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Highlights

Highlights of [GAO-09-300](#), a report to the Subcommittee on Readiness, Committee on Armed Services, House of Representatives

Why GAO Did This Study

The Department of Defense (DOD) relies heavily on petroleum-based fuel to sustain its forward-deployed locations—particularly those that are not connected to local power grids. While weapon platforms require large amounts of fuel, DOD reports that the single largest battlefield fuel consumer is generators, which provide power for base support activities such as cooling, heating, and lighting. Transporting fuel to forward-deployed locations presents an enormous logistics burden and risk, including exposing fuel truck convoys to attack. GAO was asked to address DOD's (1) efforts to reduce fuel demand at forward-deployed locations and (2) approach to managing fuel demand at these locations. This review focused on locations within Central Command's area of responsibility. GAO visited DOD locations in Kuwait and Djibouti to learn about fuel reduction efforts and challenges facing these locations.

What GAO Recommends

GAO recommends that DOD establish an effective approach to managing fuel demand at forward-deployed locations by developing fuel demand management requirements; designating the new director of operational energy as the lead proponent of fuel demand management at forward-deployed locations; addressing demand management shortcomings in DOD's energy strategy; and establishing military department oversight of fuel demand issues. DOD generally concurred with the recommendations.

To view the full product, including the scope and methodology, click on [GAO-09-300](#). For more information, contact William M. Solis at (202) 512-8365 or solisw@gao.gov.

DEFENSE MANAGEMENT

DOD Needs to Increase Attention on Fuel Demand Management at Forward-Deployed Locations

What GAO Found

DOD components have some efforts under way or planned to reduce fuel demand at forward-deployed locations. Many of these efforts are in a research and development phase, and the extent to which they will be fielded and under what time frame is uncertain. Notable efforts include the application of foam insulation to tent structures (see fig.), the development of more fuel-efficient generators and environmental control units, and research on alternative and renewable energy sources for potential use at forward-deployed locations. In addition, during visits to Kuwait and Djibouti, GAO met with officials about local camp efforts aimed at reducing fuel demand.

Figure: Tent before Application of Foam Insulation and Tent after Application of Foam Insulation



Source: DOD Power Surety Task Force.

DOD lacks an effective approach for implementing fuel reduction initiatives and maintaining sustained attention to fuel demand management at its forward-deployed locations. Moreover, DOD faces difficulty achieving its goals to reduce dependence on petroleum-based fuel and its logistics "footprint," as well as operating costs associated with high fuel usage, because managing fuel demand at forward-deployed locations has not been a departmental priority and fuel reduction efforts have not been well coordinated or comprehensive. GAO found that DOD's current approach to managing fuel demand lacks (1) guidance directing locations to address fuel demand, (2) incentives and a viable funding mechanism to invest in fuel reduction projects, and (3) visibility and accountability for achieving fuel reduction. Although it may not be practical for DOD to decrease fuel usage at every forward-deployed location and base commanders must place their highest priority on meeting mission requirements, fuel demand is likely to remain high until the department gives systematic consideration to incorporating fuel demand in construction, maintenance, procurement, and other policy decisions for forward-deployed locations. The 2009 defense authorization act requires DOD to establish a director of operational energy and an energy strategy, providing the department with an opportunity to increase attention on improving fuel demand management.