



THE **POWER** IS  
IN YOUR HANDS



U.S. ARMY **OPERATIONAL ENERGY**

# 2020

Energy-informed considerations permeate the **TOTAL** Army culture...**Soldiers** (Active, Reserve, and Guard), **Army Civilians**, and **Family members**.

# 2013

The Army Campaign Plan synchronizes and institutionalizes the Army's conversion to energy-informed operations and Contingency Basing.

# 2012

Established the Operational Energy Contingency Basing Task Force under the Assistant Secretary of the Army for Installations, Energy and Environment.

# 2011

Established the Operational Energy Office under the Deputy Chief of Staff of Logistics, G-4.

# 2010

The Deputy Assistant Secretary of the Army (Energy and Sustainability) appointed as Senior Energy Executive.

## CALL FOR ACTION

As we operate across the spectrum of missions, we must conserve energy and reduce risk. Energy consumption is a burden on the unit, as well as a huge funding and resource requirement. Most importantly, it leaves our operations vulnerable.

Every time we deliver fuel or batteries on the battlefield we put Soldiers at risk. As volumes increase, more storage is required, making our forward operating bases larger and harder to protect.

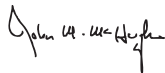
We are examining every way possible to be more effective with our energy use, to employ renewable resources, and lower our costs. All of this will reduce the number of convoys on the roads. But it requires us to change our behavior. When Soldiers start thinking: HOW CAN I USE ENERGY SMARTER?, we know we are on our way.



**SMA RAYMOND F. CHANDLER III**  
SERGEANT MAJOR OF THE ARMY



**GEN. RAYMOND T. ODIERNO**  
ARMY CHIEF OF STAFF



**HON. JOHN M. MCHUGH**  
SECRETARY OF THE ARMY



**"WE NEED TO DEVELOP MORE ENERGY-EFFICIENT  
TECHNOLOGIES THAT PROVIDE OPERATIONAL  
FLEXIBILITY AND TAKE ENORMOUS WEIGHT OFF  
THE BACKS OF OUR SOLDIERS."**

**HON. JOHN M. MCHUGH  
SECRETARY OF THE ARMY**

## **SMART ENERGY WINS THE FIGHT**

Soldiers have speed, agility, endurance, and a lethal edge on the battlefield thanks to Operational Energy, but it comes at a cost. Today in combat, it takes more than 20 gallons of fuel per day to sustain each Soldier. Every Soldier in an Infantry squad carries 23 batteries just to power equipment on a 72-hour mission.

We must learn to use energy smarter. Just as consumers check fuel economy of cars and energy performance of appliances before buying them, we too must make more energy-informed decisions. If we do, we can grow our operational capabilities, while reducing risks to our Soldiers and the costs of providing that energy.

Operational Energy touches every aspect of the Army from the factory to the foxhole. Successful missions require us to consider energy from planning through execution. Operational Energy efforts are already enabling the Army to Prevent, Shape, and Win.



**"WE HAVE TO REDUCE THE GROWTH  
OF OUR ENERGY COSTS, OR SOON OUR  
ENERGY COSTS WILL OUTPACE  
WHAT WE CAN AFFORD."**

**GEN. RAYMOND T. ODIERNO**  
ARMY CHIEF OF STAFF

## CHARGING AHEAD

Operational Energy is about combat power and mission effectiveness. Our efforts are paying off. Here are some examples of how we are reducing Soldier energy loads, fielding more fuel efficient technologies, reducing risk, and cutting costs.



**SOLDIER** — Project Manager for Soldier Warrior is working to increase combat effectiveness, decrease combat load, and improve mission flexibility. The current Soldier Worn Integrated Power Enhanced System reduces three-day power weight by 30 percent - from 14 to 9.8 pounds.



**VEHICLES** — Project Manager for Tactical Vehicles is increasing the readiness of our Tactical Wheeled Vehicle fleet. New technology will enable Soldiers to recharge batteries, reduce reliance on mobile power generation, and extend operational reach through the correct application of energy resources.



**AIRCRAFT** — Improved Turbine Engine Program (ITEP) will replace the engine for the Blackhawk and Apache. This will result in a 35 percent reduction in production and maintenance costs; 65 percent increase in horsepower to weight; 20 percent longer engine life; and 25 percent improvement in fuel efficiency.



**BASING** — The Base Camp Integration Lab at Fort Devens, Massachusetts, assesses the efficiency of fuel, water, and waste disposal systems. For example, the Shower Water Reuse System is expected to reduce water consumption by 75 percent.



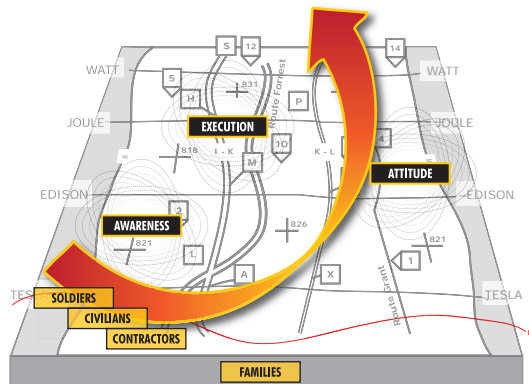
**"YOU HAVE TO CHANGE THE CULTURE AND  
HOLD PEOPLE ACCOUNTABLE."**


**SMA RAYMOND F. CHANDLER III  
SERGEANT MAJOR OF THE ARMY**

## **AN ENERGY-INFORMED CULTURE**

Transforming the Army into an energy-informed culture is like changing your diet. There are many ways to eat healthier, but it requires a lifestyle change. The key to our success is the will to incorporate energy changes into our lives and daily operations. Leading the charge will be our Non-Commissioned Officers.

What will the outcome be? Energy will be used to the greatest benefit. We will have readily available energy alternatives. We will reduce our logistics footprint in theater and cut costs. An energy-informed culture means we will deliver the greatest military effect while reducing risk to our Soldiers.





**TEAM OF TEAMS**

**TOTAL ARMY / JOINT PARTNERS  
COMMERCIAL INDUSTRY CAPABILITIES**

## **OPERATIONAL ENERGY**

Enhances mission effectiveness.

Saves lives and money.

Reduces the number of convoys on the roads.

Provides flexibility to respond across  
the full range of military operations.

## **CONTACT US**



**ASST. SECRETARY OF THE ARMY (INSTALLATIONS, ENERGY & ENVIRONMENT)**  
110 Army Pentagon - Room 3E464, Washington D.C. 20310



<http://www.army.mil/asaiee>



**Assistant Secretary Of The United States Army - IE&E**



**DEPUTY CHIEF OF STAFF, G-4 - OPERATIONAL ENERGY OFFICE**  
500 Army Pentagon - Room 1D343, Washington D.C. 20310



[www.army.mil/g-4](http://www.army.mil/g-4)



**HQDA G-4**