

Fiscal Year 2012 Operational Energy Annual Report



September 2013

The estimated cost of report or study for the Department of Defense is approximately \$16,000 in Fiscal Years 2012 - 2013. This includes \$11,000 in expenses and \$5,290 in DoD labor.

Generated on 2013Sep13 RefID: C-584E097

Requirement

This report is in response to the requirement in section 2925(b) of title 10, United States Code. It provides an overview of FY 2012 operational energy activities in the Department of Defense, including information on operational energy demand, investments in alternative fuels, and support to current operations.

Introduction

President Obama established the Office of the Assistant Secretary of Defense for Operational Energy Plans and Programs (OASD(OEPP)) in June 2010, both to reflect the relationship between energy security and national security as well as honor Congress' call to establish an operational energy office at the Department of Defense. By statute, operational energy is defined as "energy required for training, moving, and sustaining military forces and weapons platforms for military operations." The purpose of OEPP is to transform the way the Department uses energy through policy, guidance, and oversight, as well as to serve as the primary advisor to the Secretary and Deputy Secretary of Defense on operational energy.

The mission of OEPP is to improve military effectiveness while lowering risks and costs to the Department. Since being established three years ago, OEPP has achieved considerable progress by:

- Promoting institutional change within the Department;
- Supporting current operations with energy innovations; and
- Building operational energy considerations into the future force.

As the war in Afghanistan comes to a close and the Department rebalances toward the Pacific region, OEPP will continue to support improvements in the operational effectiveness of forward deployed forces. Across air, land, and sea domains, reductions in the Department's need for energy can improve warfighting capabilities, such as increased range, better endurance, longer time on station, and reduced requirements for resupply. Improved energy performance also can reduce the risk and effects of attacks on supply lines and enable tactical and operational superiority.

Defense Energy Challenge

Although accounting for approximately 1.5 percent of U.S. petroleum consumption, the Defense Department is the single largest energy user in the nation.¹ In FY 2012, the Department consumed an estimated \$16.4 billion dollars of liquid fuels, with more than 60 percent of that

¹ Figure derived from Energy Information Agency; between October 2011 and September 2012, U.S. petroleum consumption was 6.83 billion barrels.

purchased outside of the U.S. In FY 2013, the Department anticipates spending almost \$17 billion dollars to provide more than 111 million barrels of liquid fuels for military operations, training, and readiness. This need for energy presents the Department with multiple financial, operational, and strategic challenges.

DoD Operational Energy Summary

	OE Demand	OE Cost
FY 2012	104 million barrels	\$16.4B
FY 2013 (est)	111.2 million barrels	\$16.9B

Operation Enduring Freedom (OEF) in Afghanistan

In FY 2012, the Department used almost 13 million barrels of liquid fuels to support OEF in Afghanistan. In addition to the fuel provided to vehicles, aircraft, and intelligence, surveillance, and reconnaissance (ISR) equipment, combat outposts and forward operating bases are powered almost entirely by diesel generators. Supplying fuel to these bases is impeded by numerous logistical and operational challenges, including poorly maintained roads with multiple choke points, weather conditions that slow movement, and potential attacks from insurgents and thieves. These challenges then can be compounded by the inefficient use of contingency base camp equipment. Dismounted troops on patrol also carry equipment that requires a large number and variety of batteries that represent further logistical challenges.

Future Challenges

The 2012 Department of Defense Strategic Guidance calls for a future military force that is “agile, flexible, and ready for the full range of contingencies,” and prepared for a complex, global security environment. Given current trends in major acquisitions, meeting the guidance’s requirements is likely to require a greater supply of fuel. As the Department rebalances toward the Pacific, the vast distances and enormous operating areas of the region may well present additional energy supply challenges. Improving range and endurance of systems and platforms through efficiency will have operational relevance as the Department increases presence in the region. In this environment, the assured availability of energy – through aerial refuelers and oilers, for instance – and improved energy performance may influence the success of future military operations.

The guidance also articulates a vision of the changing security environment that includes rising powers, weapons of mass destruction, anti-access/area denial weapons, and violent extremism. To respond to these challenges, the Department is developing new and diverse capabilities that may demand increased supplies of energy. However, in a future with long-range

precision weapons, asymmetric threats, and area denial strategies, the Department's energy needs may challenge U.S. power projection and sustainment.

The Department also must understand the complex effects of a volatile and interconnected global energy market on U.S. security. Almost 20 percent of the world's traded oil and gas travels daily through the Strait of Hormuz, and any disruption would upset global markets.² Despite the massive increases in domestic U.S. energy production and significant decreases in imports, the U.S. and the Department remain subject to price and supply volatility associated with a global market. This is especially true since the Department purchases a majority of energy overseas, where the force is operating.

Promoting Institutional Change

As required by law, the Department released "Energy for the Warfighter: The Department of Defense Operational Energy Strategy" in June 2011. The Operational Energy Strategy set the overall direction for energy use in the Department: to assure reliable supplies of energy for 21st century military operations. It outlines three ways to meet that goal: reducing the demand for energy; expanding and securing the supply of energy; and building energy security into the future force.

In March 2012, the Operational Energy Strategy Implementation Plan was signed by the Secretary of Defense and included the following seven targets:

- Measure operational energy consumption;
- Improve energy performance and efficiency in operations and training in current operations;
- Promote operational energy innovation;
- Improve operational energy security at fixed installations;
- Promote the development of alternative fuels;
- Incorporate energy security considerations into requirements and acquisition; and
- Adapt policy, doctrine, professional military education, and Combatant Command activities.

To provide a mechanism for reviewing, synchronizing, and supporting operational energy initiatives, the Defense Operational Energy Board (DOEB) was established in March 2012 and is co-chaired by the ASD(OEPP) and the Joint Staff Director of Logistics (the Chairman's designated operational energy lead). The DOEB advises the co-chairs on operational energy plans and programs, serves as a forum for sharing operational energy lessons learned and best practices, and facilitates the implementation of the Operational Energy Strategy. The DOEB met twice in FY 2012 to discuss Department-wide operational energy consumption, performance metrics, research

² Energy Information Administration (EIA), "World Oil Transit Checkpoints," August 22, 2012.

and development gap assessments, requirements and acquisition, and the development of operational energy policy and doctrine.

Building on the inaugural Operational Energy Budget Certification Report for FY 2012, the Department released the FY 2013 Budget Certification Report in August 2012, which certified that the Military Department's budgets support the Operational Energy Strategy and Implementation Plan. The report outlines how the Department will invest \$1.6 billion dollars as proposed in the FY 2013 President's Budget on initiatives that improve the use of operational energy. The report benefited from the efforts of a Certification Advisory Working Group (CAWG) that assessed the adequacy of each Component's proposed budget and provided certification recommendations. The CAWG included representatives from OEPP, Office of the Director for Cost Assessment and Program Evaluation (CAPE), Office of the Under Secretary of Defense (Comptroller), Joint Staff, the Services, and the Defense Logistics Agency (DLA).

In July 2012, the Department also released the first comprehensive policy for alternative fuels. Developed with the Services and relevant Defense Agencies, the policy states that the Department's alternative fuels goals are to ensure operational military readiness, improve battlespace effectiveness, and increase flexibility in military operations.³ The policy establishes an internal review process that enables the Department to make effective investments in alternative fuels while simultaneously ensuring the long-term readiness and capability of the joint force. It also includes guidance that potential fuels be compatible with existing equipment and able to achieve significant production volumes at competitive cost, among other factors.

Supporting Current Operations

The Department's top priority is support to U.S. forces engaged in current operations around the world. This includes OEF in Afghanistan, where the Department is pursuing numerous material and non-material initiatives to improve operational capabilities and reduce the fuel sustainment burden on deployed forces. In FY 2012, successful initiatives included more energy efficient shelters, improved power generation, base camp experimentation, and electrical microgrids, among others.

The Department also worked with the Combatant Commands to include operational energy considerations in operational planning and organization. In March 2012, U.S. Pacific Command (USPACOM) held an Operational Energy Summit, where the Command's senior leaders committed to implement the Operational Energy Strategy within their areas of responsibility. USPACOM established an energy governance structure, appointed an operational energy advisor, and included operational energy considerations in a number of exercises. In addition, other Combatant

³ This Policy is available at <http://energy.defense.gov>

Commands established operational energy governance systems and charters, integrated operational energy considerations into theater campaign plans and exercises, and sponsored studies to improve understanding of operational energy challenges and opportunities in respective areas of responsibility.

Building Energy into the Future Force

In addition to promoting institutional change and supporting current operations, the Department continued to integrate operational energy into future force development. Through the promotion of innovation, collaboration with interagency partners, and improvements to acquisition and requirements processes, the Department will continue to develop a more energy-secure future force.

In January 2012, the Department announced the release of \$18 million dollars through the Operational Energy Capability Improvement Fund (OECIF) to fund six different programs looking to reduce the energy demand of future contingency bases. These programs include the Innovative Cooling Equipment (ICE) Development/Demonstration Program, the Super Energy Efficient Containerized Living Unit (SuperCLU) Design and Development, and the OEF Energy Initiative Proving Ground, among others.

In FY 2012, the Department also engaged with interagency partners and supported numerous projects initiated by the July 2010 memorandum of understanding (MOU) with the Department of Energy (DOE), including:

- Hybrid Energy Storage Module (HESM) – This joint program between Advanced Research Projects Agency-Energy (ARPA-E) and the Department aims to develop modular hybrid energy storage technology that addresses long endurance and rapid charge/discharge needs for forward operating bases, aircraft power management, and future shipboard weapons systems.
- The Advanced Vehicle Power Technology Alliance (AVPTA) – DOE’s Vehicle Technologies Program and the Army continue to work on joint vehicle research and development, with solicitations either planned or awarded in the technical areas of battery storage and lightweight materials. In July 2012, the AVPTA partners conducted kick-off meetings for two thermoelectric generator joint agreements.
- Energy Storage Demonstration at Army’s Base Camp Integration Lab (BCIL) – DOE’s Office of Electricity Delivery & Energy Reliability and Sandia National Laboratories are collaborating with the Army to conduct an energy storage system demonstration to reduce generator fuel consumption.

- DOE Advisors at Combatant Commands – DOE Energy Advisors are assigned at five geographic Combatant Command Headquarters helping to integrate energy considerations into planning, exercises, programs, and security cooperation.

To effectively implement the Operational Energy Strategy, the Department continued to enhance the requirements and acquisition processes. In particular, OEPP teamed with the Joint Staff J-4 office to oversee the implementation of the Energy Key Performance Parameter (KPP) under the Joint Capabilities Integration and Development System (JCIDS). The Energy KPP helps limit growth in future system energy demand by ensuring that energy performance issues are captured, defined, and included in acquisition trade decisions. Joint Staff J-4 and OEPP collaborated to assess compliance with the guidance and evaluate Service analyses of the logistical supportability of new capabilities. The KPP became mandatory in January 2012 through an update to the JCIDS instruction. Going forward, the relevance of the KPP will increase as the Department better understands anti-access/area-denial threats to logistics and infrastructure.

In August 2012, OEPP released a memorandum titled “Notification of Updated Guidance for the Calculation of Fully Burdened Cost of Energy (FBCE) in Analysis of Alternatives (AoAs) and Acquisition Programs.”⁴ FBCE estimates the energy-related costs to sustain specific pieces of equipment, including the procurement of energy, the logistics needed to deliver energy, related infrastructure, and force protection for logistics forces involved in energy delivery. Released to the Service Acquisition Executives in partnership with CAPE, this memorandum updated the FBCE methodology to help inform cost, schedule, and performance trade decisions in AoAs and acquisition programs. While relatively few AoAs have been commissioned since the publication of the guidance, the Department expects to apply this new approach to future acquisition programs.

OEPP also participates in Service wargames to help incorporate operational energy issues into force planning, requirements development, and acquisition. These efforts explore the energy demand from various force structures and systems as well as emerging threats to energy-related logistics. Through these efforts, the Services can “test” the military effectiveness of systems and concepts of operations that could provide greater combat effectiveness with less fuel demand and related logistics.

The Department also continued to use smart contracting approaches to incentivize system energy efficiencies during the acquisition process. The Air Force’s recent Combat Rescue Helicopter request for proposal (RFP) was released in September 2012 with clear rules for scoring energy efficiency related to mission, capabilities, and cost. The RFP included incentives that rewarded energy efficiency but deterred the inclusion of unrealistic and unachievable claims in

⁴ This Memorandum is available at <http://energy.defense.gov>

competitor proposals. This approach included the costs of energy in life cycle cost calculations relative to scoring the bids, and assessed fuel usage against the aircraft's proposed missions. The RFP also allowed the Department to test actual fuel consumption against the vendor claims to validate improvements in energy performance.

Conclusion

During his confirmation hearing in January 2013, Secretary of Defense Chuck Hagel stated his commitment to “operational effectiveness and efficiency – improving the energy performance of aircraft, ships, ground vehicles and military bases; reducing the vulnerability of our fuel supply lines; decreasing the load our expeditionary forces must carry; and diversifying the energy supplies we use.” The Department is committed to addressing how energy affects the purpose and intent of our missions, as well as improving how energy contributes to warfighting capabilities. This past year, the Department made great strides in reforming core business processes and decision-making, supporting current operations, and applying energy considerations to the development of the future force. Institutional change requires commitment and persistence. The Department appreciates the support of Congress in achieving the operational energy mission in support of military operations around the globe.

Appendix A: Operational Energy Reporting Requirements

Demand for Operational Energy, FY 2008 – FY 2014

(A) *Statistical information on operational energy demands, in terms of expenditures and consumption, for the preceding five fiscal years, including funding made available in regular defense appropriations Acts and any supplemental appropriation Acts.*

(B) *An estimate of operational energy demands for the current fiscal year and next fiscal year, including funding requested to meet operational energy demands in the budget submitted to Congress under Section 1105 of Title 31 and in any supplemental requests.*

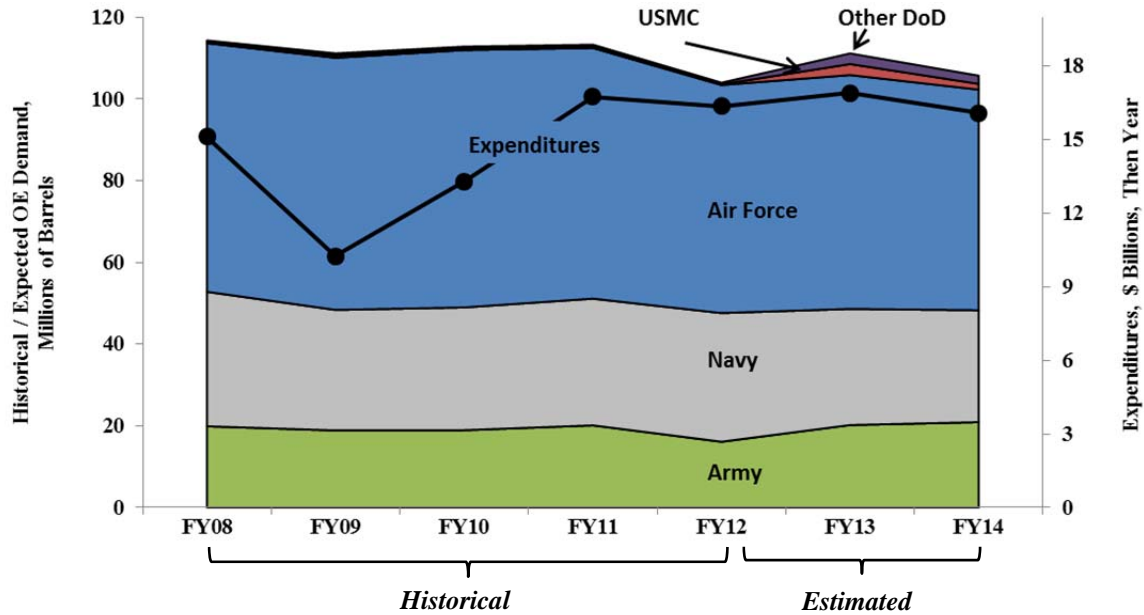
The figure below details historical demand for operational energy in FY 2008 – FY 2012, estimated future operational energy demand in FY 2013 – FY 2014, and total expenditures to purchase that fuel. Historical operational energy demand is based on net sales of select liquid fuels by DLA to the Services, while estimated future operational energy use is based on the FY 2014 President's Budget.

The Department's demand for operational energy varies according to the activities conducted as well as the equipment used in those activities. Including basic training, branch training, home station training, exercises, and the full range of military operations, the Department uses operational energy to sustain readiness, and deploy, employ, and sustain forces around the globe. Year over year, operations tempo will reflect unexpected demands (i.e., post-9/11 operations, humanitarian relief missions, operations over Libya) as well as changes in the magnitude of other ongoing operations (Iraq, Afghanistan, et al).

Expenditures for operational energy are estimated using the average fuel sales price for the specific fuel provided to the customer at the point of sale, and include procurement costs from the open market plus overhead costs. However, this price does not reflect additional costs imposed on the Department for force protection, storage, and transportation beyond the point of sale. As a purchaser of fuel on the open market, the Department is subject to the same price volatility experienced by commercial consumers.

This report utilizes an updated methodology for calculating historical and expected operational energy use. This methodology utilizes a standardized reporting system for specific operational energy fuel categories and reflects improved coordination among the Defense Components. As a result, the trends below may differ from the FY 2011 Operational Energy Annual Report. In addition, actual energy use in a given year may vary from the levels originally budgeted for that same year.

Operational Energy Demand, FY 2008 – FY 2014



		<i>Historical</i>					<i>Estimated</i>	
		FY08	FY09	FY10	FY11	FY12	FY13	FY14
Operational Energy Demand, Million Barrels	Army	19.9	18.9	18.9	20.1	16.1	20.2	20.9
	Navy	32.9	29.5	30.0	31.0	31.5	28.4	27.4
	Air Force	60.8	61.7	63.0	61.4	55.8	57.2	54.0
	Marine Corps	0.5	0.6	0.4	0.3	0.2	2.7	1.4
	Other DoD	0.2	0.5	0.5	0.5	0.4	2.6	2.0
	Total Demand	114.3	111.2	112.8	113.3	104.0	111.2	105.7
	Expenditures, \$ Billions	\$15.1	\$10.3	\$13.3	\$16.8	\$16.4	\$16.9	\$16.1

Notes

- FY 2012 figures utilize an updated methodology that may lead to different results than the FY 2011 Operational Energy Annual Report.
- Expenditures are not adjusted for inflation.
- Data on historical demand may not always capture final end use and does not account for fuel transfers between the Services.
- Historical and Estimated Demand include Base and Overseas Contingency Operations (OCO) funding, and purchases using Transportation Working Capital Fund (TWCF).
- Beginning in FY 2013 USMC will budget for OCO fuel. In previous years, USMC OCO fuel was included in Army's budget.

Operational Energy Initiatives and Funding, FY 2011 – FY 2017

(C) A description of each initiative related to the operational energy strategy and a summary of funds appropriated for each initiative in the previous fiscal year and current fiscal year and requested for each initiative for the next five fiscal years.

See the FY 2013 Operational Energy Budget Certification Report provided to the Secretary of Defense and available at <http://energy.defense.gov/>.

Progress in Implementing the Operational Energy Strategy

(D) An evaluation of progress made by the Department of Defense— (i) in implementing the operational energy strategy, including the progress of key initiatives and technology investments related to operational energy demand and management; and (ii) in meeting the operational energy goals set forth in the strategy.

See **Appendix B** for a summary of progress made in implementing the Operational Energy Strategy.

Description of Alternative Fuel Initiatives, FY 2012

(E) A description of the alternative fuel initiatives of the Department of Defense, including funding and expenditures by account and activity for the preceding fiscal year, including funding made available in regular defense appropriation Acts and any supplemental Appropriation Acts.

As one of the world's largest consumers of petroleum, the Department has an interest in the diversification of fuel supplies as a hedge against potential supply disruptions and price fluctuations. Over the long term, the Department needs fuels derived from a variety of feedstocks that are cost competitive, available worldwide, and compatible with existing equipment and storage infrastructure. While expenditures on alternative fuels were only 2.5 percent of the Department's FY 2012 investments in operational energy, these initiatives will improve flexibility by ensuring military equipment can operate on a wide range of commercially and globally available fuels.

To provide clear guidelines on Department alternative fuels investments, the Department released the Alternative Fuels Policy for Operational Platforms in July 2012.⁵ This policy established Department-wide rules to streamline investments in the development and use of alternative fuels. It also identified that the Department's primary goal for alternative fuels is to ensure operational military readiness, improve battlespace effectiveness, and enhance flexibility of military forces. All investments in this area will be subject to a rigorous, merit-based evaluation, and reviewed as part of the Department's annual Operational Energy Budget Certification Report. Specifically, the policy:

- Identifies a process for coordinating future testing and certification activities;
- Sets important criteria for field demonstrations of new fuels; and
- Establishes criteria for ongoing bulk fuel purchases to meet operational requirements beyond certification and demonstration activities.

Since these alternative fuels are often prototypes procured from a maturing domestic production base for the purposes of testing and certification, the Department's relatively small purchases are often more costly than a comparative amount of petroleum. However, the policy formalizes current practice that the Department has not and will not make bulk purchases of alternative drop-in replacement fuels unless they are cost competitive with petroleum products.

In FY 2012, the Department invested \$46.4 million dollars on alternative fuels to test and certify alternative fuel blends for potential use in the Services' fleets. The Air Force invested \$22 million dollars to evaluate alternative fuels and aircraft engine compatibility. The Navy invested \$18 million dollars on the testing, evaluation, and certification regarding the use of alternative fuels in aircraft and ships. The Army invested \$2.8 million dollars to assess the effect of using emerging alternative fuels in tactical/combat vehicles, tactical generator sets, and other deployable assets. In coordination with Service investments, DLA invested \$3.6 million dollars on test and certification activities to support the addition of synthetic and alternative fuels to mobility fuel specifications.

Another component of the Department's alternative fuels activities is the Defense Production Act (DPA) advanced drop-in biofuels production initiative, which utilized \$100 million in DoD contributions in FY 2012. In partnership with the private sector, DOE, and the Department of Agriculture, this initiative aims to catalyze a domestic capability to produce cost-competitive, advanced drop-in renewable fuels at commercial scale. This initiative is subject to a rigorous review process, the same as all DPA projects, and no awards will be made unless the private sector can at least match Federal investment.

⁵ This Policy can be found at <http://energy.defense.gov>

Pursuant to section 863 of the National Defense Authorization Act for FY 2012, the Department reported to Congress in August 2012 on authorities for the purchase of alternative fuels, including advanced biofuels in multiyear contracts. Under 10 U.S.C. §2304a “Task and Delivery Order Contracts: General Authority,” the report noted the Department’s authority to enter into contracts for alternative fuels for up to five years. To date, the Department has only awarded one year contracts. The report also noted that potential alternative fuel suppliers have indicated that purchase contracts of at least 10 years in duration could stimulate greater private sector investment.⁶

Operational Energy in Current Operations, FY 2012

“(F) An evaluation of practices used in contingency operations during the previous fiscal year and potential improvements to such practices to reduce vulnerabilities associated with fuel convoys, including improvements in tent and structure efficiency, improvements in generator efficiency, and displacement of liquid fuels with on-site renewable energy generation. Such evaluation should identify challenges associated with the deployment of more efficient structures and equipment and renewable energy generation, and recommendations for overcoming such challenges.”

Supporting Current Operations

In FY 2012, support to current operations remained the Department’s top priority. For the operational energy community, this meant a continued focus on OEF in Afghanistan. In support of the January 2012 Defense Strategic Guidance and U.S. government-wide rebalance toward the Pacific region, OEPP also increased collaboration with USPACOM while working closely with U.S. Central Command (USCENTCOM) as operations in Afghanistan draw down.

OEPP partnered with stakeholders in the Office of the Secretary of Defense (OSD), the Joint Staff, Combatant Commands, Services, and Defense Agencies on a broad array of initiatives to improve operational capabilities and reduce the sustainment burden on the deployed force, including:

- Through the Experimental Forward Operating Base (ExFOB) process, the U.S. Marine Corps accelerated delivery of Program of Record expeditionary energy systems—Solar Portable Alternative Communications Energy System (SPACES) and Ground Renewable Expeditionary Energy Network Systems (GREENS) — to OEF and the Fleet Forces.

⁶ This Report is available at <http://energy.defense.gov>

- The Army’s “Energy to the Edge” program fielded a diverse array of energy-efficient gear to selected units conducting operations on the tactical edge in Afghanistan and Africa.
- The Army fielded Advanced Medium Mobile Power Sources (AMMPS) to units assigned to Afghanistan, providing power generation that is, on average, 21 percent more fuel efficient than prior generators.
- The Army BCIL at Fort Devens, MA became operational as a venue to evaluate the energy efficiency and durability of contingency basing technologies in a field environment.
- The Army’s Logistics Civil Augmentation Program (LOGCAP) completed 96 energy savings initiatives that saved over 6.3 million gallons of fuel in Afghanistan.
- USPACOM engaged with the Thai military during exercise CRIMSON VIPER 12, a Thai-US technology collaboration experimentation event jointly sponsored with the Royal Thai Defense Science and Technology Department.
- U.S. Southern Command (USSOUTHCOM) executed the Soto Cano Microgrid Study in partnership with DOE to improve mission readiness by reducing energy vulnerabilities.

Leadership actions and organizational changes throughout the Department also demonstrated institutional commitment to enhance current operations with operational energy improvements. For example:

- In his December 2011 Operational Energy policy memorandum, Gen John R. Allen, Commander, U.S. Forces Afghanistan (USFOR-A) directed forces to improve energy use through operating processes, equipment, and personal choices because “operational energy equates exactly to operational capability.”⁷
- USFOR-A’s Operational Energy Directorate directly enhanced current operations through command policy, contracting, and materiel upgrade initiatives to reduce fuel consumption in Afghanistan.
- USPACOM held the Operational Energy Summit in March 2012, where the command’s senior leaders agreed to an action plan for implementing the Operational Energy Strategy. They established an energy governance structure, appointed an operational energy advisor, and included operational energy considerations in a number of exercises.

⁷ This Memorandum is available at <http://energy.defense.gov>

Challenges and Recommendations

To achieve an energy-secure future, the Department must apply a balanced approach that responds to several persistent challenges. These challenges include technology limitations, logistical constraints, increasing energy demand, and dynamic operating environments. In response, the Department must continue to identify operational energy risks, opportunities, and requirements, capture and share best practices, field new energy-efficient equipment, and enhance tactics, techniques and procedures to meet emergent needs. Effective responses require both materiel and non-materiel innovations, from more energy dense batteries and aircraft route optimization to increased consideration of operational energy in all aspects of operational and force planning. The Department will work to address these challenges by enhancing coordination between OSD, the Joint Staff, Combatant Commands, and Services.

Recommended Changes in Organization or Authority

(G) Such recommendations as the Assistant Secretary considers appropriate for additional changes in organization or authority within the Department of Defense to enable further implementation of the energy strategy and such other comments and recommendations as the Assistant Secretary considers appropriate.

At this time, ASD(OEPP) has no recommendations for changes in organization or authority.

Appendix B: Sec. 314. Report on Status of Targets in Implementation Plan for Operational Energy Strategy

(a) REPORT REQUIRED - If the annual report for fiscal year 2011 required by section 2925(b) of title 10, United States Code, is not submitted to the congressional defense committees by December 31, 2012, the Secretary of Defense shall submit, not later than June 30, 2013, to the congressional defense committees a report on the status of the targets established in the implementation plan for the operational energy strategy established pursuant to section 139b of such title, as contained in the document entitled “Operational Energy Strategy: Implementation Plan, Department of Defense, March 2012.”

(b) ELEMENTS OF REPORT - The report required by subsection (a) shall describe, at a minimum, the following:

- 1) The status of each of the targets listed in the implementation plan.*
- 2) The steps being taken to meet the targets.*
- 3) The expected date of completion for each target, if the date is different from the date indicated in the implementation plan.*
- 4) The reason for any delays in meeting the targets.*

Targets	Tasks	Status	Expected Completion Date
1. Measure Operational Energy Consumption	Establish OE Consumption Baselines	Completed in June 2012	N/A
	Improve and Update OE Baselines	Completed in Sept 2012 - DOEB endorsed improvements for FY 2013 Q2	N/A
2. Improve Energy Performance and Efficiency in Operations and Training	Support Current Operations with Energy Improvements	In Progress - Support to USFOR-A, REF E2E, USMC ExFOB, LOGCAP ESI	OEPP continues work with partners to support the current conflict in Afghanistan by capturing and institutionalizing OE best practices, innovations, and standards
	Improve OE Efficiency of the Military Departments	In Progress - numerous ongoing efforts by USA and USMC to reduce power demand through efficiencies, particularly in the areas of small contingency bases (COBs, FOPs) and individual (soldier, Marine) power; Services reported goals in FY 2012	Completion expected in Dec 2013
	Establish Departmental OE Performance Metrics	In Progress - Metrics identified by OASD(OEPP)	Completion expected in Dec 2013
3. Promote Operational Energy Innovation	Assess Departmental Energy S&T Gaps and Options	Completed in Sept 2012 - DOEB endorsed findings of emerging priorities investigation	N/A
4. Improve Operational Energy Security for Contingency Plans	Identify OE Security Risks Associated with Operation and Contingency Plans	In Progress – Identified Service electric power vulnerabilities at installations supporting critical missions in Section 335 Report to Congress. Additional analysis and follow-on work is required	Completion expected in Dec 2013
5. Promote Alt Fuels Development	Establish a Departmental Alternative Fuels Policy	Completed in July 2012 - Alternative Fuels policy memo issued by ASD(OEPP)	N/A
	Establish a Departmental Alt Fuels Investment Portfolio	Completed in Sept 2012 - DPA investment strategy provided to DOEB	N/A
6. Incorporate Energy Security Considerations into Requirements and Acquisition	Incorporate Operational Energy into M&S Tools	In Progress – Following Army use of 2 non-integrated M&S tools in Army GCV analysis	Completion expected in Dec 2013; OEPP is working with Services to identify shortfalls in M&S tools
	Include Operational Energy in the Requirements Process	Completed in Dec 2012 - OEPP and Joint Staff J-4 developed process for reviewing capability documents during staffing. Energy KPP issues now directed back to the Service. Released FCBE guidance letter in Aug 2012.	N/A
	Apply Operational Energy Analyses to Defense Acquisitions	Completed in Jan 2012 - JCIDS Manual published with OE considerations and guidance for establishing the Energy KPP	N/A
7. Adapt Policy, Doctrine, PME, and Combatant Command Activities	Adapt and Adopt OE Policy, Doctrine, and PME	Completed in Sept 2012 - PME initiatives and FY13 Policy Plan provided to DOEB	N/A
	Incorporate OE into Combatant Command Activities	Completed in Sept 2012 - Combatant Command overview provided to DOEB	N/A