

MILITARY AND CONFLICT-RELATED EMISSIONS: KYOTO TO GLASGOW AND BEYOND

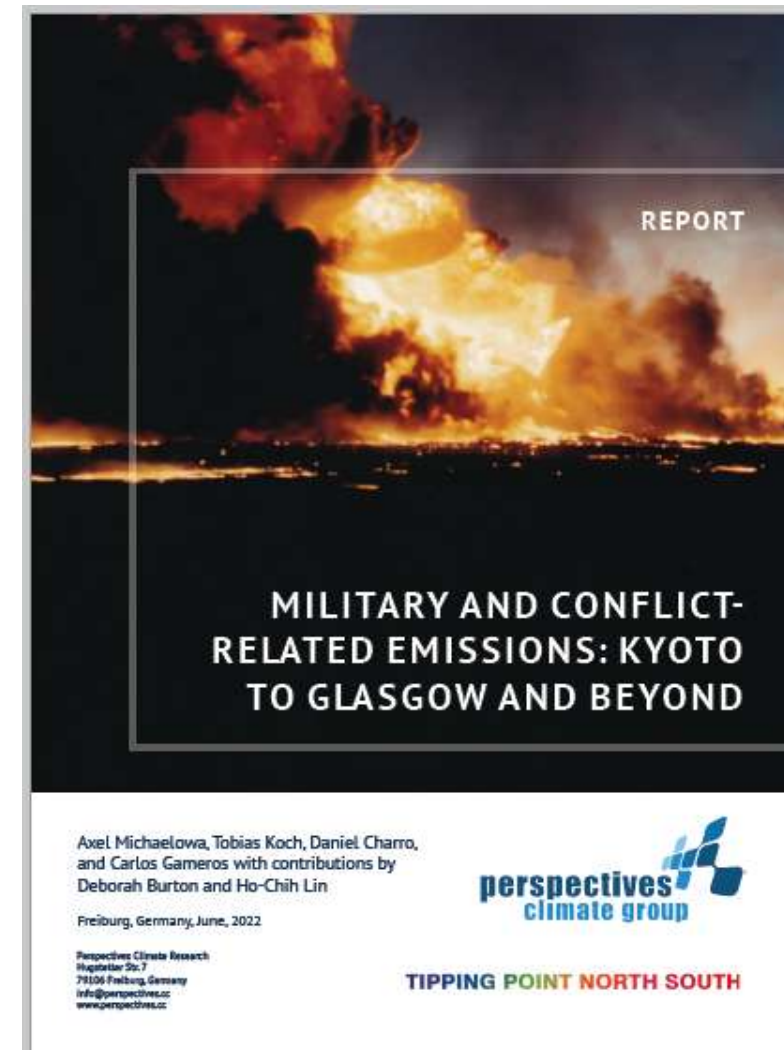
Axel Michaelowa
Research director



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- **How did the study come about?**
- **Peacetime military emissions : several % of national emissions**
- **War emissions can reach hundreds of million t CO₂e, more than annual emissions of many countries**
- **UNFCCC emissions accounting ignores military emissions**
- **Recommendations for reform**



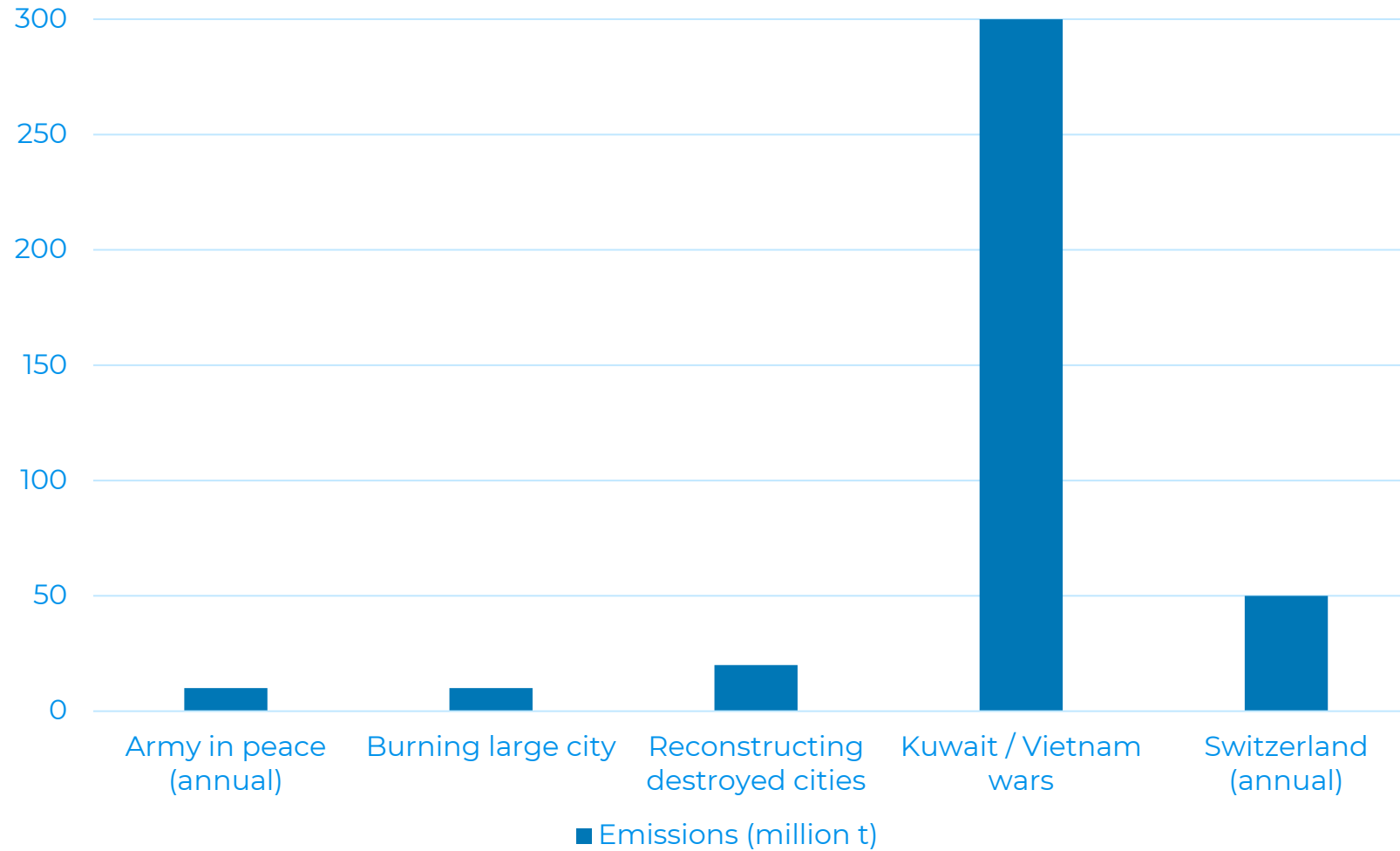
Background of our study on military emissions

- **Need to report international emissions from military emissions in peacetime and war** under the UNFCCC
 - What is the **level** of military emissions?
 - Make proposals regarding **accounting** for military emissions
 - Discuss **responsibilities** of various international actors
- I and Tobias Koch had published a research article on **military emissions, border changes and the Kyoto Protocol** in the reputed journal “Climatic Change” in 2001
- In late 2021 we were commissioned by the UK-based NGO “Tipping Point North South” to **update and broaden the work** embarked upon in the 2001 article
- Then, Russia invaded **Ukraine ...**

Key outcomes of our study on military emissions

- **Military emissions** in **peacetime** and **war** are a **relevant** international emissions source
- Under the UNFCCC **countries do not have to publish data on direct and indirect GHG emissions related to military activities**, wars, and their side-effects
- There is **no robust global estimate** of military GHG emissions, just a patchwork of partial, inconsistent estimates
 - **Direct** emissions from military **operations** (vehicles and infrastructure) reach **~1%** of national emissions (US and UK)
 - Indirect emissions, for example from **war-related destruction of carbon sinks, and infrastructure** can **exceed** the direct emissions
 - Burning a city: ~10 Mt CO₂, burning Kuwait fossil fuel reservoirs: ~400 million t CO₂

Magnitude of military and conflict emissions



Indirect emissions are important

- **short-term: significant!**
 - shift **back to fossil fuels**
 - **Less public money for mitigation** due to shift of public budgets towards military spending
- **medium term: mixed effects**
 - acceleration of **distributed renewables** that are resilient to disruption
 - less collaboration to develop **large-scale renewables**



Dealing with such emissions under the UNFCCC

- So far, national accounting allows exclusion of military emissions due to **confidentiality rules**
- Significant parts of military emissions relate to **international bunker (transport) fuels that are not covered by the Paris Agreement**
- Rules for **reporting military and conflict-related emissions** under the Paris Agreement are **urgently needed**
 - **Global Stocktake** (COP28)
 - **Inclusion in national inventory guidelines** under the IPCC
 - Section in **7th IPCC Assessment Report**
- **Aggressors shall be made responsible for war and occupation-related emissions** through peace settlements



Thank you!
michaelowa@perspectives.cc