## The next energy revolution won't be in wind or solar. It will be in our brains.

January 27, 2015

## The Washington Post:

In the arid lands of the Mojave Desert, Marine regimental commander Jim Caley traveled alongside a 24-mile stretch of road and saw trucks, tanks and armored tracked vehicles all idling in the heat — and wasting enormous amounts of expensive fuel.

Caley had already led forces in Iraq, and at the time was charged with seven battalions comprising 7,000 Marines. But this was a new and different challenge. Overseeing a major spring 2013 training exercise at the Marine Corps' Twentynine Palms base in southern California, he was struck by how little he knew about how America's war-fighting machine used energy.

"No targets prosecuted, no miles to the gallon, no combat benefit being delivered," Caley, a Marine colonel, says of the scene. "At the time, I had no system to understand what was going on, and what was occurring, and how much further I could go on the same fuel."

The Department of Defense is the single biggest user of energy in the U.S. — its energy bill in 2013 was \$18.9 billion — and Caley now plays a central role in trying to ensure that just one of its branches, the Marine Corps, uses that power in the optimal way. The implications for the military are vast. For instance, the Marines alone have estimated that they could save \$26 million per year through a 10 percent energy reduction at their installations and bases, to say nothing of Marine field operations, which used an estimated 1.5 million barrels of fuel in 2014.

Read the whole story: *The Washington Post*