Watching "The Burden: Fossil Fuel, The Military, and National Security"¹

Andrew DeWit

On January 28, 2016, US Army base Fort Hood, in Texas, broke ground on the Army's largestever hybrid solar and wind-power project. The USD 100 million project's 63,000 solar panels and 20 massive wind turbines will supply half the base's electricity needs "at a lower price than the power generated by fossil fuels," saving USD 168 million.² A week before, the US Navy, well along in its goal of 50% renewable energy by 2020, first used biofuels in its Great Green Fleet.³ These milestones came in the same month that the Pentagon, on January 14, released a new directive on "Climate Change Adaptation and Resilience."⁴

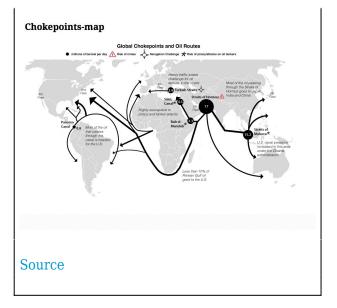


The right-wing *Washington Times* took note on February 7, portraying the Pentagon's initiatives as toadying conformity with the views of President Barack Obama.⁵ But the US military's activism on climate and energy has far deeper roots, stretching back at least to Donald Rumsfeld's second tenure as Secretary of Defense. These kinds of "inconvenient truths," so to speak, were explained with great skill in the February 4 screening of "The Burden,"⁶ a fascinating and very timely 40minute documentary. The screening was held in Concord, the state capital of New Hampshire, and hosted by the New Hampshire Sustainable Energy Association.⁷

Concord was not the first venue for viewing "The Burden," nor will it be the last. The documentary was officially released on March 27 of 2015, at the Environmental Film Festival, in Washington DC.⁸ It has been watched in countless private screenings, including by special request from Republicans who want to understand reality but are wary of leaving evidence that they attended a "climate change event."⁹ The next scheduled public screening is February 11 in Sacramento, California, where it will be co-hosted by California Assembly Veterans Affairs Committee Chairwoman Jacqui Irwin and Vice Chair Devon Mathis.¹⁰

"The Burden" is in strong demand because it expertly blends brief and engaging interviews with often gripping wide-angle footage. In this dangerously distracted US Presidential election year, the film shows why the American military wants to lead a revolution in renewable energy and efficiency. It also provides a ready introduction to the enormous geopolitical and climate risks of fossil fuels, especially oil, and how they pose an immediate and rapidly worsening threat to America's national security.





The documentary's title deftly summarizes several costly problems posed by oil, still the lifeblood of military and civilian mobility. For one thing, oil-derived fuel makes up half or more of the supplies delivered to front-line troops, to be burned in transport and combat vehicles as well as generators to power an expanding array of electrified systems. An additional "burden" is the geographical and geopolitical tethering of the US military to oilproducing areas, particularly the Middle East. Ample footage from Iraq and Afghanistan underscore this incredibly expensive reality.

Yet a further burden is that the US military is uniquely focused on protecting tankers.¹¹ Crude oil and petroleum products made up a massive 26% share, by volume, of the nearly 10 billion tons of total seaborne trade in 2014.¹² As the "Chokepoints" map shows, and as the documentary emphasizes, most of this fuel is carried through narrow straits, such as Hormuz and Malacca. These chokepoints are vulnerable to attacks by state and non-state actors, including pirates. The documentary points out that the military budget represents roughly 20% of US federal government spending, and that the cost of patrolling chokepoints is at least USD 85 billion per year.

"The Burden" uses well-placed clips from Fox

News and C-SPAN to remind us that fervent advocates of "drill, baby, drill" insist climate change is a lie and that America can be energy self-sufficient through shale. The film counters with a convincing case that more-of-the-same will not lead to energy self-reliance, but rather continued vulnerability to volatile prices and geopolitical instability. The ongoing collapse in oil prices illustrates these risks very well. The *Financial Times*, Citi and others point to increasing evidence that oil finance may be playing a role akin to the subprime mortgages that delivered the Lehman Shock in 2008.¹³

"The Burden" shows how the military is using solar power and advanced biofuels, as well as other technologies, to reduce demand, substitute for oil, and produce power on-site. It accomplishes this with skill, through interviews with officials and veterans as well as footage of solar arrays and other projects. The film is clearly aimed at fence-sitting and conservative audiences rather than progressives. The documentary is thus careful to stress that green power increases the military's effectiveness and cuts its costs. In Afghanistan, these costs included an average of one military casualty for every 24 convoys of fuel.

Climate change makes repeated appearances in the film, as a "threat-multiplier." The documentary illustrates the threat of rising seas by showing what they are already doing to Naval Base Norfolk, the world's largest. It also highlights the fact that roughly every two weeks the American military is called on for humanitarian assistance and disaster response. The demand for this assistance will almost certainly increase. Climate change is clearly accelerating,¹⁴ and there is no agency to replace the US military's air- and sea-lift capacity for saving lives in more frequent and large-scale disasters.

The documentary is ably directed by Roger Sorkin, head of Sorkin Productions and fellow of the Truman National Security Project. Sorkin's background includes work as strategic communications advisor to the NATO Energy Security Centre and a role at the Electric Infrastructure Security Council. He specializes in the increasingly overlap among climate change, energy, and national security. At the Truman Center, Sorkin is the spokesperson for Operation Free, a coalition of military veterans and national security experts.¹⁵ This role clearly helped Sorkin get access to ships and bases as well as top officials who are implementing the American military's energy revolution.

One of these people is Ray Mabus, Secretary of the Navy and the major force behind the Navy's ambitious goal to achieve 50% renewables by 2020 as well as sail the Great Green Fleet. Mabus served as an officer aboard a Navy cruiser, was Governor of Mississippi (1988-92), and former ambassador to Saudi Arabia (1994-96). He has been Secretary since May of 2009, the longest tenure in that position in a century.¹⁶ Mabus thus speaks with immense credibility when he argues the need for an energy transition and that the Navy can help lead it. He emphasizes that military demand has been a key factor in past technological revolutions, and that the Navy itself has already led previous energy transitions.

Other interviewees include Sharon Burke and Dennis McGinn. Burke is interviewed as Assistant secretary of defense for operational energy plans and programs. That position was created by Congress in 2009, and Burke became its first-ever appointee in 2010, serving until May of 2014. She was also the author of the 2008 report, *A Strategy for American Power: Energy, Climate, and National Security,* released by the Center for a New American Security.¹⁷ She speaks with the authority of an expert on the role of energy in military operations.





Ray Mabus Sharon Burke









Dennis McGinn Anthony Zinni Donald Rumsfeld

Former Vice-Admiral Dennis McGinn was interviewed as Assistant Secretary of the Navy (Energy, Installations & Environment), a position to which he was appointed on September 3, 2013. Prior to that appointment, McGinn was President of the American Council On Renewable Energy, an important organization that links the renewable energy industry, the states, and the US military. In the documentary, McGinn persuasively depicts alternative energy as an important economic opportunity in addition to being an avenue for alleviating risks.

Former United States Marine Corp General Anthony Zinni also makes an appearance. Zinni's outspoken opposition to the Iraq War, prior to the 2003 invasion, was strikingly perspicacious concerning the risks of that neocon gambit.¹⁸ In the film, Zinni makes clear the perils posed by conventional energy as well as conventional thinking. Among other points, he argues that disasters exacerbated by climate change will increase the burden on the US military "as they are forced to respond because they are the best first-responders in the world." Zinni continues to speak truth to complacency, warning for example in an October 24, 2014 OpEd that "we run the risk of being too late on climate change, endlessly debating causes at the expense of sensible actions."¹⁹

The US military's role in renewables, portrayed so well in the documentary, has drawn the ire of conservative critics. As noted in the introduction, many insist the military has been browbeaten by Barack Obama. The argument is absurd. The film does not take up the point, but in 2004 former US Secretary of Defense Donald Rumsfeld (1975-77 and 2001-06) became a first-mover in the US military's drive to deploy renewable energy and efficiency. The Rumsfeld-authored "DOD FY 2004: Annual Report to the President and the Congress" notes that "[we] also are pursuing renewable energy technologies, such as fuel cells and geothermal, wind and solar power; we intend to purchase electricity from these environmentally friendly sources when cost-effective."²⁰

On the other hand, some progressive critics claim that the US military is the biggest climate culprit.²¹ But this author's calculations show that the US military's total fuel use of roughly 87 million barrels (13.8 billion liters) in 2014 was just 5% of global airlines' consumption of 276 billion liters of fuel in the same year.²² Fuel consumption by global marine transport was roughly the same as that for aviation, at least according to data from 2010.²³ Moreover, the US military's fuel use was under 7 days' worth of US consumption by light-duty vehicles in 2012, which was roughly 13 million barrels of oil equivalent per day.²⁴

It also pays to keep in mind – as the film illustrates - that a significant portion of US military fuel use is devoted to protecting the flow of oil for use in cars, aircraft, maritime shipping and a myriad other purposes across the globe. Without the US military's force projection assuring security of oil supply, there would be havoc in the global economy. But now the US military itself is warning that businessas-usual is leading to even more existential mayhem. That alarm, and the sobering realities that give rise to it, should transcend all slogans.

Both the right and the left share a tendency to ignore inconvenient truths, even as climate and energy threats accelerate. Meanwhile, on February 9, the Supreme Court's 5 conservative justices made the "stunning" and "unprecedented" decision to block Obama's "Clean Power Plan" to regulate CO2 emissions from power plants.²⁵ Against the perilously polarized backdrop of American politics, "The Burden" makes an invaluable contribution. It delivers conservatives a powerful message from the military on the urgent need for a paradigm change in energy.

Andrew DeWit is Professor in Rikkyo University's School of Policy Studies and an editor of The Asia-Pacific Journal. His recent publications include "Climate Change and the Military Role in Humanitarian Assistance and Disaster Response," in Paul Bacon and Christopher Hobson (eds) Human Security and Japan's Triple Disaster (Routledge, 2014), "Japan's renewable power prospects," in Jeff Kingston (ed.) Critical Issues in Contemporary Japan (Routledge 2013), and (with Kaneko Masaru and Iida Tetsunari) "Fukushima and the Political Economy of Power Policy in Japan" in Jeff Kingston (ed) Natural Disaster and Nuclear Crisis in Japan: Response and Recovery after Japan's 3/11 (Routledge, 2012). He is lead researcher for a five-year (2010-2015) Japanese-Government funded project on the political economy of the Feed-in Tariff.

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Andrew DeWit is Professor in the School of Economic Policy Studies at Rikkyo University and an *Asia-Pacific Journal* editor. His publications include "Japanese Smart Cities and Communities: Integrating Technological and Institutional Innovation for Society 5.0," in *Smart Cities for Technological and Social Innovation*, Elsevier (Hyung Min Kim, Soheil Sabri and Anthony Kent, eds.) forthcoming 2020 (with Brendan Barrett and Masaru Yarime); "Japan's (re)integration of energy in industrial policy," in *Critical Issues in Contemporary Japan, 2nd Edition*, Routledge (Jeff Kingston, ed.) 2019; "Energy," in *Routledge Handbook of Contemporary Japan*, Routledge (Hiroko Takeda and Mark Williams, eds.) forthcoming January 2020.

Notes

¹ The short article is a revised and updated version of Andrew DeWit, "2014 The Burden: Fossil Fuel, The Military, and National Security," Anthropology Review Database, February 1, 2016.

² See Todd Pruden, "Ground breaks for largest Army renewable energy project to date," *Fort Hood Sentinel*, February 4, 2016.

³ On the Great Green Fleet, see the US Navy website.

⁴ See the Directive at the Federation of American Scientists website.

⁵ See Rowan Scarborough, "Pentagon orders commanders to prioritize climate change in all military actions," *Washington Times*, February 7, 2015.

⁶ A short clip from the documentary as well as a summary of its content is available here.
⁷ On the event, see "THE BURDEN: A Film About National Security and Climate Change,"

New Hampshire Sustainable Energy Association.

⁸ See Peter Lehner, "The Burden: New Documentary Illustrates Impacts of Fossil Fuels on the U.S. Military," March 30, 2015.

⁹ The film's director, Roger Sorkin, makes this point at 39:00 minutes during the December 17, 2015 Reinvent roundtable (with Carl Pope, Bill McKibben, and others) on "Confronting the Full Foreign Policy Implications of Climate Change".

¹⁰ See "Veterans Join CA Assembly Members to Screen Energy Security Documentary in Sacramento," Operation Free, Press Release, (nd).

¹¹ On this indispensable role, representing a global public good, see Andreas Goldthau, "A Public Policy Perspective on Global Energy Security," *International Studies Perspectives*, February 1, 2012.

¹² On seaborne trade volumes, see the graph on p. 7 of "Review of Maritime Transport 2015," United Nations Conference on Trade and Development, October 15, 2015.

¹³ On this, see Izabella Kaminska, "Petrodollars as the new vendor-financing feedback loop of hell," FTAlphaville, February 5, 2016.

¹⁴ The evidence is overwhelming. See for example hurricane expert Jeff Masters' February 8,



2016 analysis of how unprecedented were the wind-speeds and intensification of Hurricane Patricia in October of 2015. Jeff Masters, "Hurricane Patricia's 215 mph Winds: A Warning Shot Across Our Bow," Wunderblog, February 8, 2016.

¹⁵ See Sorkin's bio.

¹⁶ See the Mabus bio.

¹⁷ On Sharon Burke's roles, see the "New America welcomes Sharon E. Burke as senior advisor to international security program," New America Press Release, May 8, 2014.
¹⁸ See Daniel Gabriel, "Anthony Zinni's Hard Truths," *The American Conservative*, June 9, 2015.

¹⁹ See Anthony Zinni, et al, "US military refuses to be 'too late' on climate change," October 29, 2014.

²⁰ See p. 95 Donald Rumsfeld, "DOD FY 2004: Annual Report to the President and the Congress".

²¹ See, for example, Sara Flounders, "The Pentagon, The Climate Elephant. The US Military Machine is the World's Worst Polluter of Greenhouse Gas Emissions," Global Research, December 1, 2015.

²² Total fuel use by global airlines is available on p. 4 "Economic Performance of the Airline Industry," International Air Transport Association (IATA), June 5, 2015.

²³ On marine transport, see p. 11 of "Repowering Transport," World Economic Forum, Project White Paper, April 2011.

²⁴ See "Passenger travel accounts for most of world transportation energy use," US Energy Information Administration, November 19, 2015.

²⁵ Adam Liptak and Coral Davenport, "Supreme Court Deals Blow to Obama's Efforts to Regulate Coal Emissions," *New York Times*, February 9, 2016.