



Truthout

**NEWS ANALYSIS**

# **The Military Assault on Global Climate**

**BY**

**H Patricia Hynes (<https://truthout.org/authors/h-patricia-hynes/>), TRUTHOUT**

**PUBLISHED**

September 8, 2011



(Image: [LP /](#)

[Truthout](#)

(<https://www.flickr.com/photos/truthout/>);

(<https://www.flickr.com/photos/miguelvieira/2734633812/>),

(<https://www.flickr.com/photos/expertinfantry/5416970457/>)

Adapted:

[Miguel](#) [Vieira](#)

[Expert](#) [Infantry](#)

By every measure, the Pentagon is the largest institutional user of petroleum products and energy ... Yet, the Pentagon has a **blanket exemption** ([http://www.iacenter.org/o/world/climatesummit\\_pentagon121809/](http://www.iacenter.org/o/world/climatesummit_pentagon121809/)) in all international climate agreements ... Any talk of climate change which does not include the military is nothing but hot air, according to Sara Flounders.

It's a **loophole** (<http://priceofoil.org/climateofwar/>) [in the Kyoto Convention on Climate Change] big enough to drive a tank through, according to the report "A Climate of War."

In 1940, the US military consumed one percent of the country's total energy usage; by the end of World War II, the military's share rose to 29 percent. **(1) (#1.)** Oil is indispensable for war.

Correspondingly, militarism is the most oil-exhaustive activity on the planet, growing more so with faster, bigger, more fuel-guzzling planes, tanks and naval vessels employed in more intensive air and ground wars. At the outset of the Iraq war in March 2003, the Army estimated it would need more than 40 million gallons of gasoline for three weeks of combat, exceeding the total quantity used by all Allied forces in the four years of World War 1. Among the Army's armamentarium were 2,000 staunch M-1 Abrams tanks fired up for the war and burning 250 gallons of fuel per hour. **(2) (#2.)**

The US Air Force (USAF) is the single largest consumer of jet fuel in the world. Fathom, if you can, the astronomical fuel usage of USAF fighter planes: the F-4 Phantom Fighter burns more than 1,600 gallons of jet fuel per hour and peaks at 14,400 gallons per hour at supersonic speeds. The B-52 Stratocruiser, with eight jet engines, guzzles 55 gallons per minute; ten minutes of flight uses as much fuel as the average driver does in one year of driving! A quarter of the world's jet fuel feeds the USAF fleet of flying killing machines; in 2006, they consumed as much fuel as US planes did during the Second World War (1941-1945) – an astounding 2.6 billion gallons. **(3) (#3.)**

Barry Sanders observes with a load of tragic irony that, while many of us assiduously reduce our carbon footprint through simpler living, eating locally, recycling and reusing, energy conservation, taking public transportation, installing solar panels, and so on, the single largest institutional polluter and contributor to global warming – the US military – is immune to climate change concerns. The military reports no climate change **emissions** (<http://usinfo.org/enus/government/forpolicy/kyoto.html>) to any national or international body, thanks to US arm-twisting during the 1997 negotiations of the first international accord to limit global warming emissions, the Kyoto Protocol on Climate Change. To protect the military from any curbs on their activities, the United States demanded and won exemption from emission limits on "bunker" fuels (dense, heavy fuel oil for naval vessels) and all greenhouse gas emissions from military operations worldwide, including wars. Adding insult to injury, George W. Bush pulled the United States out of the Kyoto Protocol as one of the first acts of his presidency, alleging it

would straitjacket the US economy with too costly greenhouse emissions controls. Next, the White House began a neo-Luddite campaign against the science of climate change. In researching “The Green Zone: The Environmental Costs of Militarism,” Sanders found that getting war casualty statistics out of the Department of Defense (DoD) is easier than getting fuel usage data.

Only recently has the momentous issue of military fuel use and its massive, yet concealed role in global climate change come to the foreground, thanks to a handful of perspicacious researchers.

**Liska and Perrin (<http://www.environmentmagazine.org/Archives/Back%20Issues/July-August%202010/securing-foreign-oil-full.html>)** contend that, in addition to tailpipe emissions, immense “hidden” greenhouse gas pollution stems from our use of gasoline. This impact on climate change should be calculated into the full lifecycle analysis of gasoline. When the Environmental Protection Agency (EPA) compares gasoline and biofuels for their respective atmospheric pollution, the greenhouse gas emissions calculated for gasoline should include the military activities related to securing foreign crude oil, from which gasoline is derived. (But they do not, thanks to the Kyoto Accords military exemption.) Oil security comprises both military protection against sabotage to pipelines and tankers and also US-led wars in oil-rich regions to assure long-term access. Nearly 1,000 US military bases trace an arc from the Andes to North Africa across the Middle East to Indonesia, the Philippines and North Korea, sweeping over all major oil resources – all related, in part, to projecting force for the sake of energy security. Further, the “upstream emissions” of greenhouse gases from the manufacture of military equipment, infrastructure, vehicles and munitions used in oil supply protection and oil-driven wars should also be included in the overall environmental impact of using gasoline. Adding these factors into their calculations, the authors conclude that about “20 percent of the conventional DoD budget ... is attributable to the objective of oil security.”

A corresponding **analysis** (<http://priceofoil.org/climateofwar/>) by researchers at Oil Change International quantifies the greenhouse gas emissions of the Iraq war and the opportunity costs involved in fighting the war, rather than investing in clean technology, during the years 2003–2007. Their key findings are unambiguous about the vast climate pollution of war and the lockstep bipartisan policy of forfeiting future global health for present day militarism.

1. The projected full costs of the Iraq war (estimated \$3 trillion) would cover “*all of the global investments in renewable power generation*” needed between now and 2030 to reverse global warming trends.
2. Between 2003–2007, the war generated at least 141 million metric tons of carbon dioxide equivalent (CO<sub>2</sub>e)(**4**)(**#4.**), *more each year of the war than 139 of the world’s countries release annually.*(**5**)(**#5.**) Rebuilding Iraqi schools, homes, businesses, bridges, roads and hospitals pulverized by the war, and new security walls and barriers will require millions of tons of cement, one of the largest industrial sources of greenhouse gas emissions.

3. In 2006, the US spent more on the war in Iraq than the entire world spent on renewable energy investment.
4. By 2008, the Bush administration had spent 97 times more on military than on climate change. As a presidential candidate, President Obama pledged to spend \$150 billion over ten years on green energy technology and infrastructure – less than the United States was spending in one year of the Iraq war.

Just how much petroleum the Pentagon consumes is one of the best-kept secrets in government. More likely, observes Barry Sanders, no one in DoD knows precisely. His unremitting effort to ferret out the numbers is one of the most thorough to date. Sanders begins with figures given by the Defense Energy Support Center for annual oil procurement for all branches of the military. He then combines three other non-reported military oil consumption factors: an estimate of “free oil” supplied overseas (of which Kuwait was the largest supplier for the 2003 Iraq war), an estimate of oil used by private military contractors and military-leased vehicles and an estimate of the amount of bunker fuel used by naval vessels. By his calculation, the US military consumes as much as one million barrels of oil per day and contributes 5 percent of current global warming emissions. Keep in mind that the military has 1.4 million active duty people, or .0002 percent of the world’s population, generating 5 percent of climate pollution.

Yet, even this comparison understates the extreme military impact on climate change. Military fuel is more polluting because of the fuel type used for aviation. CO<sub>2</sub> emissions from jet fuel are larger – possibly triple – per gallon than those from diesel and oil. Further, aircraft exhaust has unique polluting effects that result in greater warming effect by per unit of fuel used. Radiative effects from jet exhaust, including nitrous oxide, sulfur dioxide, soot and water vapor exacerbate the warming effect of the CO<sub>2</sub> exhaust emissions. **(6) (#6.)** Perversely, then, the US military consumes fossil fuel beyond compare to any other institutional and per capita consumption in order to preserve strategic access to oil – a lunacy instigated by a series of executive decisions.

### **Short History of Militarizing Energy**

***Ten of 11*** (<http://www.environmentmagazine.org/Archives/Back%20Issues/July-August%202010/securing-foreign-oil-full.html>) *US recessions since World War 11 have been preceded by oil price spikes ... Maintaining low and stable oil prices is a political imperative associated with modern petroleum-based economies.*

In 1945 the US military built an air base at Dhahran, Saudi Arabia, the start of securing permanent American access to newly discovered Middle East oil. President Roosevelt had negotiated a quid pro quo with the Saudi family: military protection in exchange for cheap oil for US markets and military. Eisenhower possessed great prescience about the post-World War II rise of a permanent

war-based industry dictating national policy and the need for citizen vigilance and engagement to curb the “military-industrial” complex. Yet, he made a fateful decision on energy policy, which set our country and the world on a course from which we must find our way back.

The 1952 blue-ribbon Paley Commission Report proposed that the US build the economy on **solar energy sources** (<http://www.nuclearfreenz.org.nz/coldwartool.htm>). The report also offered a strong negative assessment of nuclear energy and called for “aggressive research in the whole field of solar energy” as well as research and development on wind and biomass. In 1953, the new President Eisenhower ignored the report recommendation and inaugurated “Atoms for Peace,” touting nuclear power as the world’s new energy miracle that would be “too cheap to meter.” This decision not only embarked the country (and world) on a fateful course of nuclear power, but it also affixed the centrality of oil, gas and coal within the US economy.

By the late 1970s, the Soviet invasion of Afghanistan and the Iranian Revolution threatened US access to oil in the Middle East, leading to President Carter’s 1980 State of the Union warmongering doctrine. The Carter Doctrine holds that any threat to US access to Middle East oil would be resisted “by any means necessary, including military force.” Carter put teeth into his doctrine by creating the Rapid Deployment Joint Task Force, whose purpose was combat operations in the Persian Gulf area when necessary. Ronald Reagan ramped up the militarization of oil with the formation of the US Central Command (CENTCOM), whose *raison d’être* was to ensure access to oil, diminish Soviet Union influence in the region and control political regimes in the region for our national security interests. With growing reliance on oil from Africa and the Caspian Sea region, the US has since augmented its military capabilities in those regions.

In 2003, Carter’s doctrine of *force when necessary* was carried out with “shock and awe,” in what was the most intensive and profligate use of fossil fuel the world has ever witnessed. Recall, too, that as Baghdad fell, invading US troops ignored the looting of schools, hospitals and a nuclear power facility as well as the ransacking of national museums and burning of the National Library and Archives holding peerless, irreplaceable documentation of the “cradle of civilization.” The US military did, however, immediately seize and guard the Iraqi Oil Ministry Headquarters and positioned 2,000 soldier to safeguard oilfields.**(7) (#7.)** First things first.

Many factors have converged and clarified over time to support the proposition that, at its core, the Iraq war was a war over oil. Eliminating weapons of mass destruction, deposing a tyrannical dictator, rooting out terrorism linked to 9/11, employing gunboat diplomacy to instill democracy and human rights – all were largely foils for oil. Alan Greenspan put it squarely: “I am saddened that it is politically inconvenient to acknowledge what everybody knows: the Iraq war is largely about oil.”**(8) (#8.)**

As we near peak oil production, that is, the point of diminishing returns for oil exploration and production and higher oil prices, OPEC countries' share of **global production** (<http://www.environmentmagazine.org/Archives/Back%20Issues/July-August%202010/securing-foreign-oil-full.html>) “will rise from 46 percent in 2007 to 56 percent in 2030.” Iraq has the third-largest reserves of oil; Iraq and Kazakhstan are “two of the top four countries with the largest [petroleum] production increases forecast from 2000 to 2030. The Middle East and Central Asia are, predictably, epicenters of US military operations and wars. A 2006 **report** (<https://antiwar.com/engelhardt/?articleid=12981>) on national security and US oil dependency released by the Council on Foreign Relations concluded that the US should maintain “a strong military posture that permits suitably rapid deployment to the [Persian Gulf] region” for at least 20 years. US military professionals concur and are preparing for the prospect of “large-scale armed struggle” over access to energy resources.

### **Where We Stand**

Our *national security* has been reduced in large part to *energy security*, which has led us to militarizing our access to oil through establishing a military presence across the oil-bearing regions of the world and instigating armed conflict in Iraq, sustaining it in Afghanistan and provoking it in Libya. The air war in Libya has given the new US Africa Command (AFRICOM) – itself another **extension** ([http://www.tomdispatch.com/post/174943/michael\\_klare\\_the\\_pentagon\\_as\\_energy\\_insecurity\\_inc\\_](http://www.tomdispatch.com/post/174943/michael_klare_the_pentagon_as_energy_insecurity_inc_)) of the Carter Doctrine – some spotlight and muscle. A few commentators have concluded that the NATO war in Libya is a justifiable humanitarian military intervention. The more trenchant judgment, in my view, is that the air war violated the UN Security Council Resolution 1973, the US Constitution and the War Powers Act; and that it sets a precedent and “**model** ([https://www.nytimes.com/2011/08/29/world/africa/29diplo.html?\\_r=3&ref=helenecooper&pagewanted=all](https://www.nytimes.com/2011/08/29/world/africa/29diplo.html?_r=3&ref=helenecooper&pagewanted=all)) for how the United States wields force in other countries where its interests are threatened,” to quote administration officials. The air war in Libya is another setback to non-militarized diplomacy; it marginalized the African Union and it sets a course for more military intervention in Africa when US interests are at stake. Air war a model for future wars? If so, a death knell for the planet. This insatiable militarism is the single greatest institutional contributor to the growing natural disasters intensified by global climate change.

### **Postscript**

In August 2010, as I was conceiving this series “**War and the True Tragedy of the Commons** (<https://truthout.org/war-and-tragedy-commons/1312405464>),” wildfires caused by drought and heat wave were consuming huge swaths of Russia and choking Moscow with air pollution. A member of the Russian Academy of Sciences warned that fire-induced winds could carry

radioactive particles hundreds of miles from the burning forest around Chernobyl, reaching cities in Russia and even in Eastern Europe. The same risk exists for regions elsewhere contaminated with radioactive waste and jeopardized by uncontrollable wildfires. At the same time as the Russian fires, more than one in ten Pakistanis were uprooted, rendered food dependent and endangered by disease from the worst floods in recorded history, floods which engulfed one-fifth of the country from the northwest region to the south. Pakistan – a highly militarized nuclear power with tense relations with its nuclear neighbor India, whose border area with Afghanistan is a war zone, and within whose boundaries the CIA is conducting a drone war – prioritizes militarism over development. It ranks 15 in global military strength and 141 out of 182 countries in the Human Development Index.

In summer 2011, as I was completing this series, forest fires burned almost 50,000 acres in and around the nuclear weapons production and waste storage facilities at the Los Alamos National Laboratory. Among the endangered radioactive materials and waste were as many as 30,000 55-gallon drums of plutonium-contaminated waste stored in fabric tents above ground, awaiting transport to a low-level radiation dumpsite in southern New Mexico. Two months later, Vermont suffered its worst ever floods and flood damage, with no part of the state untouched, from Tropical Storm Irene – considered to be one of the ten costliest disasters in US history.

Coincident with these environmental tragedies intensified by global warming, is the ongoing tradeoff in the US federal budget between militarized defense and genuine human and environmental security. The United States contributes more than 30 percent of global warming gases to the atmosphere, generated by five percent of the world's population and US militarism. The pieces of the US federal budget pie that fund education, energy, environment, social services, housing and new job creation, taken together, receive less funding than the military/defense budget. Former Secretary of Labor Robert Reich has called the military budget a taxpayer-supported jobs program and argues for reprioritizing federal spending on jobs in green energy, education and infrastructure – the real national security.

The United States has the wealth (currently larding the defense budget) and the technical capacity to revolutionize our energy economy and turn it within a few decades into an economy based on efficiency and renewable [energy sources \(http://www.ieer.org/carbonfree/\)](http://www.ieer.org/carbonfree/), thus removing a critical demand factor of our Goliath military. How costly would it be to eliminate underlying causes of war and injustice, such as poverty and gender inequality, and to restore the natural environment? In his most recent book “Plan B 4.0: Mobilizing to Save Civilization,” Lester Brown estimates that eradicating poverty, educating women, providing reproductive resources and restoring forests worldwide would cost one-third of the US 2008 defense budget. The issue is not public monies.



Another ferocious demand factor is the octopus of defense industry companies that have spread their tentacles to nearly all of the states and control the majority of Congressionals. Thus, another vital scarce resource – some mineral in a contested seabed, for example – could replace petroleum and become the next flashpoint for more military build-up and response, unless that military-industrial complex is neutered.

Perhaps the most elusive driving factor of war is the values that underpin the tradition and habit of militarized solutions. War mirrors the culture of a country. US militarism – from its training, tactics and logistics to its reasons for going to war and its weapons of war – is distinctly shaped by core elements of American identity. These determining cultural forces are, according to military historian **Victor Davis Hanson** (<http://www.thenewatlantis.com/publications/military-technology-and-american-culture>): manifest destiny; frontier mentality; rugged individualism and what he calls a “muscular independence”; unfettered market capitalism; the ideal of meritocracy (no matter what one’s class, one can rise to the top in the US military); and a fascination with machines, modernity and mobility. All converge to generate bigger, better and more destructive war technology. He adds that the integration of military into society is smoothed through the Second Amendment right to bear arms.

This cultural competence for high-tech war, with its origins in our past annihilation of Native Americans, may be our society’s nemesis unless we do critical soul searching about our cultural and personal **values** (<http://www.thesolutionsjournal.com/node/969>) and actively engage in transforming them. There are a plentitude of cross currents in our society that have profoundly challenged the dominant cultural profile limned by militarist Hanson: the women’s and civil rights movements, the anti-war and peace movements, public intellectuals and progressive media, peace and justice studies, progressive labor and health workers, the coop and Transition Town movements and the handful of progressive politicians, among others. The challenge is how to build voice, social cohesion and public influence for our shared values of a sense of community, connection to nature, concern for the exploited and thirst for equity and justice against the dominant market messages of wealth, social prestige, image, power through dominance and meeting conflict with force.

*“A nation that continues year after year to spend more money on military defense than on programs of social uplift is approaching spiritual death.” –Martin Luther King*

### **Resources for Education and Action**

Bring the War Dollars Home, a growing movement at the state and city/town level, uses the National Priorities Project data to make the case for ending the wars in Afghanistan and Iraq and redirecting defense spending to genuine domestic security. See [here \(http://ourfunds.org/\)](http://ourfunds.org/) and [here \(http://www.bringourwardollarshome.org/\)](http://www.bringourwardollarshome.org/).

**National Priorities Project** (<https://nationalpriorities.org/>) is a think tank and advocacy group that provides research designed to influence US federal spending priorities. Includes data on costs of wars, local taxes for war and tradeoffs.

Progressive Caucus Budget for 2012, also known as **The People's Budget** (<http://cpc.grijalva.house.gov/index.cfm?sectionid=70>), is an alternative budget offered by the 81-member Congressional Progressive Caucus that takes steps toward a saner role for government while reducing the deficit more and faster than either Ryan's "Plan for Prosperity" or Obama's plan.

Peace and Conflict Studies Programs: Two hundred and fifteen accredited peace and conflict studies graduate programs and grad schools on the leading graduate school **web site** (<http://www.gradschools.com/search-programs/conflict-peace-studies>).

**Peace and Justice Studies Association** (<http://legacy.earlham.edu/~psa/>)

War Tax Resistance: See the **web site** (<http://www.warresisters.org/wartaxresistance>) of War Tax Resistance/War Resisters League

**Women's International League for Peace and Freedom** ([http://wilpf.org/US\\_WILPF](http://wilpf.org/US_WILPF)) (WILPF) was founded in 1915 during World War I. WILPF works to achieve, through peaceful means, world disarmament, full rights for women, racial and economic justice, an end to all forms of violence.

Footnotes:

1. Barry Sanders (2009), "The Green Zone: The Environmental Costs of Militarism," Oakland, California: AK Press, p.39.
2. Barry Sanders (2009), "The Green Zone: The Environmental Costs of Militarism," Oakland, California: AK Press, p.51.
3. Barry Sanders (2009), "The Green Zone: The Environmental Costs of Militarism," Oakland, California: AK Press, pps.50,61 for data in this section.
4. Units of carbon dioxide equivalent to combined greenhouse gas emissions.
5. This figure is conservative because there were no reliable numbers on the military consumption of naval bunker fuels for the transport of fuel and troops. Nor was there data on the use or release of intensive greenhouse gas chemicals in war, including halon, an ozone-depleting fire extinguishing chemical banned in the US since 1992 for civilian production and use, but allowed for DoD "critical mission" use.
6. George Monbiot (2006), "Heat: How to Stop the Planet from Burning," cited in Sanders, p.72.

7. Chalmers Johnson (2010), "Dismantling the Empire: America's Last Best Hope," New York: Metropolitan Books. pp.40-51.

8. Quoted in **Liska and Perrin**

**(<http://www.environmentmagazine.org/Archives/Back%20Issues/July-August%202010/securing-foreign-oil-full.html>), p.9.**

---

**H Patricia Hynes (<https://truthout.org/authors/h-patricia-hynes/>)**

H. Patricia Hynes is a retired professor of environmental health from the Boston University School of Public Health. She directs the **Traprock Center for Peace and Justice** (<http://traprock.org/>) and is a member of Nuclear Free Future.

Rarely acknowledged in the debate on global climate change, the world's weather can now be modified as part of a new generation of sophisticated electromagnetic weapons. Both the US and Russia have developed capabilities to manipulate the climate for military use. Environmental modification techniques have been applied by the US military for more than half a century. Climatic Manipulation by the US Military: The HAARP Program. The High-Frequency Active Auroral Research Program (HAARP) based in Gokona, Alaska, has been in existence since 1992. The military reports no climate change emissions to any national or international body, thanks to US arm-twisting during the 1997 negotiations of the first international accord to limit global warming emissions, the Kyoto Protocol on Climate Change. To protect the military from any curbs on their activities, the United States demanded and won exemption from emission limits on "bunker" fuels (dense, heavy fuel oil for naval vessels) and all greenhouse gas emissions from military operations worldwide, including wars. Adding insult to injury, George W. Bush pulled the United States out of the Kyoto Protocol. What is climate change? The term climate refers to the general weather conditions of a place over many years. In the United States, for example, Maine's climate is cold and snowy in winter while South Florida's is tropical year-round. Climate change is a significant variation of average weather conditions—say, conditions becoming warmer, wetter, or drier—over several decades or more. The mechanics of the earth's climate system are simple. When energy from the sun is reflected off the earth and back into space (mostly by clouds and ice), or when the earth's atmosphere releases energy, the planet cools. When the earth absorbs the sun's energy, or when atmospheric gases prevent heat released by the earth from radiating into space (the greenhouse effect), the planet warms.