AMMTIAC Success Story

Diversifying The Energy Supply: The DoD Energy Handbook

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Customer:	Defense Technical Information Center, (DTIC)
Challenge:	The Department of Defense (DoD) faces the challenge of reducing its total energy footprint by minimizing its dependence on traditional fuels, enacting greater operating efficiencies, and turning more to renewable energy sources; all while decreasing operating costs and lessening environmental impact. A great deal of information on renewable and alternative energy technologies already exists, but is scattered through a number of disparate sources. What is required is a one-stop reference that provides both the guidance and technical information necessary to assess and formulate power and energy strategies for all DoD installations. To provide warfighters with ready access to critical power and energy data in a cost-effective manner, DTIC commissioned AMMTIAC to develop an expansive handbook on alternative and renewable energy strategies for the DoD.
Approach:	To produce this handbook, AMMTIAC performed hundreds of strategic literature searches, reviewed thousands of bibliographic records, and collected approximately 1,500 documents from more than 400 sources. They collected information on emerging power and energy technologies from numerous government agencies - Defense, Energy, Transportation, Commerce, Agriculture, and NASA. AMMTIAC additionally reviewed refereed technical papers, industrial standards and practices, academic works, and references from technical societies. A number of SMEs – government, industry, academia, and consultants – provided additional material and guidance to this publication to produce this 420-page publication.

Value:	The handbook is a foundational guide to energy technologies and alternative power sources for DoD installations. It constitutes a first-of-its-kind asset for facility energy managers and their staffs, providing warfighters with a one-stop, all-in-one resource to assess and evaluate options for their energy strategies. While only recently published, the handbook is already having a positive impact on Defense infrastructure. One recent example: the US Marine Corps utilized the data and guidelines in the handbook to evaluate technical information on a geothermal heating and cooling system being installed at one of their facilities, and evaluated parameters of a wind turbine at another installation. By accessing the common resources of the handbook rather than independently developing their own data, the Services will make great strides toward meeting the DoD's energy goals and yield significant savings for the taxpayer.

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