Appendix 21 – Fossil fuel and arms corporations and other related organisations

Table 21.1 – Fossil fuel corporations mentioned in this report

Corporation	Key information	Main references
AGR	Norwegian-based oil and gas consultancy (especially in software products) focused on exploration, production and enhanced oil recovery.	https://www.agr.com/
Aker BP	A world top 70 oil and gas corporation, in terms of reserves (CO ₂ emissions equivalent). Norwegian-based company, involved in exploration, development and production activities.	https://www.akerbp.com/en/ FFI
Anadarko Petroleum	A world top 40 oil and gas corporation, in terms of reserves (CO ₂ emissions equivalent). US-based company involved in exploration and production. In 2019, it was acquired by Occidental Permian. Subject of multiple environmental pollution cases.	https://www.oxy.com/Pages/default.aspx FFI; Wikipedia
Anglo American	A world top 25 coal corporation, in terms of reserves (CO ₂ emissions equivalent). UK/South African-based mining company, also involved in metals.	http://www.angloamerican.com/about-us/at-a-glance FFI
Anglo American Group Foundation	Charity which is funded by Anglo American. Also see Anglo American.	http://www.angloamericangroupfoundation.org/
Aramco	See Saudi Aramco	
Aspect EnterPrise Solutions	UK-based financial/ IT consultancy, which is heavily involved in fossil fuels.	http://www.aspectenterprise.com/about-us/
Badleys	UK-based company, which provides geological services to the oil and gas exploration and production industry.	http://www.badleys.co.uk/about-us.php
Варсо	Also known the Bahrain Petroleum Company, it is the state-owned oil corporation of that nation. It works in exploration, refining, storage, production, marketing, training and development, and works closely with Saudi Aramco (see Saudi Aramco).	http://www.bapco.net/en-us
BASF	A world top 40 corporation, in terms of oil and gas reserves (CO ₂ emissions equivalent). German-based company, it is the largest chemical producer in the world.	https://www.basf.com/ FFI
BG Group	BG Group was a UK-based oil and gas company. In 2016, BG Group was acquired by Shell. Also see Royal Dutch Shell.	BG Group [1]; BG Group [2]

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BHP	A world top 15 corporation, in terms of coal reserves, and a world top 40 corporation, in terms of oil and gas reserves (both CO ₂ emissions equivalent). Australian/UK company, focused on mining, metals and petroleum. Until recently, known as BHP Billiton. It was joint owner of Samarco, the company at the centre of the Bento Rodrigues tailings dam disaster in Brazil in 2015.	https://www.bhp.com/our-approach/our- company/about-us FFI; Wikipedia
Blue Water Energy BP	 UK financial services company specialising in the oil and gas industry. World's 5th largest oil and gas corporation, in terms of known reserves (CO₂ emissions equivalent). UK-based energy company, with a strong focus on oil and gas operations. Operator of the Deepwater Horizon oil rig, which exploded in 2010 causing huge environmental impacts. 	https://www.bluewaterenergy.com/ https://www.bp.com FFI; section 2.2 (of main report)
C & C Reservoirs Ltd	UK-based data analysis corporation, with a focus on oil and gas exploration and production.	http://www.ccreservoirs.com/
Cairn	UK-based oil and gas exploration and production corporation.	https://www.cairnenergy.com/about-us/at-a-glance/
Centrica	A world top 100 oil and gas corporation, in terms of reserves (CO ₂ emissions equivalent). UK-based energy company, and parent of British Gas and Scottish Gas. It has been a key investor in UK shale gas exploration, including hydraulic fracturing.	https://www.centrica.com/ FFI; Centrica [1]
CGG	French-based geophysical services company, primarily working for the global oil and gas industry.	https://www.cgg.com/en
Chemie Tech	UAE-based engineering services company, focused mainly on the oil and gas sector.	http://www.chemietech.com/index.php/about-chemie- tech
Chevron	World's 8th largest oil and gas corporation, in terms of known reserves (CO ₂ emissions equivalent). US-based company, involved in wide range of activities, including exploration, production and refining. Heavily involved in US shale oil and gas exploration and production. Took over Texaco in 2000.	https://www.chevron.com/operations FFI; Wikipedia
CNOOC	A world top 20 oil and gas corporation, in terms of reserves (CO ₂ emissions equivalent). Chinese state-owned company, also known as Chinese National Offshore Oil Company.	https://www.cnoocltd.com/ FFI
ConocoPhillips	A world top 15 oil and gas corporation, in terms of reserves (CO ₂ emissions equivalent). US-based company, heavily involved in exploration and production.	http://www.conocophillips.com/about-us/ FFI

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Dana Gas	UAE-based gas corporation, involved in exploration and production across the Middle East. (Not to be confused with Dana Petroleum)	http://www.danagas.com/en-us/about/overview
Dana Petroleum	UK-based oil and gas corporation, involved in exploration and production, especially in the North Sea. It is a wholly owned subsidiary of the Korea National Oil Corporation. (Not to be confused with Dana Gas)	https://www.dana-petroleum.com/
Dow	One of the world's largest chemical corporations. US-based company, heavily involved in oil and gas exploration, including high-carbon oil sands.	https://www.dow.com/en-us/oil-gas- mining/markets/mining
E.ON	Large German-based electric utility corporation. In 2016, it sold its main European fossil fuel division into a separate company called Uniper. Over 60% of its UK electricity production came from fossil fuels in early 2019. However, from July 2019 all its residential electricity supply was matched by purchases from renewable sources.	https://www.eonenergy.com/About-eon/Fuel-Mix http://electricityinfo.org/fuel-mix-of-uk-domestic- electricity-suppliers/ Wikipedia
ENI	A world top 15 oil and gas corporation, in terms of reserves (CO ₂ emissions equivalent). Italian-based company, involved in almost all elements of oil and gas, including exploration, production and refining.	https://www.eni.com/en_IT/company/company- profile.page FFI
EOG Resources	A world top 25 oil and gas corporation, in terms of reserves (CO ₂ emissions equivalent). US-based company, heavily involved in exploration and production.	http://www.eogresources.com/ FFI
EP Energy	A world top 80 oil and gas corporation, in terms of reserves (CO ₂ emissions equivalent). US-based company, heavily involved in high-carbon unconventional oil and gas.	http://www.epenergy.com/ FFI
Equinor	A world top 20 oil and gas corporation, in terms of reserves (CO ₂ emissions equivalent). Norwegian state-owned company, known as Statoil until 2018. While it has recently been investing significantly in wind power, it continues to explore for new fossil fuels resources.	https://www.equinor.com/ FFI; Wikipedia
ERCE	UK-based energy consultancy, specialising in services to the oil and gas industry. Formerly known as ERC Equipoise.	https://www.erce.energy/services
ERC Equipoise ESAI Energy	See ERCEUS-based consultancy, providing market intelligence services mainlyto the oil and gas industry.	http://esaienergy.com/services/

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ExxonMobil	World's 4th largest oil and gas corporation, in terms of known	http://corporate.exxonmobil.com/en
	reserves (CO ₂ emissions equivalent). US-based company, and largest	FFI; section 2.2 (of main report); Wikipedia
	publicly traded oil and gas company in the world. It has a long history	
	of questioning the science and political action on climate change.	
	Mainly trades under the name of 'Esso' in the UK.	
Freeport-McMoRan	Large US-based mining corporation, with a focus on metals. Its fossil	https://www.fcx.com/
Copper & Gold	fuel operations led it to be ranked in the top 100 oil and gas	FFI [2]
	companies in the recent past.	
Fugro	Dutch-based geosciences corporation, which provides services to	https://www.fugro.com/your-industry/oil-gas
	several industries. The majority of its business is with the oil and gas	https://www.fugro.com/about-fugro/group-
	sector, and it assists with exploration, development, production and	overview/fugro-at-a-glance
	decommissioning.	
Fujairah Oil Industry	Government-sponsored free trade zone in UAE. It was established to	http://fnrc.gov.ae/forum/present/2015/42.pdf
Zone	"strengthen the role of the private sector and provide support to	
	companies, research centres and the technological development in	
	the field of petroleum industry"	
Getech	UK-based geosciences corporation, which provides data services to	https://getech.com/what-we-do
	several industries, but mainly the oil and gas sector.	
Gibson Energy	Canadian-based "crude oil infrastructure company" whose activities	https://www.gibsonenergy.com/about-us/
	include transportation (especially pipelines), storage, and wholesale	Gibson [1]
	marketing. Involved in high-carbon oil sands.	
Halliburton	Very large US-based corporation which provides products and services	http://www.halliburton.com/en-US/default.page
	to the energy industry, especially the oil and gas sector. "North	
	America's leader in unconventional resources" including high-carbon	
	oil and gas.	
Heritage Oil	UK-based oil and gas corporation, mainly focusing on exploration,	http://www.heritageoilltd.com/
	development and production.	
Ikon Science	UK-based geosciences company, providing services for oil and gas	https://www.ikonscience.com/about/about-us
	exploration and production.	
INEOS Upstream	UK-based oil and gas exploration and production corporation. It has	https://www.ineos.com/businesses/ineos-shale/our-
	two divisions, one which operates in the North Sea and one focused	business/
	on shale gas via hydraulic fracturing. It claims to be "the biggest player	
	in the UK onshore shale gas sector with access to over one million	
	acres in England and Scotland".	

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Inpex	A world top 20 oil and gas corporation, in terms of reserves (CO ₂	https://www.inpex.co.jp/english/
	emissions equivalent). Japanese-based company, engaged in research,	FFI
	exploration, development, production of oil and gas.	
JKX Oil and Gas	UK-based oil and gas exploration and production company operating	http://www.jkx.co.uk/
	mainly in eastern Europe, including Ukraine and Russia.	
Lukoil	World's 6th largest oil and gas corporation, in terms of known	http://www.lukoil.com/Company/CorporateProfile
	reserves (CO ₂ emissions equivalent). Russian-based company,	FFI; Wikipedia
	involved in wide range of operations, including exploration,	
	production, refining and chemicals manufacture. Not state-owned.	
	Russian oil industry is widely criticised for poor environmental record.	
Maersk Oil	Maersk Oil was a Danish oil and gas company owned by the A. P.	Maersk Oil [1]
	Moller-Maersk Group, but which in 2018 was taken over by Total (see	FFI
	Total). Until its takeover, it was a world top 75 oil and gas corporation,	
	in terms of reserves (CO ₂ emissions equivalent).	
Midland Valley	UK-based geosciences consultancy, providing services especially for oil	https://www.mve.com/about/about-midland-valley
	and gas exploration and development. Its work involves shale oil and	
	gas. Part of Petroleum Experts Ltd.	
Nexen	Large Canadian-based oil and gas corporation, now owned by CNOOC	https://intl.cnoocltd.com/
	(see CNOOC). Its operations include high-carbon oil sands and shale	FFI; Wikipedia
	oil/gas. In 2018, its name changed to CNOOC Petroleum North	
	America.	
Nexen Petroleum UK	UK subsidiary of Nexen (see Nexen).	
NPA CGG Services	Part of CGG (see CGG). CGG's NPA Satellite Mapping group provides	https://www.cgg.com/en/What-We-
	services to the oil and gas industry for exploration and production.	Do/GeoConsulting/NPA
NRG Energy	Large US-based energy corporation, especially involved in electricity	https://www.nrg.com/generation/asset-map.html
	generation. Over 80% of its plants are fossil fuel-based, including coal,	
	oil and gas.	
Oando	A world top 100 oil and gas corporation, in terms of reserves (CO ₂	https://www.oandoplc.com/
	emissions equivalent). Nigerian-based company, involved in	FFI
	production activities.	
Oil & Gas UK	Oil & Gas UK is "the leading representative body for the UK offshore	Oil & Gas UK [1]
	oil and gas industry" representing around 400 members in the UK.	
Ophir Energy	UK-based oil and gas corporation, focusing on exploration and	https://www.ophir-energy.com/
	production in Asia and Africa. In 2019, it was acquired by Medco.	

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PDVSA	Venezuela's state-owned oil and gas corporation. It is involved in exploration, production, refining and exporting of oil and gas.	http://www.pdvsa.com/index.php?lang=en
Pembina Pipeline	Canadian-based corporation, focused on transportation, processing and storage of oil and gas products. Heavily involved in the high- carbon oil sands sector.	http://www.pembina.com/about-us/
Petrocare	US-based consultancy, providing services mainly to the oil and gas industry.	http://www.petrocare-marineconsultants.com/
Petrofac	UK-based engineering corporation, which builds and operates facilities for the global oil and gas industry.	https://www.petrofac.com/en-gb/about-us/what-we-do/
PGS	Norwegian-based geosciences consultancy, providing services to the oil and gas industry for exploration and production.	https://www.pgs.com/about-us/
Premier Oil	A world top 100 oil and gas corporation, in terms of reserves (CO ₂ emissions equivalent). UK-based company, involved in exploration and production.	http://www.premier-oil.com/ FFI
Reabold Resources	UK-based oil and gas investment corporation.	https://reabold.com/
Repsol	A world top 25 oil and gas corporation, in terms of reserves (CO ₂ emissions equivalent). Spanish-based company, involved in a wide range of activities including exploration and production.	https://www.repsol.com/en/ FFI
Repsol Sinopec Resources UK	UK-based oil and gas exploration and production company operating in the North Sea. Joint venture between Repsol (see Repsol) and Addax Petroleum UK, a subsidiary of Sinopec (see Sinopec).	https://www.repsolsinopecuk.com/about-us FFI
Rio Tinto	A world top 30 coal corporation, in terms of reserves (CO ₂ emissions equivalent). UK/Australian-based mining company. Criticism of environmental impacts from mining activities in Indonesia led to divestment by the Government Pension Fund of Norway.	http://www.riotinto.com/ FFI; Wikipedia
Rosneft	World's 2nd largest oil and gas corporation, in terms of known reserves (CO ₂ emissions equivalent). Russian state-controlled company, with an especially controversial history.	https://www.rosneft.com/ FFI; Wikipedia; Rosneft [1]
Royal Dutch Shell	World's 7th largest oil and gas corporation, in terms of known reserves (CO ₂ emissions equivalent). UK/Dutch-based company, commonly known as Shell. Has received particular criticism over its operations in Nigeria and the Arctic.	https://www.shell.com/ FFI; Wikipedia

RPS Energy	UK-based energy consultancy, part of RPS Group. It provides	https://www.rpsgroup.com/sectors/energy/
	numerous services to the oil and gas industry, including for	
	exploration and production.	
Sasol	A world top 60 corporation, in terms of oil and gas reserves and a	https://www.sasol.com/about-sasol/overview-0
	world top 90 corporation, in terms of coal reserves (both CO ₂	FFI
	emissions equivalent). South African-based company, whose	
	subsidiaries include one in the UK.	
Saudi Aramco	One of the world's largest oil and gas corporations, but specific data is	https://www.saudiaramco.com/
	lacking on the total size of its reserves. Saudi Arabian state-owned oil	Wikipedia
	company, also known as Aramco. It manages over 100 oil and gas	
	fields in Saudi Arabia, including both the world's largest onshore and	
	offshore oil fields. Involved in unconventional gas extraction.	
Schlumberger	World's largest oilfield services corporation. French/US-based	https://www.slb.com/who-we-are
	company, which especially supports exploration and production work.	
Shell	See Royal Dutch Shell	
Shell Centenary	UK charity set up by Royal Dutch Shell (see Royal Dutch Shell).	https://www.shellcentenaryscholarshipfund.org/
Scholarship Fund	Trustees appointed by Shell, as Shell is the 'sole member' of the fund.	Shell CSF [1]
Siccar Point Energy	UK-based oil and gas corporation, involved in exploration and	http://www.siccarpointenergy.co.uk/
	production in the North Sea.	
Sinopec	A world top 20 oil and gas corporation, in terms of reserves (CO ₂	http://www.sinopec.com/listco/en/about_sinopec
	emissions equivalent). Chinese stated-owned company, also known as	FFI
	China Petroleum & Chemical Corporation.	
SRK Consulting	Canadian-based geosciences consultancy, which provides services to	https://www.srk.com/en/ww-who-we-are-0
	several sectors, especially mining and oil and gas companies.	
SSE	Large UK-based energy supply corporation, including electricity and	http://sse.com/
	gas. Over 70% of its electricity was produced from fossil fuels in 2019.	http://electricityinfo.org/fuel-mix-of-uk-domestic-
	It has begun investing heavily in renewable energy sources.	electricity-suppliers/
Statoil	See Equinor	
Tata Group	Tata Group is an Indian-based conglomerate operating in a wide range	https://www.tata.com/business/overview
(Tata Sons)	of different industries, including both fossil fuels and arms. Owned by	FFI
	Tata Sons. Subsidiaries include Tata Power and Tata Steel which hold	
	large coal reserves. In combination, it would be in the world top 30 in	
	terms of coal reserves. (Also see Tata Power and Tata Steel.)	

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Tata Power	A world top 90 coal corporation, in terms of reserves (CO ₂ emissions	https://www.tatapower.com/
	equivalent). Indian-based electric utility company, and part of Tata	FFI
	Group (see Tata Group). Majority of its electricity generation is from	
	coal plants.	
Tata Steel	A world top 35 coal corporation, in terms of reserves (CO ₂ emissions	https://www.tatasteel.com/
	equivalent). Indian-based steel-making company, and part of Tata	FFI
	Group (see Tata Group). Most of its steel is produced using coal.	
Total	World's 11th largest oil and gas corporation, in terms of known	https://www.total.com/en
	reserves (CO ₂ emissions equivalent). French-based company, which	FFI
	has extensive operations covering most areas, such as exploration,	
	production and refining.	
Tullow Oil	UK-based oil and gas corporation, which engages in exploration and	https://www.tullowoil.com/about-us
	production mostly in Africa.	
Weir Group	UK-based engineering corporation, providing technical support to the	https://www.global.weir/
	mining, oil and gas, and power sectors. Some of its technology is	
	specific to extraction of high-carbon oil sands and shale gas.	
Wood Mackenzie	UK-based energy consultancy, with a major focus on the oil and gas	https://www.woodmac.com/our-expertise/
	and mining industries.	

Notes and further references

BG Group [1] - https://web.archive.org/web/20101021072039/http://www.bg-group.com/ContactUs/Pages/pgContactUs.aspx

BG Group [2] - https://www.shell.com/investors/financial-reporting/pre-combination-bg-group-publications.html

Centrica [1] - https://www.theguardian.com/business/2013/jun/13/british-gas-centrica-bowland-shale-fracking

FFI – Fossil Free Indexes (2017). http://fossilfreeindexes.com/research/the-carbon-underground/

FFI [2] – Fossil Free Indexes (2016). http://fossilfreeindexes.com/research/the-carbon-underground/

Gibson [1] - https://www.gibsonenergy.com/getattachment/cdfb505e-b76c-4f5e-ae77-5268b7365266/Investor-Day-Presentation

Maersk Oil [1] - https://www.total.com/en/media/news/press-releases/total-closes-maersk-oil-acquisition-and-becomes-second-largest-operator-north-sea

Oil & Gas UK [1] - http://oilandgasuk.co.uk/wp-content/uploads/2017/05/Blueprint-for-Government-2017.pdf

Rosneft [1] - https://www.telegraph.co.uk/finance/newsbysector/energy/oilandgas/8261264/BP-Rosneft-deal-Who-are-Rosneft.html

Shell CSF [1] - http://apps.charitycommission.gov.uk/Accounts/Ends78/0001071178_AC_20151231_E_C.pdf

Wikipedia – relevant company pages on the Wikipedia website

[All URLs correct as of 27/09/19]

Table 21.2 - Arms corporations mentioned in this report

Corporation	Key information	Main sources
AECOM	In the world top 60 as measured by military sales. US-based	https://www.aecom.com/
	engineering corporation, involved in stockpile maintenance and	SIPRI; PAX
	modernisation of the US nuclear arsenal.	
Airbus Defence &	See Airbus Group.	
Space		
Airbus Group	In the world top 10 as measured by military sales. Dutch-based	https://www.airbus.com/
	aerospace corporation, involved in maintenance and development	SIPRI; PAX
	work on French nuclear arsenal, and development and manufacture of	
	combat planes, including armed robotic planes ('drones').	
AWE (Atomic	The organisation responsible for design, development, manufacture	http://www.awe.co.uk/about-us/our-company/
Weapons	and maintenance of warheads for the UK's nuclear weapons. It is a	NIS
Establishment)	'government-owned contractor-operated' corporation managed by a	
	consortium of Jacobs Engineering, Lockheed Martin UK and Serco.	
Babcock	In the world top 30 as measured by military sales. UK-based company,	https://www.babcockinternational.com/
	which is part of the consortium building the UK's new nuclear-armed	SIPRI; NIS
	Dreadnought submarines.	
BAE Systems	World's no.4 corporation measured by military sales, and largest	https://www.baesystems.com/
	outside USA. UK-based company whose main products include	SIPRI; PAX; NIS; section 2.3 (of main report)
	combat planes, nuclear submarines, missiles, combat vehicles, and	
	military ships. Lead contractor for UK's new nuclear-armed	
	Dreadnought submarines. Developing armed drones. Current area of	
	controversy are weapons sales to Saudi Arabia for use in Yemen war.	
Bechtel	In the world top 30 as measured by military sales. US-based	https://www.bechtel.com/
	engineering company, involved in several US nuclear weapons	SIPRI; PAX
	programmes, including development of new weapons system.	
BMT Defence Service	UK-based engineering company, offering ship design and support for	https://www.bmt.org/
	submarines, warships and other military vessels. Provides services	
	both internationally and to the UK government. Part of BMT.	
Boeing	World's no.2 corporation measured by military sales. US-based	https://www.boeing.com/
	company whose main military products include combat and	SIPRI; PAX
	transporter aircraft, and missiles. Key contractor for US nuclear	
	weapons programmes. Also involved in UK nuclear weapons work.	

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Boeing Company	Charity funded by Boeing, which provides grants to (among others)	https://www.boeing.com/principles/community-
Charitable Trust	scientific bodies and military/ veteran bodies. (Also see Boeing.)	engagement.page?
CH2M Hill	US-based engineering consultancy, involved in a US nuclear weapons	http://www.dontbankonthebomb.com/ch2m-hill/
	testing programme. In 2017, it was acquired by Jacobs Engineering.	
Cobham	In the world top 60 as measured by military sales. UK-based company,	https://www.cobham.com/
	which manufactures numerous military technologies.	SIPRI
Collins Aerospace	US-based arms corporation formed in 2018 from the merger between	https://www.collinsaerospace.com/who-we-are/about-
	UTC Aerospace Systems and Rockwell Collins, and part of United	us
	Technologies Corporation. Military sales put it in the world's top 15.	SIPRI
CST	Part of the Dassault Group (see Dassault Systèmes).	
Dassault Systèmes	French-based software company which provides services to the arms	https://www.3ds.com/industries/
	industry. It is part of the Dassault Group whose subsidiary, Dassault	SIPRI
	Aviation, is in the world top 50 as measured by military sales.	
EADS Astrium	Now Airbus Defence & Space (see Airbus Group).	
Finmeccanica	See Leonardo.	
General Electric	In the world top 25 as measured by military sales. US-based	https://www.geaviation.com/
	engineering corporation, with divisions in many industrial sectors.	SIPRI
	Military products mainly include aircraft engines.	
GKN	In the world top 70 as measured by military sales. UK-based	https://www.gkn.com/en/about-gkn/gkn-at-a-glance/
	engineering company, whose sales include systems and components	SIPRI
	for military aircraft.	
GKN Aerospace	Part of GKN (see GKN).	
HoneyWell	In the world top 20 as measured by military sales. US-based	https://aerospace.honeywell.com/en/markets/defense
	technology corporation, involved in numerous military aerospace	SIPRI; PAX
	projects. Produces key components for nuclear-armed missiles	
	deployed by USA and UK.	
Leonardo	In the world top 10 as measured by military sales. Italian-based arms	https://www.leonardocompany.com/en/about-us
	company, formerly known as Finmeccanica, and formed from the	SIPRI; PAX
	integration of its subsidiaries AgustaWestland, Alenia Aermacchi, DRS	
	Technologies, Selex ES, Oto Melara and WASS. It is involved in the	
	production of French nuclear-armed missiles.	

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Lockheed Martin	World's no.1 corporation measured by military sales. US-based company whose main products include combat planes, nuclear-armed missiles and other weaponry. It manufactures the Trident nuclear missiles used by US and UK militaries.	https://www.lockheedmartin.com/ SIPRI; PAX
MASS	UK-based corporation, whose work is mainly focused on electronic warfare operational support, cyber security, and support to military operations. Part of the Cohort Group.	https://www.mass.co.uk/ http://www.cohortplc.com/about_us/our_businesses/
MBDA	In the world top 30 as measured by military sales. Trans-European corporation that develops and manufactures a wide range of missiles. It developed the ASMPA nuclear-armed missile for the French air force. Its Brimstone and Storm Shadow missiles have been used by the Saudi air force in Yemen.	https://www.mbda-systems.com/ https://www.mbda-systems.com/product/asmpa/ https://www.caat.org.uk/resources/companies/mbda- bae-systems-airbus-leonardo SIPRI; section 2.3 (of main report)
Meggitt	In the world top 100 as measured by military sales. UK-based engineering corporation, with a significant arms-related division.	https://www.meggitt.com/what-we-do/ SIPRI
Northrop Grumman	World's no.5 corporation measured by military sales. US-based company whose main products include combat planes (including nuclear-armed bombers), missiles (including nuclear-armed ones), and drones. It is key within the US and UK nuclear weapons programmes.	http://northropgrumman.com/ SIPRI; PAX
Raytheon	World's no.3 corporation measured by military sales. US-based corporation whose main products include guided missiles. Its weapons have been sold to Saudi Arabia for use in the Yemen war.	http://raytheon.com/ SIPRI; PAX; section 2.3 (of main report)
Ricardo	Large UK-based engineering corporation, with a large arms division.	https://defence.ricardo.com/
Roke	UK-based corporation, with a focus on military technologies. Part of the Chemring Group, which has been in the world top 100 as measured by military sales several times during the last 10 years.	https://www.roke.co.uk/ SIPRI
Rolls-Royce	In the world top 20 as measured by military sales. UK-based engineering company focusing on power and propulsion systems, including for combat and other military planes, and nuclear-powered submarines. It is part of the consortium manufacturing the UK's new nuclear-armed Dreadnought submarines.	https://www.rolls-royce.com/products-and- services.aspx SIPRI; NIS
Science Applications International Corp (SAIC)	In the world top 40 as measured by military sales. US-based corporation, providing IT support and other services. Most of its work is for the US military.	http://www.saic.com/about/about-saic/ SIPRI

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Selex	Part of Selex ES, which was a subsidiary of Finmeccanica, now known	SIPRI; Wikipedia
Communications	as Leonardo (see Leonardo). Selex ES was in the world top 60 as	
	measured by military sales until company restructuring.	
Selex Galileo	Predecessor to Selex ES, which was a subsidiary of Finmeccanica now	SIPRI; Wikipedia
	known as Leonardo (see Leonardo). Selex ES was in the world top 60	
	as measured by military sales until company restructuring.	
Thales	In the world top 10 as measured by military sales. French-based	https://www.thalesgroup.com/en/
	corporation, which designs and builds electrical and electronic	SIPRI; PAX
	systems mainly for military uses. It is involved in the French ASMPA	
	nuclear weapons programme. Also involved in developing drones.	
Ultra Electronics	UK-based corporation focused on electronic and software	https://www.ultra-electronics.com/about-us/group-
	technologies for military uses. It has been in the world top 100 as	overview.aspx
	measured by military sales several times in the last 10 years.	SIPRI

Notes and further references

NIS – Nuclear Information Service (2019). https://www.nuclearinfo.org/article/new-report-trouble-ahead

PAX – PAX (2019). https://www.dontbankonthebomb.com/2019-producers/

SIPRI – Stockholm International Peace Research Institute (2018). https://www.sipri.org/databases/armsindustry

Wikipedia – relevant company pages on the Wikipedia website

[All URLs correct as of 27/09/19]

Table 21.3 - UK military organisations mentioned in this report

Organisation	Key information	Main sources
British Army	UK land forces. For main ethical concerns, see below.	https://www.army.mod.uk/
Defence Science and	Executive agency of the Ministry of Defence. Its stated purpose	https://www.gov.uk/government/organisations/defence-
Technology	is to ensure "that innovative science and technology contribute	science-and-technology-laboratory
Laboratory (DSTL)	to the defence and security of the UK."	
Ministry of Defence	Government body that purchases and supports all the	https://www.gov.uk/government/organisations/defence-
Defence Equipment	equipment and services used by the UK armed forces. It also	equipment-and-support
and Support (MOD	works closely with industry under various partnering	
DE&S)	agreements, including research funding programmes.	
Royal Air Force	UK air force. For main ethical concerns, see below.	https://www.raf.mod.uk/
Royal Navy	UK naval force. For main ethical concerns, see below.	https://www.royalnavy.mod.uk/
Welbeck Defence	Specialist college funded by the Ministry of Defence for pupils	http://www.dsfc.ac.uk/Principals-Welcome
Sixth Form College	aged 16-19 who want to pursue a career in the UK armed	
	forces or the MOD section of the civil service.	

There are numerous ethical concerns related to activities of the UK military. Major issues include:

- Political, financial and technical support provided to UK arms corporations and their customers, which include nations with poor human rights records, e.g. via UK Trade and Investment (government body) and Defence and Security Equipment International (world's largest trade fair for military equipment held in London) (CAAT, 2016a; 2016b).
- Recruitment of under-18s i.e. children into the military. The British Army recruits from age 16 and the Royal Navy and Royal Air Force recruit from age 17. (Recruits are kept in non-combat roles until 18.) The UK is the only country in Europe to recruit from age 16. There is evidence that the army targets deprived communities in its recruitment activities (CRIN, 2019).
- UK military strategy and equipment/ capability is well beyond what would be necessary solely for territorial defence and international peace-keeping operations. The most problematic equipment includes: nuclear-armed submarine-launched ballistic missiles; aircraft carriers; very long-range nuclear-powered submarines; very long-range strike planes (including air-to-air refuelling); and very long-range armed robotic planes (SGR, 2013).

Notes and further references

CAAT (2016a) – https://www.caat.org.uk/campaigns/stop-arming-saudi/a-shameful-relationship.pdf CAAT (2016b) – https://www.caat.org.uk/resources/publications/economics/special-treatment.pdf CRIN (2019) – https://home.crin.org/evidence/research/british-army-recruitment-and-deprivation-report SGR (2013) – https://www.sgr.org.uk/publications/offensive-insecurity