

Palestine and Climate Justice: Military emissions as a symptom of genocidal present and future

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Climate and Community Project
4 April 2024

Ceasefire now, ceasefire forever: No climate justice without Palestinian freedom and self-determination

by Patrick Bigger, Batul Hassan, Salma Elmallah, Seth J. Prins, J. Mijin Cha, Malini Ranganathan, Thomas M. Hanna, Daniel Aldana Cohen, Johanna Bozuwa

December 13, 2023

Less War, Less Warming: A Reparative Approach to US and UK Military Ecological Damages

Patrick Bigger,
Nick Pearce,
Khem Rogaly &
Ketaki Zodgekar
November 2023



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A Multitemporal Snapshot of Greenhouse Gas Emissions from the Israel-Gaza Conflict

14 Pages · Posted: 9 Jan 2024

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Date Written: January 5, 2024

Abstract

Highlights:

The projected emissions from the first 60 days of the Israel-Gaza war were greater than the annual emissions of 20 individual countries and territories.

If we include war infrastructure built by both Israel and Hamas, including the Hamas' tunnel network and Israel's protective fence or 'Iron Wall,' the total emissions increase to more than over 33 individual countries and territories.

The carbon costs of reconstructing Gaza are enormous. Rebuilding Gaza will entail total annual emissions figure higher than over 130 countries, putting on them par with that of New Zealand.

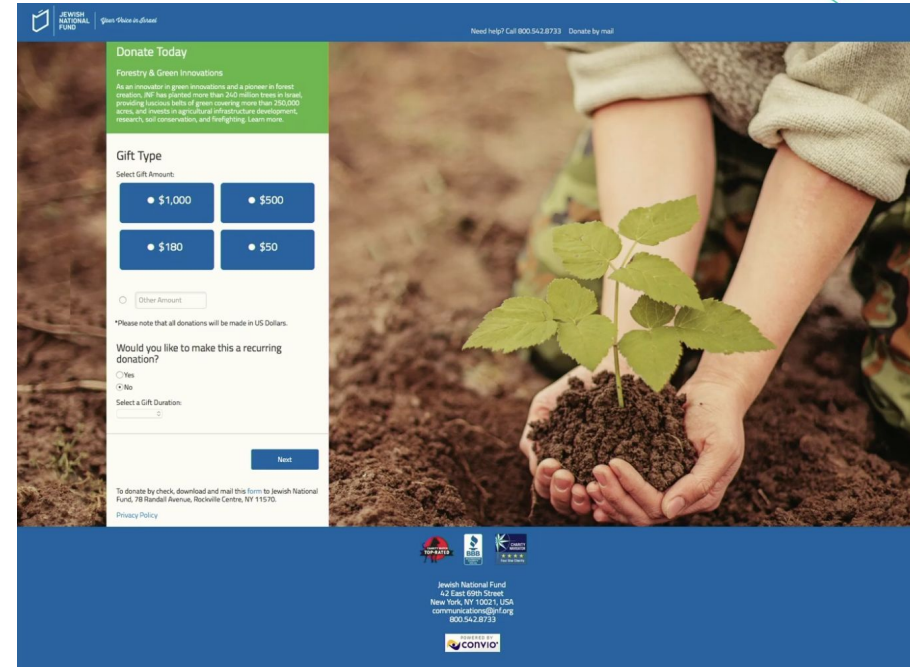
The ad-hoc nature of these calculations point to the urgent need for mandatory military emissions reporting for both war and peacetime through the UN Framework Convention on Climate Change (UNFCCC).

Keywords: Israel-Gaza War, Military Emissions, Climate Change, Greenhouse Gases

Thesis:

To confront the drivers of climate breakdown is also to confront the drivers of apartheid, militarism, and perpetual war. An immediate, permanent ceasefire in Palestine and end to all occupation and apartheid is the only viable path forward for lasting peace, security, and survival through the climate crisis. **For both ethical and practical reasons, there cannot be climate and environmental justice in just one region or country. There is climate justice globally, or nowhere.**

Environmental 'Nakba'

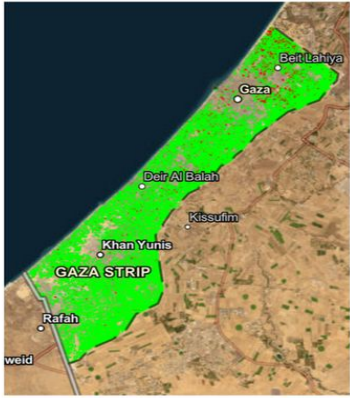


'Palestine and the Culture of Denial, Saree Makdisi'
Jewish National Fund website

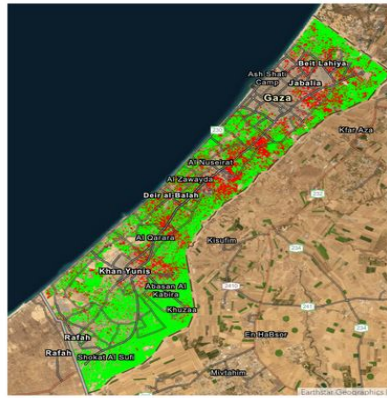
Ecocide and infricide in Gaza

Damaged agricultural land in the Gaza Strip, October 2023 – January 2024

a. October 15, 2023



b. January 6-7, 2024



Legend. Green: non-affected agricultural land; red: damaged agricultural land
International Food Policy Research Institute (2024)



Ecocide and infricide in Gaza

GAZA STRIP - INTERIM DAMAGE ASSESSMENT | SUMMARY NOTE

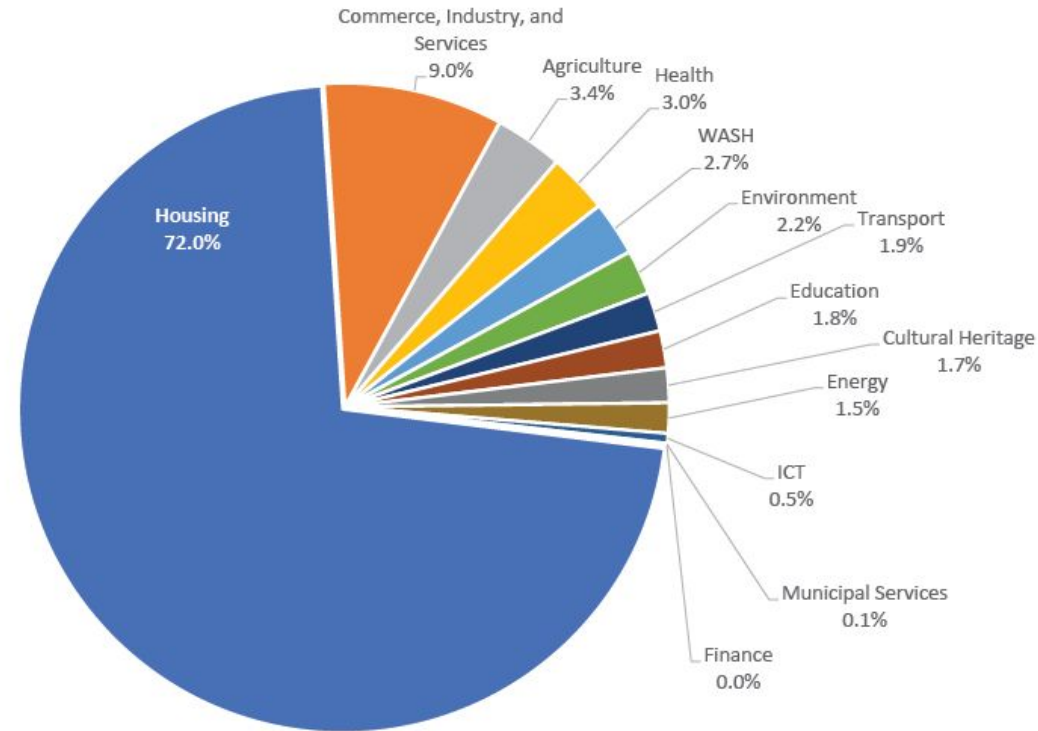


Figure 2: Proportion of estimated total damages per sector

The climate costs of genocide in Gaza

<i>Emission Activity</i>	<i>Lower estimate (tCO₂e)</i>	<i>Mean Estimate (tCO₂e)</i>	<i>Upper estimate (tCO₂e)</i>
<i>Immediate Emissions</i>			
Cargo Flight	134,629	159,107	183,586
Fighter Jets	125,928	157,410	188,892
Tanks and Vehicles	61,333	91,999	122,666
Israeli Bombs and Artillery	18,689	45,227	71,765
Hamas Rockets	713	784	856
Gaza Electricity Production	11,340	20,250	29,160
Hamas Bunker Fuels	1,350	2025	2,700
Gaza Aid Delivery by Trucks	13,009	15,177	17,345
<i>Intermediate Emissions</i>			
Gaza Metro	174,600	326700	478,800
Iron Wall	274,232	293310	312,387
<i>Long-term Emissions</i>			
Reconstruction	27,000,000	43,500,000	60,000,000

“Armed conflict pushes humanity even closer to the precipice of climate catastrophe, and is an idiotic way to spend our shrinking carbon budget.”
-David Boyd, UN SR for Human Rights and Environment

The climate costs of genocide in Gaza

Carbon emissions generated by the Israel-Gaza war

Breakdown of carbon emissions generated by the first 60 days of the war, by usage

Total: 281,315 tonnes of CO2 equivalent

Land transport 5,663

Flights 254,650

Munitions 21,002

Flights

US supply flights
133,650

Israeli aircraft missions
121,000

Munitions

Israeli artillery 13,600
Israeli bombs 6,689
 Hamas Rockets 713

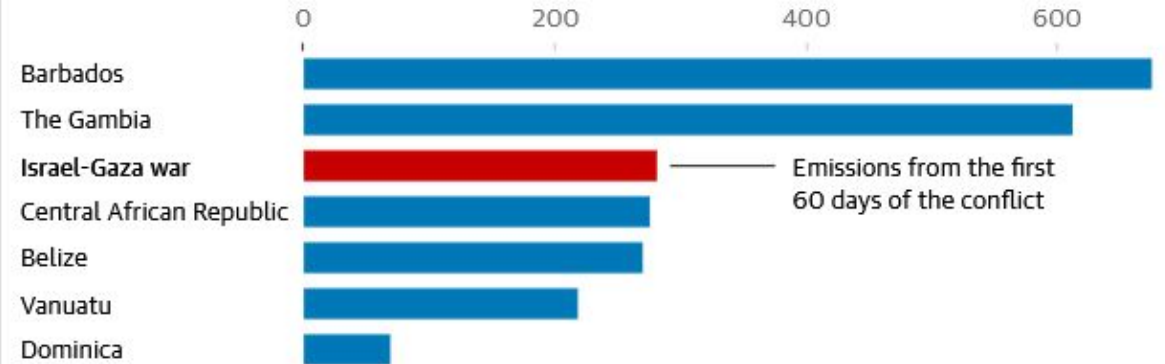
Land transport

Israeli tanks and armoured vehicles 5,663

Guardian graphic. Source: A multitemporal snapshot of greenhouse gas emissions from the Israel-Gaza conflict. Note: emissions calculated by usage not manufacture, Benjamin Neimark, Partick Bigger et al.

Emissions generated by two months of war surpass the annual emissions for Central African Republic

Israel-Gaza war CO2 emissions emissions versus 2022 annual CO2 emissions from fossil fuels thousand tonnes of CO2 equivalent



Guardian graphic. Source: A multitemporal snapshot of greenhouse gas emissions from the Israel-Gaza conflict, Benjamin Neimark, Partick Bigger et al. European Commission: EDGAR

US Military Aid to Israel

 The Washington Post [+ Follow](#)

Israel used U.S.-supplied white phosphorus in Lebanon attack

Story by William Christou, Alex Horton, Meg Kelly • 2d

DHEIRA, Lebanon — Israel used U.S.-supplied white phosphorus munitions in an October attack in southern Lebanon that injured at least nine civilians in what a rights group [says](#) should be investigated as a war crime, according to a Washington Post analysis of shell fragments found in a small village.

December 5, 2023

Israel/OPT: US-made munitions killed 43 civilians in two documented Israeli air strikes in Gaza – new investigation

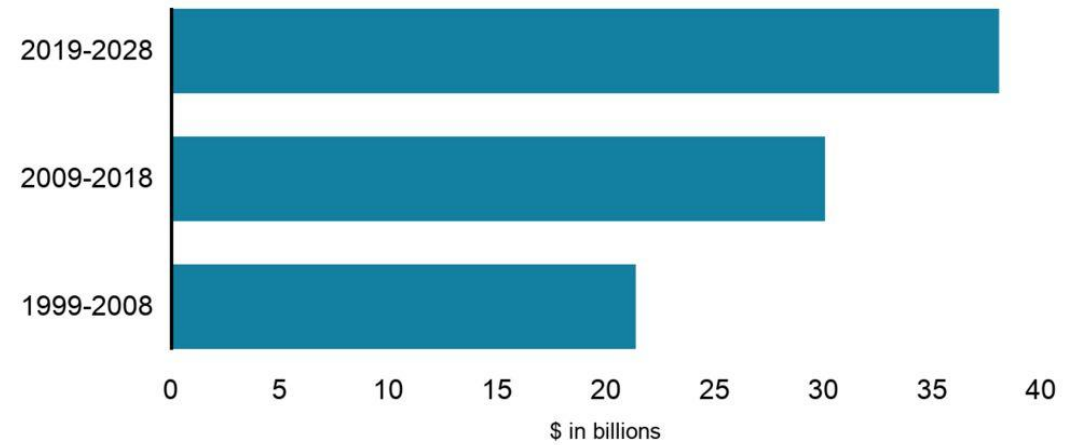
- Fragments of US-made JDAM bombs found in rubble of homes destroyed by Israeli air strikes
- Attacks must be investigated as war crimes
- “US-made weapons facilitated the mass killings of extended families” – Agnès Callamard

US to deliver precision weapons to Israel to help lower civilian casualties - report

World leaders have expressed concern with the number of civilians being reported killed in the fighting in the Gaza Strip.

US aid commitments to Israel have increased

Total amount of military aid pledged

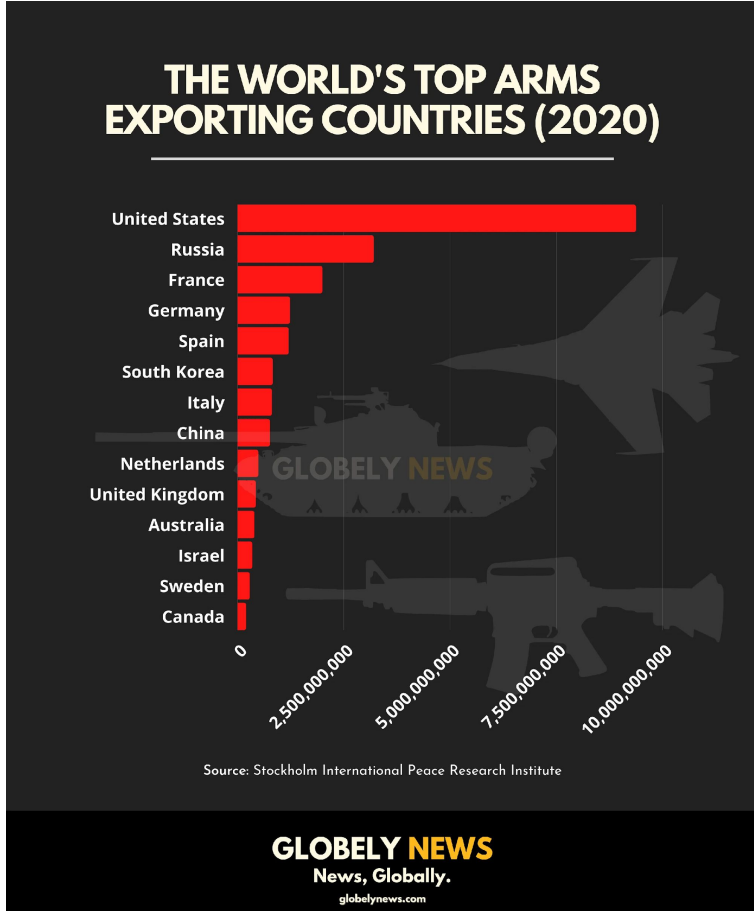


Missile defence funds not included. Figures not adjusted for inflation.

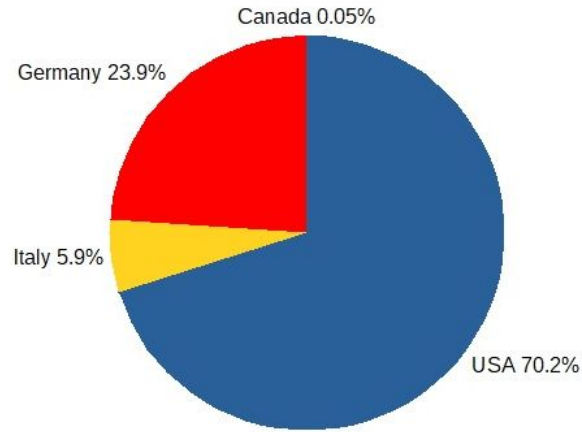
Source: Congressional Research Service



The US arms industry & Israel

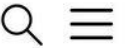


Exporters of major conventional weapons to Israel 2011-2020 (from SIPRI Arms Transfers Database):



+972
MAGAZINE

SUPPORT US



Gaza war offers the ultimate marketing tool for Israeli arms companies

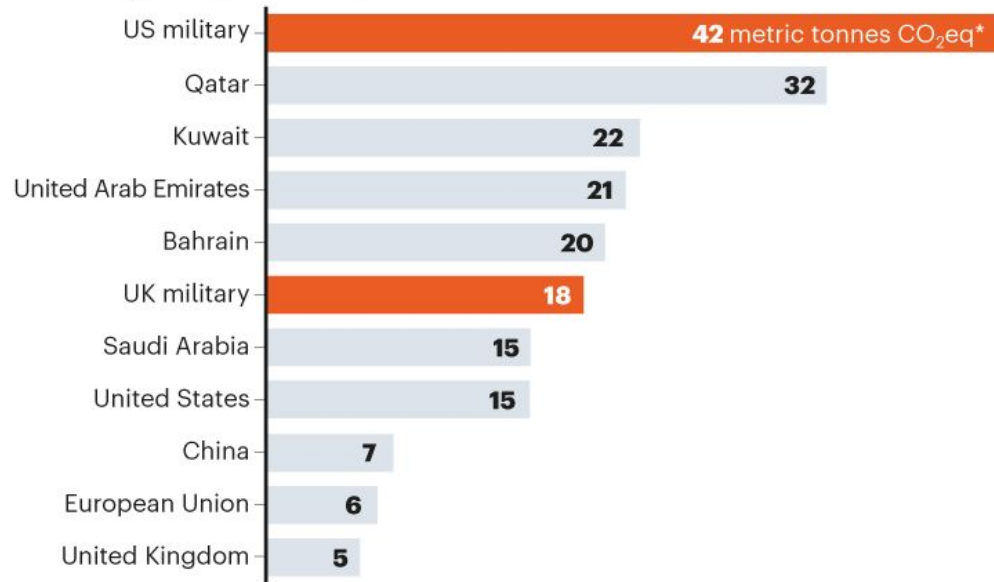
As investors worldwide drop cash on Israeli start-ups for 'battle-tested' weapons, defense tech CEOs are poised to be the war's only victors.

By Sophia Goodfriend
January 17, 2024

US Military Emissions

MILITARY EMISSIONS

Fuel-use data show that US and UK armed forces emit as much CO₂ per capita as many carbon-intensive countries.



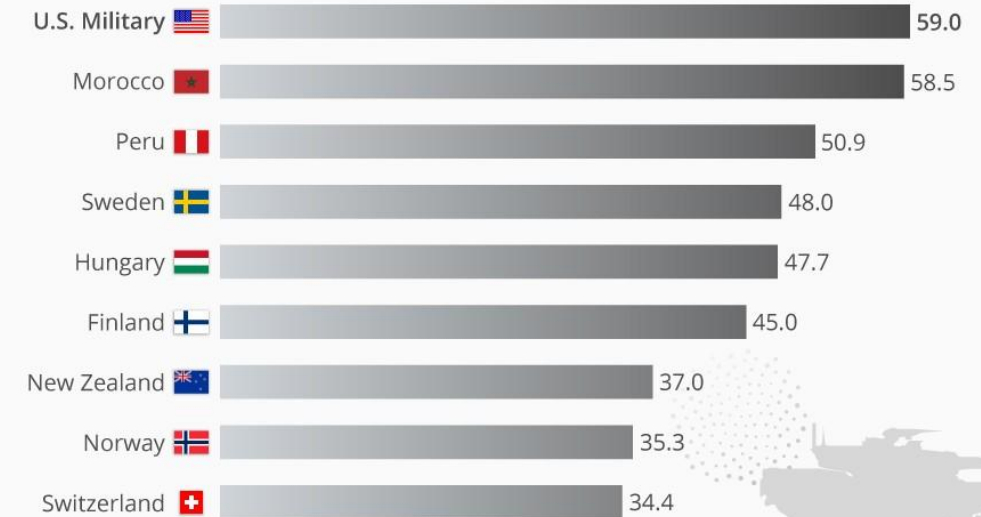
*Per capita or per military personnel.
Country-level data are from the World Bank and are from 2018.
See the Supplementary spreadsheet for further calculations.

©nature

Rajaeifar, Mohammad Ali, et al. "Decarbonize the military—mandate emissions reporting." *Nature* 611.7934 (2022): 29-32.

The U.S. Military Emits More CO₂ Than Many Nations

Estimated carbon dioxide emissions in 2017 (million tonnes)



@StatistaCharts

Sources: Brown University, BP Statistical Review of World Energy

statista

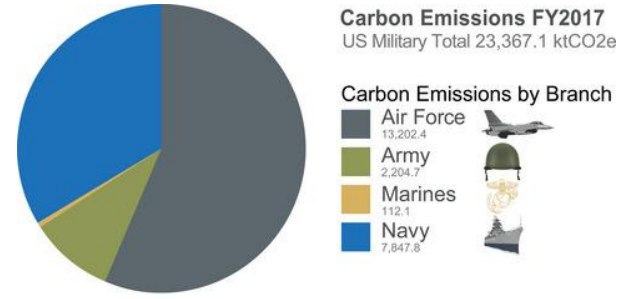
Everyday Military Emissions

U.S. Military Bases Abroad, 2020

In 2020, the United States controlled around 800 bases outside the 50 U.S. states and Washington, DC. Map reflects bases' relative number and positioning given best available data. For ease of comparison we use contemporary borders and a Mercator projection.



Map by Kelly Martin / kmartindesign.com for David Vine, *The United States of War: A Global History of America's Endless Conflicts, from Columbus to the Islamic State* (University of California Press, 2020).



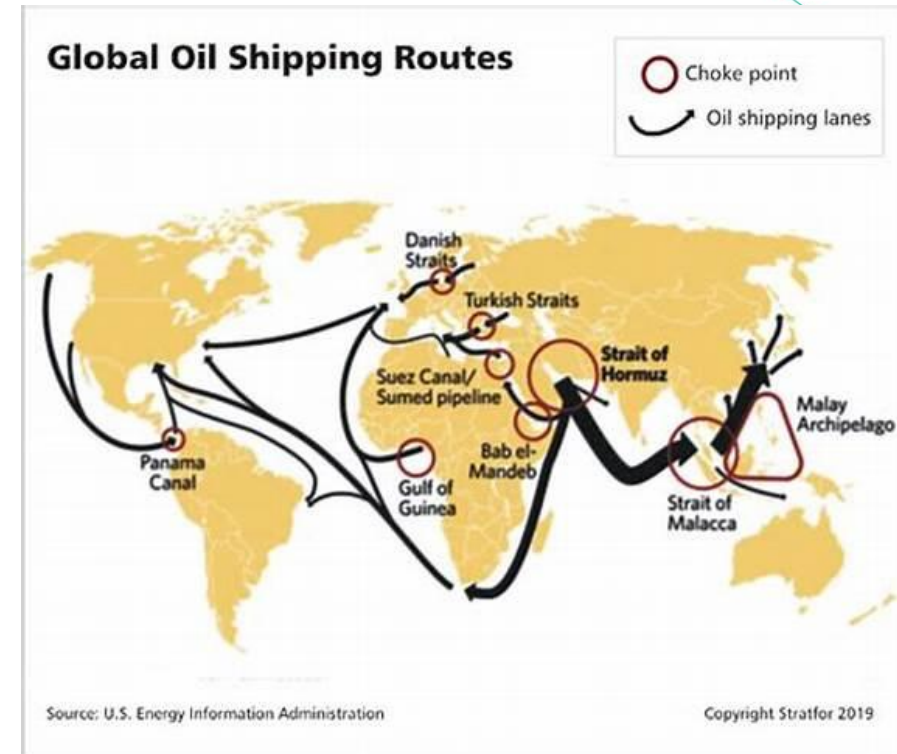
Graphical Approximation of Above Pie Chart Comparison of CO₂e



US Military & Fossil Capital



The UK & US Navies had largely transitioned to oil by the start of WWI (USN 6th Division and the RN Grand Fleet, 1918)



A reparative strategy for climate justice in Palestine and beyond

- Immediate ceasefire and end military aid to Israel
- Immediate and massive scale-up in assistance to Palestine to rebuild resiliently
- Not Just Less Pollution, Less Military
- Close Bases
- Pay Countries for Past and Present Pollution
- A Global Military Superfund
- Transparent Military Pollution Data
- A Just Transition for Arms Workers and Military Personnel

Palestine is a climate justice issue

“The life of humanity, and especially of the people of the south, depends on the way in which humanity chooses the path to overcome the climate crisis produced by the wealth of the north. Gaza is just the first experiment in considering us all disposable.”