

November 2021

While it never made headlines like COP26, the U.S. Department of Defense's Climate Adaptation Strategy (combined with its Sustainability Report and Implementation Plan) has the capacity to have knock-on effects that might not only help drive decarbonization and reduce water stress, but also push investors to reconsider ESG screening practices.

In this report we examine:

- •The Department of Defense's footprint and exposure to ESG risk.
- •The DoD's key priorities and strategies as it relates to sustainability and procurement.
- •The opportunity this provides aerospace & defense companies and investors.

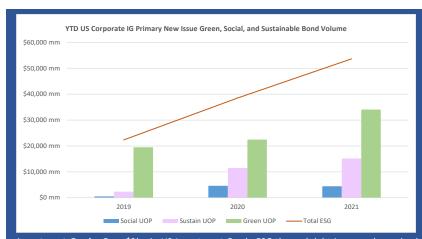
The U.S. Department of Defense & Sustainability

One might not immediately think of the U.S. military as an organization that is concerned about ESG, but in many respects, it is one of the most exposed to risks associated with environmental, social, and human capital. As an institution, the U.S. Department of Defense consists of over three million military and civilian personnel, and in terms of real estate and fixed assets, it utilizes more than 25 million acres that includes 603,385 facilities encompassing more than 2.2 billion square feet!

Extreme weather-related events associated with

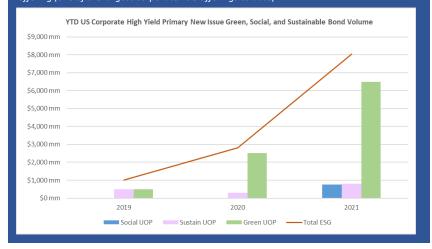
climate change (in addition to "lost days" which disrupt unit & weapon systems readiness) can also damage facilities and equipment and alter the environments where U.S. forces operate. In some circumstances it already has. For instance, the China Lake Naval Air Weapons Station in California has had to cancel numerous training missions (including multiple sorties and explosive ordnance training) due to forest fires. In response to rising sea levels and flooding, the U.S. Naval Academy and Norfolk Naval Weapons Station are exploring sea walls, while at Ft. Huachuca (in Arizona) water security is a risk.

In response to these situations (and Executive Order 13834), the DoD has developed a strategic framework and implementation plan which lays out how the U.S. DoD intends to better use more climate-informed decision making, as well as train & equip a climate ready force, build resilient infrastructure, and enhance supply chain resilience/innovation. Some of its key priorities include fleet management, renewable electricity use, energy efficiency measures, and sustainable acquisition. Ultimately, the DoD's end game is to ensure that it can operate under changing climatic conditions, preserve operational capabilities, and enhance the systems (natural & manufactured) critical to the success of the United States military.



Investment Grade: Over \$3bn in US Investment Grade ESG themed debt issuance has priced this month, surpassing last November's \$2.25bn. While Social Bond Issuance remains flat for the month, both Northwest Natural Gas and Colgate-Palmolive came to market with sustainability bonds.

High Yield: This month Ford came to market with its inaugural \$2.5bn dollar green bond offering (one of the largest corporate ESG offerings to date).





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Academy ESG

Towards a More Sustainable Military Industrial Complex

Part of this strategy includes plans for fixed capital investments like stormwater & road network upgrades, tidal exclusion barriers, and facility adaptation. In the past 2 years alone, the military has invested over \$1 billion on 40+ projects meant to improve efficiency and energy measures. Specifically on the procurement and carbon disclosure front, the DoD intends to use "its position as the single largest buyer of goods and services to drive transparency within and across its supply chain and is expecting major suppliers to fully disclose GHG emissions and broader ESG performance." For instance, all new electronics must meet energy efficiency requirements and 100% of electronics disposal must use environmentally sound methods.

With some of the deepest pockets in the land, the Department of Defense outlays (according to the CBO) in 2020 totaled ~\$713bn and are projected to be ~\$800bn annually over the next ten years. The Defense Department has the capacity like no other to alter sustainable supply chains via procurement policies. However, currently sustainable acquisition only represents a small fraction of total acquisition, which is expected to be only .5% for 2021, but has some of the greatest opportunity for growth.

There is an enormous opportunity here for aerospace & defense companies (which can be excluded from funds due to negative and moral/ethical screening methods) to begin focusing on disclosing and improving ESG metrics required for government contracts. The knock-on effects of this focus shift also have the potential to put traditionally excluded companies within aerospace & defense (~\$800bn+ in market cap in total) on the radar of ESG investors. Should more disclosure become available and ESG metrics improve, current holders of aerospace & defense names might have a first mover advantage as the landscape evolves and ESG funds consider investment. In addition to aerospace & defense companies, infrastructure firms involved in constructing climate adaptation measures needed by the military like sea walls, elevated buildings, new bases (to replace ones no longer acceptable for training), and roads might also see gains.

U.S. DoD > COP26

While there were some interesting developments out of COP26, most notable were some agreement on carbon trading schemes and voluntary carbon markets, as well as the creation of the Forest Agriculture and Commodity Trade Dialogue and commitment to reversing forest loss. However, it remains to be determined how these will play out. The DoD's strategy is much more reliable in terms of how it looks to use control-based mechanisms like technology and performance standards in combination with procurement policy to facilitate change across the 400,000+ full time equivalent workers it employs, the 2,000+ land and maritime weapons systems in its arsenal, aviation hardware, and textiles (to name a few). According to General Walsh from our Geopolitical Intelligence Group, while the results might not happen overnight, the shift "will happen over time and probably will come first in the vehicle market to leverage commercial EV developments." The DoD's top-down command style approach (unlike the UN) puts it in position to more efficiently execute policy and impact stakeholders.

Further Resources

Defense Logistics Agency: https://www.dla.mil/SmallBusiness/Getting-Started/What-DLA-Buys/

Congressional Budget Office: https://www.cbo.gov/data/budget-economic-data#2

DOD Sustainability Report & Implementation Plan 2020: https://www.sustainability.gov/pdfs/dod-2020-2020
sustainability-plan.pdf

DOD Climate Adaptation Strategy: https://www.sustainability.gov/pdfs/dod-2021-cap.pdf



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