

Electrifying National Vehicle Fleets

The U.S. government has approximately 645,000 vehicles in the federal fleet, and produces more than 7 billion pounds of greenhouse gases (GHG) annually. In 2021, President Biden issued an Executive Order which prioritizes the transition of the federal fleet to clean and zero-emissions federal vehicles, as well as an Executive Order setting a goal that by 2030, 50 percent of all new passenger cars and light trucks sold in the U.S. be zero-emission vehicles. This transition will accelerate U.S. independence from foreign oil and gas and enable the U.S. to achieve its national climate goals.

Department of Defense & Service Overview



DOD is the world's largest producer of greenhouse gas emissions and next to the U.S. Postal Service, is the largest fleet in the U.S. federal government. Transitioning the DOD fleet to electric is critical to achieving national emissions goals, enhancing national security, and signaling demand to the private sector.



DOD has approximately 170,000 non-tactical vehicles used in daily, routine operations on bases. It has approximately 240,000 tactical vehicles, used in conflict zones and combat, which are anticipated to transition first to hybrid vehicles.



Hybrid-electric drive (HED) could reduce fuel consumption by an estimated 35 percent.



The Department of the Air Force invested in DOD's first non-tactical vehicle fleet composed entirely of plug-in electric vehicles in 2014. Likewise, USAF reduced fleet operating costs by 22.3 percent while increasing Alternative Fuel Vehicle inventory by 42.7 percent through a variety of means, including alternative fuel/hybrid vehicle prioritization, which resulted in the 2020 Federal Energy Management Program award.



The 2022 Department of the Army Climate Strategy specifically sets a goal for a 50% reduction in Army net GHG by 2030, and net-zero Army GHG emissions by 2050.



The Department of the Navy Climate Action 2030 is committed to drawing down an additional five-million metric tons of CO2 or equivalent pollution per year by 2027 and achieving net-zero GHG emissions by 2050.



Select DOD EV and Electrification Highlights

★ USAF Electric Vertical Take-off and Landing (eVTOL)

The Air Force Research Laboratory (AFRL) innovation hub has partnered with industry and academic institutions to develop Heaviside, a new eVTOL single-passenger aircraft that can reach 180 mph with a range of 100 miles and on a single charge. With half the energy per miles requirements than an electric car, this innovation is being considered for future search and rescue missions.

★ U.S. Army Reserve EV Pilot Program

In 2022, the U.S. Army Reserve launched a pilot program to transition non-tactical vehicles to an all electric and plug-in hybrid electric vehicle fleet. It installed 27 Level 2 EV charging stations at three Army Reserve facilities in Washington and California. The future all electric fleet will include over 2,000 vehicles at 763 total facilities.

★ U.S. Navy - Naval Facilities Engineering Command (NAVFAC), SW

NAVFAC Southwest lead the Department of the Navy's transition to EVs back in 2015. In 2017, NAVFAC Southwest partnered with several California state agencies to transition the Navy's California vehicle fleet to zero emissions vehicles. This effort alone is estimated to have saved over fifty-one thousand gallons of unleaded gasoline.

★ Marine Corps Logistics Base Albany, Georgia

MCLB Albany is the first installation in the service to generate more energy that it consumes. In late 2021, an initiative from Marine Corps Installations Command and partnership with Georgia Power's Make Ready Program has facilitated applications for funding assistance for EV infrastructure and charging systems. There are more than 130 "green vehicles" currently in the installation's fleet.

★ U.S. Army

In the last three years, the U.S. Army has reduced its non-tactical fleet by 18,000 vehicles and added 3,00 hybrid vehicles. This progress has resulted in a cut of 13 million gallons of fuel per year and reduced GHG emissions per mile by 12%. The Army's Rapid Capabilities and Critical Technologies Office has also advanced tactical experimentation and a prototyping effort with a hybrid electric Bradley Fighting Vehicle.