



Research and Development ENERGY READINESS PROGRAM (ERP)



Program Info

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DLA'S TRANSFORMATION IMPERATIVES

Build Organization Agility Through Our People and Culture

Calibrate Resilient And Responsive Logistics Solutions On Support Of Military Readiness

Enhance Support To Integration Deterrence Across The Continuum Of Conflict In Contested Logistics Environments

Lead Logistics Interoperability Across The Department, Allies, Whole Of Government, And Industrial Base

OBJECTIVE

The Energy Readiness Program (ERP) is a designated Defense Operational Energy Program and is managed under the DLA LOG R&D Program. The ERP directly supports the DoD Class III Bulk fuel and energy supply system through a multi-faceted approach to addressing current and future issues connected to the entire spans of the system. R&D projects and studies are normally developed by or in conjunction with the military service technical offices and activities.



INNOVATION & TECHNOLOGY

- Support of DoD and industry coordinated efforts to determine the effects of alternative (non-petroleum based) fuels on aircraft engine combustion.
- Support of DoD and industry coordinated efforts to develop innovative techniques to mitigate and/or prevent fuel instability, deterioration and contamination.
- Improvement and enhancement of practices and standards for fuel product additization, filtration and sampling for analysis.



STRATEGIC THRUSTS

- Keep abreast of Fuel Refining and Distribution Industry practices that affect, or potentially affect, Warfighter operational requirements.
- Coordinate with Military Services and Industry Technical Organizations to develop and structure projects addressing fuel instability and contamination problems.
- Coordinate with Military Tri-Service Petroleum, Oils and Lubricants (POL) group to optimize support opportunities for alternative fuel certification efforts.



Research & Development ERP



THE CHALLENGE

- Fuel production practices that affect product stability and integrity.
- Environmental mandates (e.g. fuel desulfurization) that can affect certain military fuel operational properties (e.g. lubricity).
- Supply infrastructure practices that contribute to fuel product contamination and adulteration.
- Decreased military budgets for the certification of alternative fuels in meeting warfighter requirements.



WARFIGHTER READINESS

THE BENEFITS



Improved operational energy performance for the Warfighter



Improved technology for the quality assurance and quality surveillance of fuel and energy products



Increase in reliable product supplier base for fuel and energy products

INDUSTRY AND WHOLE OF GOVERNMENT PARTNERSHIPS

- | | |
|--------------|------------------|
| • DLA Energy | • Industry |
| • US Army | • US Air Force |
| • NATO | • US Coast Guard |
| • US Navy | • Academia |
| • US Marines | |



<https://www.dla.mil/Information-Operations/Research-And-Development/>

ACCOMPLISHMENTS & ONGOING EFFORTS



Development of New Ground Vehicle Fuel Contamination Limits Compatible with High Pressure Common Rail Engines - results of this study used to determine the allowable fuel particulate contamination load of the high-pressure common rail fuel injection equipment used in Joint Light Tactical Vehicle (JLTV) operations.



Development of conditioned-based fuel-metering maintenance and calibration protocols that eliminate unnecessary upkeep expenses and increase inventory accountability performance.



Management of congressionally funded initiative to develop refinery-scale production of biofuels produced from woody biomass for military and commercial consumption.