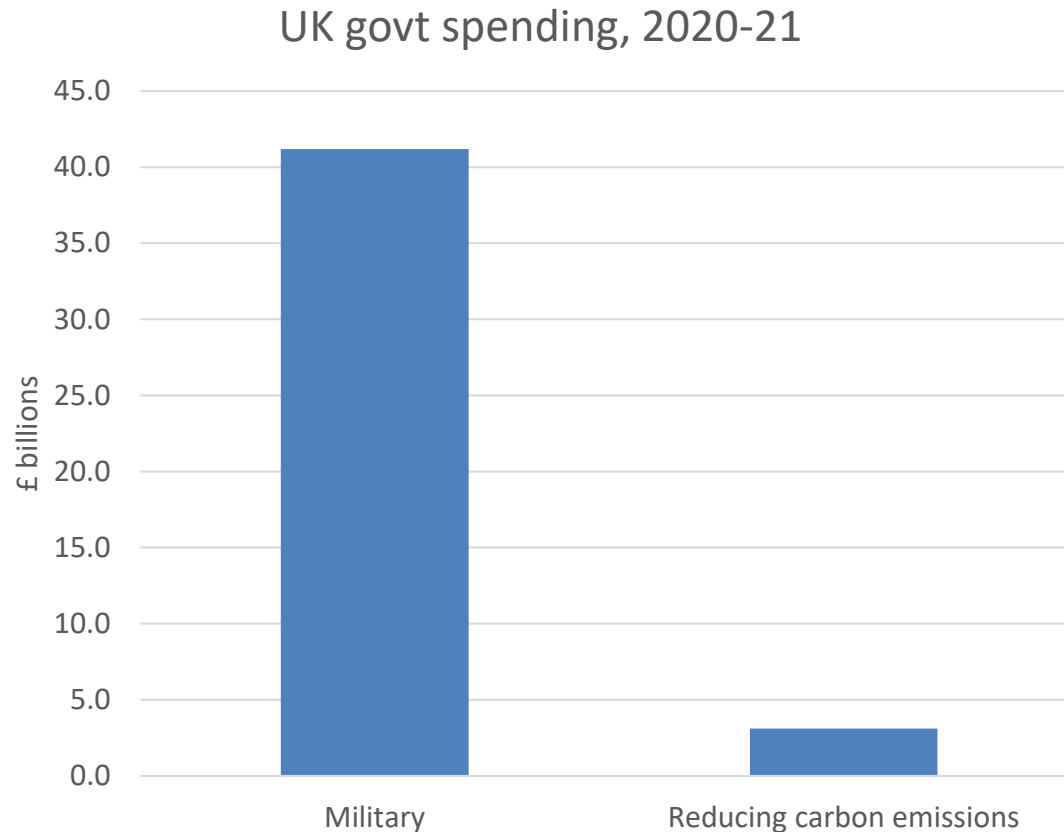
Total spending over 4y: **max. £11bn** (£2.8bn/y)

What climate spending do we need?

- Transition to net zero UK carbon emissions requires investment of ...

	Current annual spending	Total necessary annual spending	Target date for zero emissions	Source
Whole economy (govt, business, individuals)	£10bn	£50bn	2050	Committee on Climate Change
Govt spending	£5bn	£10bn	2050	Committee on Climate Change
Govt spending	£3.1bn	£15bn+	2030	This presentation

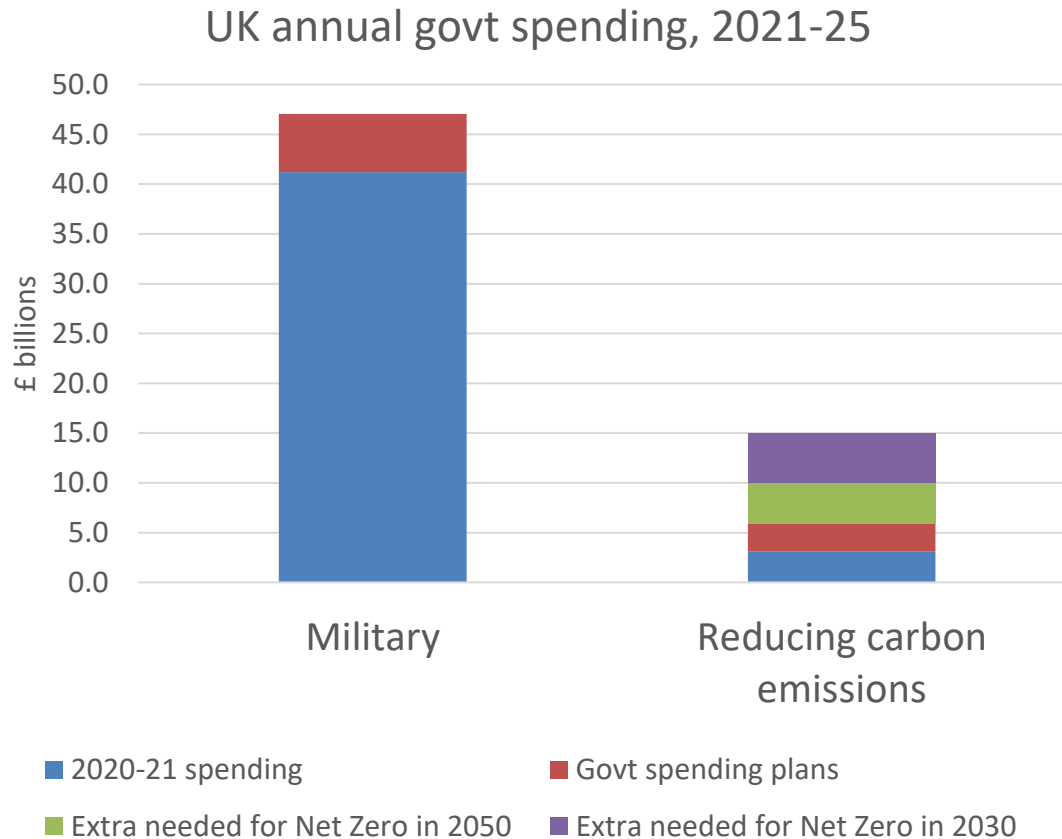
Military v climate: total govt spend



Main sources: HM Treasury (2020); CCC (2020); Guardian (2021)

- Military total does not include Trident contingency fund, military pensions etc
- No official govt figures for annual climate spending

Military v climate: UK govt spend



Main sources: HM Treasury (2020); CCC (2020); Prime Minister's Office (2020); BEIS (2020); Guardian (2021)

- Military total does not include Trident contingency fund, military pensions etc
- Extra needed for Net Zero 2030 is minimum value

Global nuclear weapon spending 2020

- ❑ In 2020 the nine nuclear-armed countries spent \$72.6 billion on 13,000+ nuclear weapons,
- ❑ \$137,666 every minute
- ❑ \$1.4 billion increase over 2019
- ❑ Source: ICAN report 'Complicit' (June 2021):

UK nuclear weapons 2020

- ❑ \$ 6,200 million / year
- ❑ 225 warheads
- ❑ Submarines, warheads, US missile leasing, reactor programme
- ❑ Plan to increase warheads to 260 !
- ❑ New subs etc – \$42,000m – construction
- ❑ \$270,000m – lifecycle cost
- ❑ Sources: 2018 National Audit Office, CND, ‘Complicit’

UK military contribution to climate crisis

- UK military carbon footprint
 - At least 11 million tonnes CO2 equivalent
 - Comparable with annual use of 6 million cars
- UK deployment of nuclear weapons warheads carried by one Trident submarine could cause catastrophic climate cooling due to smoke from explosions/fires blocking Sun's warmth ('nuclear winter'). Similar to 'regional' scenarios. 10m blast, radiation, burns casualties...

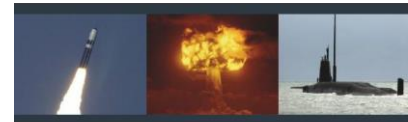


DECLASSIFIED • UK

The Environmental Impacts of the UK Military Sector



Scientists for Global Responsibility
Scientists • Architects • Engineers • Technologists



UK nuclear weapons:
a catastrophe in the making?

Philip Webber and Stuart Parkinson



SGR
Promoting ethical
science, design
and technology

Job creation: govt projections

- Extra £24bn of military tech spending
 - 40,000 jobs in 4y
- Extra £11bn spending for 10 point climate plan
 - 90,000 jobs in 4y
- So climate spending will create about 5x as many jobs per £bn of govt investment
- A similar ratio applies to funding social care

UK govt has chosen...

- Extra £6bn per year on...
 - Deploying aircraft carrier group to South China Sea
 - Playing leading role in robot arms race
 - Exporting weapons to fossil fuel dictatorships
 - Deploying nuclear weapons, creating risk of *accidental* catastrophic nuclear war & nuclear winter
 - Failing to tackle climate emergency, fuelling rise in instability and war
- ...rather than extra £7bn per year/ £12bn+ per year on hitting 2050/ 2030 net zero climate target

References

- BEIS (2020). The ten point plan for a green industrial revolution. Dept for Business, Energy, and Industrial Strategy.
<https://www.gov.uk/government/publications/the-ten-point-plan-for-a-green-industrial-revolution>
- CCC (2020). The sixth carbon budget: the UK's path to net zero. Committee on Climate Change.
<https://www.theccc.org.uk/publication/sixth-carbon-budget/>
- ICAN (2021). Complicit: 2020 Global Nuclear Weapon Spending.
https://www.icanw.org/2020_global_nuclear_weapons_spending_complicit
- The Guardian (2021). Hundreds of millions in green grants for English homes pulled despite delays. 10 February.
<https://www.theguardian.com/environment/2021/feb/10/hundreds-of-millions-in-green-grants-for-english-homes-pulled-despite-delays>
- HM Treasury (2020). Spending Review 2020. <https://www.gov.uk/government/publications/spending-review-2020-documents>
- International Energy Agency (2020). Energy Technology RD&D Statistics: online database.
<http://wds.iea.org/WDS/Common/Login/login.aspx>
- Office of National Statistics (2020). Research and development expenditure by the UK government: 2018.
<https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/researchanddevelopmentexpenditure/bulletins/ukgovernmentexpenditureonscienceengineeringandtechnology/2018>
- Prime Minister's Office (2020). PM statement to the House on the Integrated Review. November.
<https://www.gov.uk/government/speeches/pm-statement-to-the-house-on-the-integrated-review-19-november-2020>
- SGR (2015). UK nuclear weapons: a catastrophe in the making? (Authors: Philip Webber; Stuart Parkinson)
<https://www.sgr.org.uk/publications/uk-nuclear-weapons-catastrophe-making>
- SGR (2020). The environmental impacts of the UK military sector. (Author: Stuart Parkinson)
<https://www.sgr.org.uk/publications/environmental-impacts-uk-military-sector>
- SGR (2018) <https://www.sgr.org.uk/resources/military-spending-hits-record-levels-while-climate-finance-falls-short>
- SIPRI (2021). <https://www.sipri.org/media/press-release/2021/world-military-spending-rises-almost-2-trillion-2020>
- Wpg: Women's Budget Group 2021. A care led recovery from corona virus <https://wbg.org.uk/wp-content/uploads/2020/06/Care-led-recovery-final.pdf>