



Department of Defense Installations Energy

Making a Case for Energy Security in an Energy-Climate Revolution

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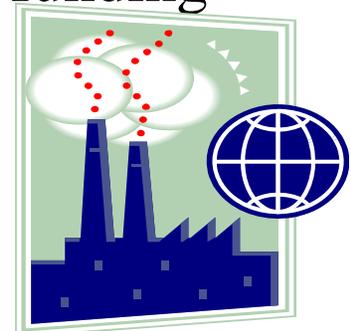


What Revolution?

- Combining People and Programs:
 - Education and behavioral changes
 - Energy conservation / Water conservation
 - Energy efficiency
 - Rapid expansion of renewable energy sources
 - Increasing alternative fuels
 - Reducing fossil fuel use
 - Greenhouse gas reductions
 - Increasing R&D funding and Test & Evaluation funding
 - More opportunities for new solutions
 - Creating eco-friendly “green” workforce
 - Demonstrating Global Leadership



→ **Everywhere!**



Creating an Energy Security and Climate Change Action Plan



Energy Security

- How do we define and value Energy Security?
 - How does Energy Security fit into your energy equation?
 - Is Energy Security linked to Climate Change?
 - Do you know the costs of Energy Security?
 - Is it an “insurance policy”?
 - Or is it a “capability” we can measure and establish worth?
 - Does it include sustainability and uses of renewable energy?
 - What are the environmental impacts and costs?
 - How is critical infrastructure addressed?
- These answers will lead us to a *decision matrix* and strategy for employment of renewable energy, partnerships, contracts, projects, and valuation of Energy Security in an integrated DoD approach that will show industry, state governments, other federal agencies, and the Congress, the purpose of our collective pursuit of energy security and the expansion of renewable energy and alternative fuels.

Req'mnt + Tech Solutions + \$Cost = Value to Customers + \$\$\$ NRG Security



Characteristics of Energy Security

- Surety
- Sufficiency
- Survivable
- Sensible
- Sustainable
- Safely Operated
- Storage
- Standards
- Scalable
- Severable (Switch gear)
- Smart Grid
- Systems Controls/System Designs
- Satisfies Risks
- \$\$\$ - Cost Feasible
- DoD Facilities energy security encompasses sufficiency, surety, and sustainability. Above all, energy security means having adequate power to conduct critical missions for the duration of that mission (sufficiency). Secondly, and leading to sufficiency, is ensuring resilient energy supplies that are accessible when needed (surety). Finally, the energy supplies must present the lowest life cycle cost, while considering all statutory and executive order requirements, as well as the impact to mission, community, and environment (sustainability).

Does this DoD definition of Energy Security make sense to you?



Pricing Energy Security

- Determining local risks and the cost to DoD Assets / Capabilities
- Renewable energy costs vary by technology, location, availability, surety, existence of renewable portfolio standards, transmission infrastructure, etc.



- Compared with existing costs of conventional forms of energy
- Creates the potential for hundreds of energy security valuations
 - DoD has 534 major installations
- E-Security Policy considerations:
 - DRAFT: “Allow costs not to exceed 150% of current energy costs”
 - Rooted in sound life-cycle-cost economics
 - Use all contract forms available to execute



An Energy and Climate Change Action Plan

- What is it?

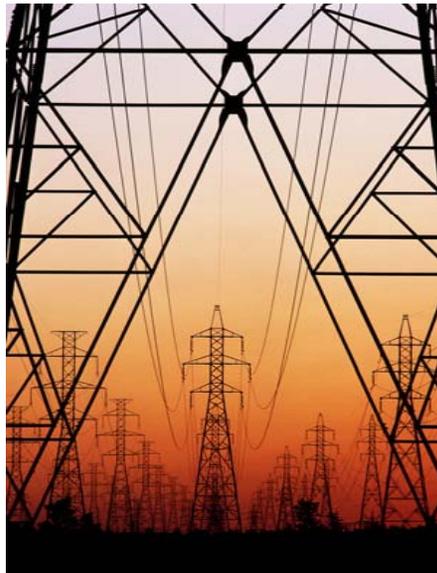
- A DoD Installations Energy Security Strategy and Implementation Plan
 - Establishing policy, goals, resources, reporting and programming guidance that complement White House, Congressional and National interests
- Linking:
 - Defense Critical Infrastructure / Assets
 - Defense Installations Strategic Plans
 - Quadrennial Defense Report
 - Recommendations from the Defense Science Board 2008 Report
 - DoD Energy Security Strategic Plan (Draft 2009)
 - National Electric Grid knowledge (age, congestion, transmission, etc.)
 - DoD Renewable Energy Assessment
 - DOT/FAA jurisdiction for safe navigation
 - DOI/BLM interests in beneficial use, effective land mgmt and conservation
 - Military test and training national assets encroachments
 - Greenhouse Gas footprint and inventories
 - Technology successes from home-station to deployed installations
 - Sustaining Military Missions





What is your definition of Energy Security?

Does the DoD approach towards Energy Security provide a framework for federal agencies and industry to create an energy security and climate change revolution that will make the United States the global “energy” leader and benefactor?





Next Year

- For additional opportunities to discuss DoD and Federal energy issues, attend:



August 15-18, 2010 in Dallas, TX