Fueling the Navy's Great Green Fleet

First surface combatants deploy using alternative fuel made from waste beef tallow.

Secretary of the Navy Ray Mabus and Secretary of Agriculture Tom Vilsack kicked off the Great Green Fleet Jan. 20 with the deployment of the USS John C. Stennis

Carrier Strike Group (JCS CSG) during a ceremony at Naval Air Station North Island.

The Great Green Fleet is a Department of the Navy initiative highlighting how the Navy and Marine Corps are using energy efficiency and alternative energy to increase combat capability and operational flexibility. At the close of the ceremony, the Arleigh Burke-class guided missile destroyer USS Stockdale (DDG 106) left the pier to begin its deployment, becoming the first U.S. Navy ship running on an alternative fuel blend as part of its regular operations.

"When it comes to power, my focus has been about one thing and one thing only: better warfighting," said Mabus. "The Great Green Fleet shows how we are transforming our energy use to make us better warfighters — to go farther, stay longer and deliver more firepower. In short, to enable us to provide the global presence that is our mission."

The blend fueling the JCS CSG's surface ships contains alternative fuel made from waste beef fat provided by farmers in the Midwest. It was purchased at a cost-competitive price through a partnership between the Department of the Navy and USDA aimed at making alternative fuel blends a regular part

Below: The Arleigh Burke-class destroyer USS Kidd (DDG 100) is underway with the John C. Stennis Carrier Strike Group. John C. Stennis is returning to homeport in Bremerton, Wash., after completing a seven-month deployment.



of the military's bulk operational fuel

supply.
"Diversifying our energy sources and strengthens our ability to provide presence, turning the tables on those who would use energy as a weapon against us," Mabus said.

JCS CSG deployed using energy conservation measures (ECMs), including stern flaps, LED lights and energy efficient operational procedures, and alternative fuel in the course of its normal operations. Other ships, aircraft, amphibious and expeditionary forces, and shore installations using ECMs and/or alternative fuels in the course of performing planned mission functions will be part of the Great Green Fleet throughout 2016.

Stockdale is the first surface combatant to receive alternative fuel as part of its regular operational supply. The remainder of the CSG's surface ships will receive fuel from fast combat support ship USNS Rainier (T-AOE 7), which will take on more than 3 million gallons of the alternative fuel blend in Washington state before joining the CSG on deployment.

The advanced fuel blend was produced by California-based AltAir Fuels from a feedstock of beef tallow provided by Midwest farmers and ranchers, and traditional petroleum provided by Tesoro. Pursuant to Navy requirements, the alternative fuel is dropin, meaning it requires no changes to ship engines, transport or delivery equipment, or operational procedures. The Defense Logistics Agency awarded a contract to AltAir Fuels for 77.6 million gallons

(gal.) of the alternative fuel blend, at a cost to DLA of \$2.05 per gal., making it costcompetitive with traditional fuel.

Through the Commodity Credit Corp., USDA is able to partner with the Navy to help diversify its fuel supply and simultaneously support America's own farmers, ranchers and rural economies.

Carrier Air Wing (CVW9), guided-

missile cruiser USS Mobile Bay (CG 53), and guided-missile destroyers USS Stockdale, USS William P. Lawrence (DDG 110), and USS Chung-Hoon (DDG 93) are part of the JCS CSG.

Sailing the Great Green Fleet in 2016 was one of the five energy goals Mabus set in 2009 for the Navy and Marine Corps. It was named to honor President Theodore

Roosevelt's Great White Fleet, which helped usher in America as a global power on the world stage at the beginning of the 20th century. The GGF will usher in the next era of Navy and Marine Corp energy innovation.

Editor's Note: This article was provided by the USDA.

