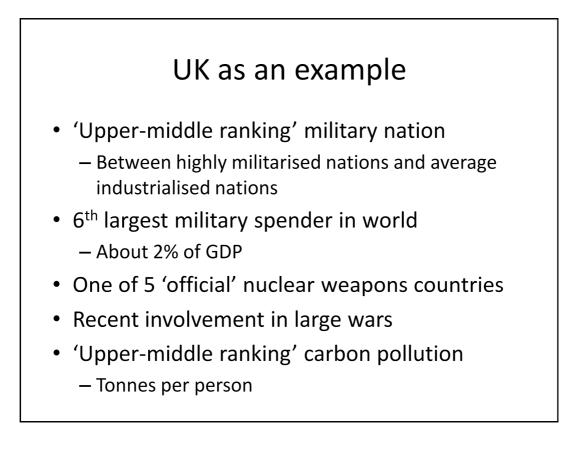


Presentation at the 'Wars, military and climate' conference, part of the People's Climate Summit, Paris, 5 December 2015

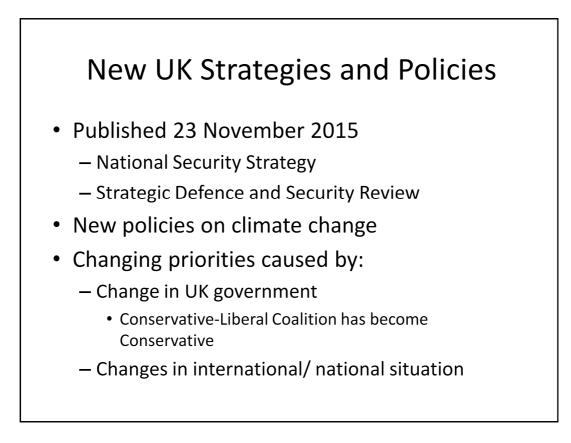


• In 2014, UK military spending was \$61bn: 2.2% of GDP (SIPRI, 2015) – in 2015, it was projected to fall to 2.0% GDP (ORG, 2015)

• Highly militarised nations include USA and Russia. In 2014, US military spending was \$610bn (3.5% GDP) and Russia's was \$85bn (4.5% GDP) (SIPRI, 2015)

• Average industrialised nations – military spending around 1.4% GDP, limited/ no involvement in recent wars (ORG, 2015)

• UK greenhouse gas emissions per person is approx 8.5t (CO2 equivalent) – world average is approx 6.5t (WRI, 2014)



NSS and SDSR: HM Government (2015)



• More info in HM Government (2015)

• NB 'concern' especially means UK government/ Conservative Party concern, especially since last NSS/SDSR in 2010

• No consideration of the role of post-Cold war expansion of NATO to Russian borders and recent NATO military exercises in fuelling Russian security fears

• One non-military option which is being given greater priority is increased efforts to exploit UK gas sources (both conventional and shale) as Russian supplies to European mainland increase – but this has implications for climate change (see later)

Middle East (and other 'hotspots')

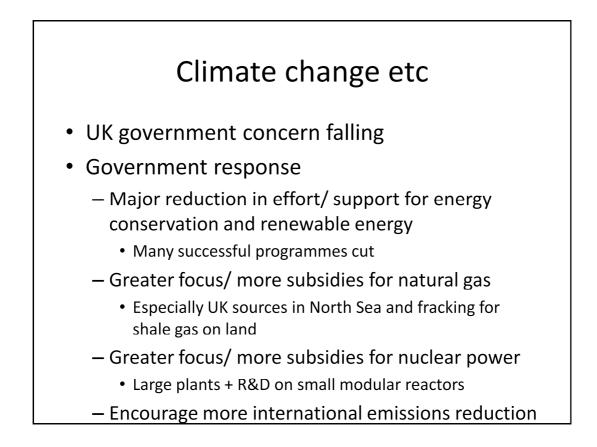
- More concern due to:
 - Rapid rise of IS and other extreme groups
 - Syrian war
 - Refugees
- Government response
 - More 'force projection' through offensive weapons systems
 - Commissioning of second aircraft carrier
 - Speed up deployment of new military aircraft
 - Completion of new military base in Bahrain
 - Increased promotion of arms exports to 'allies'
 - Greater aid focus on 'fragile states'

• More info in HM Government (2015)

• Force projection often referred to by military as 'expeditionary capability' which hides aggressive role

• New military aircraft includes accelerated introduction of F-35 Lightning fighterbombers and more armed drones

• Non-military preventative action is missing, e.g. restricting arms exports to authoritarian regimes, recognising past failures of Western military action, strengthening border controls to prevent foreign fighters entering conflict zones, financial restrictions to cut off funding to IS from elsewhere in Middle East, greater diplomatic efforts to achieve local humanitarian ceasefires, prioritising carbon reductions to prevent climate change which drives instability



- Examples of cuts to UK green energy programmes are given in Parkinson (2015)
- Current UK energy and climate policy summarised in a recent ministerial statement (DECC, 2015)
- UK is the only G7 nation which is increasing fossil fuel subsidies (ODI/OCI, 2015)
- Lack of appreciation of current failings in international nuclear industry and its inability to deliver on promises (see, eg, Dorfman, 2015)
- Phase-out of coal for electricity generation by 2025 is one new positive policy but it has loop-holes



• Submarines & nuclear weapons - incl. Trident replacement (4 x nuclear-armed subs – total cost risen to £31bn); completion of 7 x Astute Class conventionally-armed subs – approx ¼ of total equipment budget

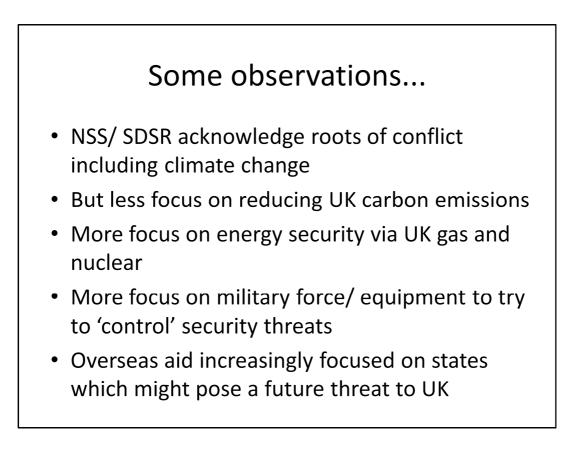
• Warships – incl. completion of 2 x Queen Elizabeth Class aircraft carriers; Type-26 Global Combat Ship

• Combat planes - incl. F-35 Lightning II fighter-bombers (accelerated introduction); Typhoon fast jets (lifetime extension); more armed drones

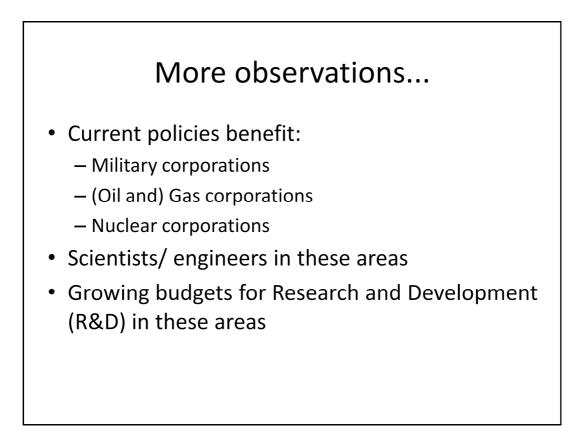
• Armoured fighting vehicles - incl. Warrior, Scout

• Long-range support aircraft - incl. Voyager & A400M for heavy lift, air-to-air refuelling;

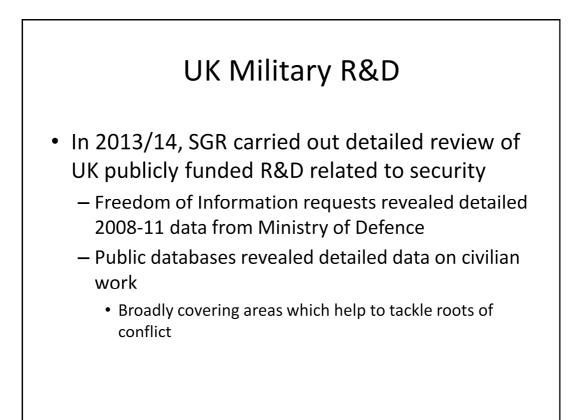
- 9 new marine patrol aircraft
- Weapons incl. missiles, torpedoes and bombs
- Helicopters incl. Chinook, Apache, Puma and Wildcat
- More details in HM Government (2015)



• Essentially military resources are being increased to try to deal with security problems (despite marked lack of success), while key preventative action – ie reducing carbon emissions (which has been successful) – is being cut back



More discussion of these issues is given in SGR (2013)



• Research published in SGR (2013); SGR (2014)

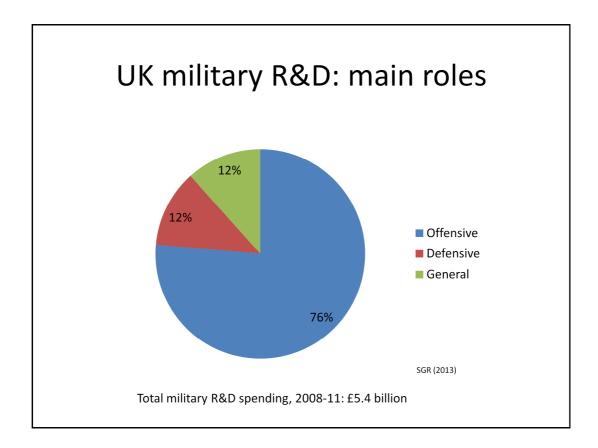
• List of research areas which tackle roots of conflict in slide 13 – broader termed 'sustainable security'

		Public R&D spending 2008-11
1.	Nuclear weapons systems Warheads; 'Successor' submarines; Nuclear propulsion for submarines	£980m
2.	Strike planes Typhoon, F-35 Lightning II, Tornado	£771m
3.	Attack helicopters Mainly Future Lynx/ Wildcat	£599m
4.	Unmanned aerial vehicles 'Drones', including Mantis, Taranis	£195m
		SGR (2013; 2014

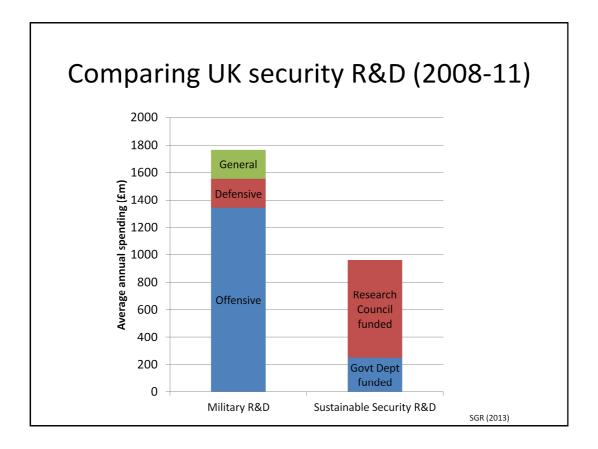
• Other areas of interest include missile systems, communications systems, warships, cyber-security, body armour, chemical/biological/radiological/nuclear defence, emerging technologies etc

• These are minimum figures – 1/4 of MoD R&D spending not clearly documented at programme level

• In public relations, the 'life-saving' contribution of military R&D projects is often emphasised, e.g. soldier armour, although in practice this is a small proportion.



• Classifications based on military/ academic literature – discussed further in SGR (2013)

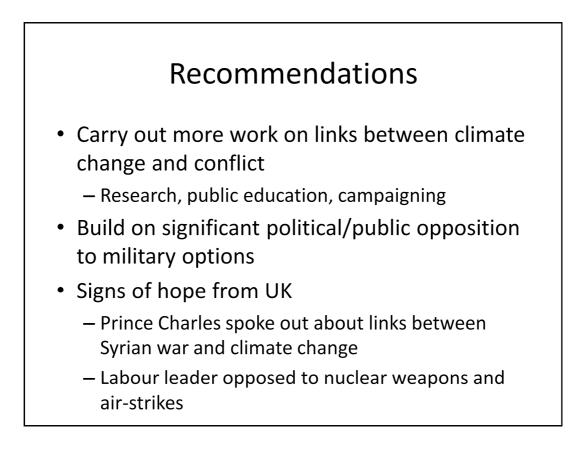


• Sustainable security R&D spending includes: international development and poverty alleviation, climate change impacts, sustainable energy technologies, food security, international relations, natural resource management, biodiversity, environmental risks and hazards, sustainable consumption and other measures to mitigate and adapt to climate change

• The concept of sustainable security was defined in ORG (2006)

Conclusions

- Need a major shift from military approaches to non-military preventative action
 - Both funds and expertise
- Very difficult to achieve in current climate
 - Due to powerful political and corporate interests



• Recommendations aimed at researchers and campaigners

• Numerous organisations working on these issues including Scientists for Global Responsibility, International Peace Bureau, Transnational Institute, Oxford Research Group etc – please support us!

References

- DECC (2015). Priorities for UK energy and climate change policy. Written statement to parliament. 18 November. https://www.gov.uk/government/speeches/priorities-for-uk-energy-and-climate-change-policy
- Dorfman P (2015). https://www.chinadialogue.net/article/show/single/en/8287-Nuclear-on-the-wane-as-grids-adapt-to-renewable-energy
- HM Government (2015). National Security Strategy and Strategic Defence and Security Review 2015: A Secure and Prosperous United Kingdom. https://www.gov.uk/government/publications/national-security-strategy-and-strategic-defence-and-security-review-2015
- ODI/ OCI (2015). Empty promises: G20 subsidies to oil, gas and coal production. Overseas Development Institute and Oil Change International. http://priceofoil.org/2015/11/11/empty-promises-g20-subsidies-to-oil-gas-and-coal-production/
- ORG (2006). Global responses to global threats: sustainable security for the 21st century. Oxford Research Group. http://www.oxfordresearchgroup.org.uk/publications/briefing_papers/global_responses_global_threats_sust ainable_security_21st_century
- ORG (2015). Cutting the cloth: ambition, austerity and the case for rethinking UK military spending. Oxford Research Group.

http://www.oxfordresearchgroup.org.uk/publications/briefing_papers_and_reports/cutting_cloth_ambition_ austerity

- SGR (2013). Offensive Insecurity: The role of science and technology in UK security strategies. Scientists for Global Responsibility. http://www.sgr.org.uk/publications/offensive-insecurity
- SGR (2014). UK nuclear weapons R&D spending: Addendum AA1 to Offensive Insecurity. http://www.sgr.org.uk/publications/uk-nuclear-weapons-rd-spending
- Parkinson S (2015). Wind turbines and solar panels into nuclear weapons: the UK's new industrial strategy? The Ecologist. http://www.sgr.org.uk/resources/wind-turbines-and-solar-panels-nuclear-weapons-uks-newindustrial-strategy
- SIPRI (2015). Trends in world military expenditure, 2014. Stockholm International Peace Research Institute. http://books.sipri.org/product_info?c_product_id=496

WRI (2014). CAIT climate data explorer. http://cait.wri.org/