Risks and Side-Effects of the Military and War
How the Military and Armaments fuel the Climate Catastrophe

War causes death and destruction, also of the environment and the climate. The production of weapons, vehicles, fighter jets, and ships generates huge amounts of greenhouse gas emissions (GHGs). Military vehicles guzzle vast amounts of fuel both during exercises and when deployed. War and the military industry contribute significantly to the global climate catastrophe. The German Affiliate of International Physicians for the Prevention of Nuclear War advocates disarmament and demilitarisation, and demands a human security policy rather than military defence.

IPPNW Germany physicians warn:

1. **heat up the climate**
   Military GHG emissions contribute significantly to worldwide emissions. The US military alone emits more than many entire countries—and would be 47th on the country index.

2. **gobble up vast amounts of money**
   Global military spending massively exceeds spending on climate and environmental protection. The German budget for the Ministry of Defence in 2022 is expected to be more than 50 billion euro. The annual budget for climate protection adds up to less than a third of that amount.

3. **destroy the environment**
   Soil, air and groundwater are polluted through military activities worldwide. For instance, 1.6 million tons of waste leftover from war still exist in German waters alone.

4. **cement our dependency on fossil fuels**
   The US military is one of the largest single institutional consumers of fossil fuels worldwide. Since 2001, the Pentagon has been responsible for 77 to 80 percent of the total energy consumption of the US government.

5. **increase human insecurity**
   The climate catastrophe exacerbates existing dangerous social and political situations and can thus become a driver for conflict. Violent conflicts in turn hinder mitigation of the effects of global warming. This is how the climate catastrophe and war reinforce each other—causing suffering to all those affected.

6. **shirk their responsibility**
   The CO₂ “boot” print of war, the military, and armaments is not published. It is still not an obligatory component of national GHG reporting or climate protection measures.
War and the military

1. heat up the climate
The military and war make a massive CO₂ “bootprint.” In 2017, the US Department of Defense alone produced more greenhouse gas (GHG) emissions than countries like Denmark or Sweden. One German Eurofighter Typhoon fighter jet consumes 3,500 kilograms of fuel per flight hour—equivalent to eleven tons of CO₂. That means: one flight hour is about the same as the average CO₂ footprint of one German citizen for a whole year, already way too much. In 2018, the German Eurofighter jets spent 10,480 flight hours in the air. More than nine million trees would be needed to capture the resulting 115,280 tons of CO₂.

2. gobble up vast amounts of money
The German defence budget for 2022 is expected to exceed 50 billion euros, money that is much needed elsewhere. 54 billion euros were allocated in total to the Climate Protection package in 2019, to cover a period of four years. Additionally, 8 billion euros were made available in 2022 under the Immediate Action Programme for Climate Protection. Together, these amount to just a third of the sum spent on defence in the period 2019 to 2022. Defence spending is increasing worldwide, and reached a record high of 1,981 billion US dollars in 2020. Scientists from the journal ‘Science’ calculated that 1,400 billion US dollars’ worth of investments in climate protection need to be made annually until 2024 to reach the goals set by the Paris Climate Agreement. In addition to this, the 59 poorest countries of the world need between 300 and 500 billion US dollars annually in income and investments to achieve the global Sustainable Development Goals (SDGs).

3. destroy the environment
Military exercises and waging wars pollute the water, soil, and air. Huge swathes of land are taken for their use and they have considerable long-term consequences. For instance, there are more than 8,500 ships lying at the bottom of the oceans—mostly sunk during World War II. As they break apart, they release millions of tons of fuel, crude oil, and marine diesel. Approximately one million people still suffer today from the long-term effects of ‘Agent Orange,’ the carcinogenic herbicide and defoliating chemical weapon used during the Vietnam War. According to scientists, the use of just a fraction (about 100) of the current nuclear arsenal would be enough to trigger a climate catastrophe and a subsequent global famine. The use of the actively deployed US and Russian nuclear weapons (about 3,000) would mean that our planet would no longer be habitable for people and most animals.

4. cement dependency on fossil fuels
Military logistics and the operation of bases, exercises and combat operations are all run on fossil fuels. The US military is thus one of the largest institutional consumers of fossil fuels in the world, needing 350,000 barrels of oil per day in 2016. At the same time, securing access to sources of raw materials and transport routes is seen as an issue of “national security” by the German government. Raw materials and, above all, energy resources are important catalysts for war and a factor in sustaining them. Replace the consumption of fossil fuels with renewable energies, and many justifications for increased armament and combat missions would no longer apply.

5. increase human insecurity
The arms industry, military, and war destroy the environment—the very foundation of human security—and contribute significantly to the climate catastrophe. Extreme weather events such as drought, floods, storms and fires exacerbate existing conflicts, causing a vicious circle. This is especially the case where basic human rights are insufficient from the start. For example, from 2006 to 2011, the worst drought in 500 years in Syria led to extreme crop failures, which neither the Syrian government nor the international community were able to effectively counter. The result was a rapid rise in internal migration. This, in turn, exacerbated unemployment and led to political unrest in the cities, which later contributed to the uprising in 2011. Those threatened most from the climate catastrophe and violent conflict are the same people who contribute least to the cause—women, children, those on low income, and the disadvantaged.

6. shirk their responsibility
The role of climate killers—the military and the arms industry—is being systematically ignored by governments, as well as by the International Panel on Climate Change. The Kyoto Protocol (1997) excluded military GHG reporting explicitly, the Paris Climate Agreement (2015) left analysis and reporting of the military CO₂ “bootprint” to the discretion of national governments. Critical analysis from scientific and civil organisations is hampered by insufficient data. State and arms producers—particularly in Europe—refuse to be transparent, hiding behind the lack of an obligation to report, and claims of national security. Transparency through documentation and publication of the military CO₂ “bootprint” is, however, essential for an effective climate strategy.