



## SPAIN'S MILITARY CARBON FOOTPRINT

Greenhouse Gas Emissions of the Spanish military sector

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## **EXECUTIVE SUMMARY**

A massive 86% of all greenhouse gas emissions are generated by fossil energies (oil, gas and coal). Simultaneously, the world's biggest corporations, supported by national governments, are fighting over the control of fossil fuels. In many cases, these disputes are related to conflicts in areas of fossil fuels extraction, as local people oppose a process that contaminates their ecosystems: air, rivers, ground water supplies and lands, while others fight to control these fossil fuels.

The world's biggest corporations are therefore connected to the armed forces. These transnationals are based in the Global North and control 80% of all of the world's transnational companies. They exercise significant influence over the global economy. Such a powerful network requires military protection to ensure it can continue extracting fossil energies and the other mineral resources required to maintain and sustain the dominant economic system. In some cases, this is provided by national armed forces and in others by private security companies.

This nexus between major companies, fossil fuels and the military sector (armed forces and the arms industry) demonstrates the latter's significant responsibility for global warming and the resulting climate crisis.

To assess the military's actual carbon footprint, we need to consider every phase of the production cycle, from extraction of the raw materials needed to manufacture arms and military equipment, to their subsequent use, to management of the waste generated by the entire production cycle. However, the arms industry's greenhouse gas emissions are unknown, and attempts to prevent this information being made public argue that doing so could affect national security. This assertion ignores the fact that like all emissions, military emissions affect the health of the planet and all her inhabitants. We urgently need to require national governments to report their military sector's greenhouse gas emissions, and to commit to reducing them, as they are one of the sectors most responsible for climate change.

In 2023, 37,550 million tCO $_2$ e [carbon dioxide equivalent tonnes] of greenhouse gases were emitted globally. The energy sector produced most of these emissions: 26%; followed by the transport sector and industry at 11%; with aviation representing 2%. Experts note that the military sector (armed forces and arms industry combined), could generate 4-8% of these emissions, representing on average 6% of all global greenhouse gas emissions or 2,253 million tCO $_2$ e. These figures are only based on standing armies while in their bases, facilities, training camps, carrying out practice manoeuvres and target practice, plus the waste they generate; but do not consider the emissions produced by armed forces in action. For example, between 2022 and 2024, the war in Ukraine generated a carbon footprint far superior to that emitted by many countries: 2,700 million tCO $_3$ e.



Other examples of military emissions that can help imagine the scale of the problem include:

- The US Defense Department's estimated 2017 greenhouse gas emissions were 59 million  $tCO_2e$ , while those related to arms production were 153 million  $tCO_2e$ . This means that 2017 US military activity emitted 212 million  $tCO_2e$ , placing it  $47^{th}$  in the ranking of countries by  $CO_2e$  emissions, ahead of Belgium, Portugal and numerous others.
- As a military organisation, NATO emitted a total of 233 million  $tCO_2$ e in 2023, which is equivalent to the emissions produced by 50.4 million cars.
- Spain's military sector is another great  $CO_2$ e emitter. It produced 4.97 million  $tCO_2$ e in 2023, equivalent to the emissions produced by 2.9 million cars or 12.5% of all Catalonia's greenhouse gas emissions: 39.70 million  $tCO_2$ e.
- Spain's total 2023 greenhouse gas emissions were: 271.6 million tCO₂e, meaning that every Spanish citizen emitted an average of 5.72 t tCO₂e into the atmosphere, while every member of the Spanish armed forces emitted on average six times more: 34.7 tCO₂e; and every Spanish arms industry employee emitted 10.3 times more: 59.3 tCO₂e.

All this should incite the Annual Conference of the Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC) to require national signatories to report their military sector emissions. Currently, under the 2015 Paris COP Protocol, this reporting is voluntary. Given the significant volume of military emissions, states should not only be required to report their military emissions, but also to reduce them.

The Spanish government must assume this requirement. There is no reason why the military sector should be exempt, when the government reports on all emissions from Spain's industrial, agricultural and service sectors. This must also be supported by a commitment to reduce the carbon footprint of both the arms industry and the armed forces, which will necessitate a reduction in military spending and arms buying, which will lead directly to reduced greenhouse gas emissions.



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