

Saving Energy in the Military

Michael Rühle
Head, Energy Security Section
NATO Emerging Security Challenges Division

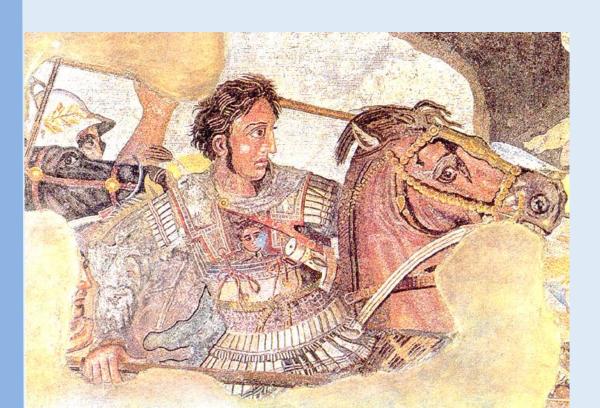
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The "fifth fuel": Why saving energy makes military sense

"My logisticians are a humorless lot ... they know if my campaign fails, they are the first ones I will slay."

Alexander the Great





The "fifth fuel": Why saving energy makes military sense

- A soldier's fuel consumption increased from one gallon in WWII to 20 gallons today (roughly half of which is consumed generating electrical power)
- Forward Operating Bases in remote locations in Afghanistan had to be supplied by air, increasing fuel cost 400 times
- Most of the energy used in military camps is for heating and cooling



The "fifth fuel": Why saving energy makes military sense

 One out of eight U.S. Army casualties in Iraq was the result of protecting fuel convoys.





What nations are doing

• Smart grids (e.g. to reduce running time of diesel generators)

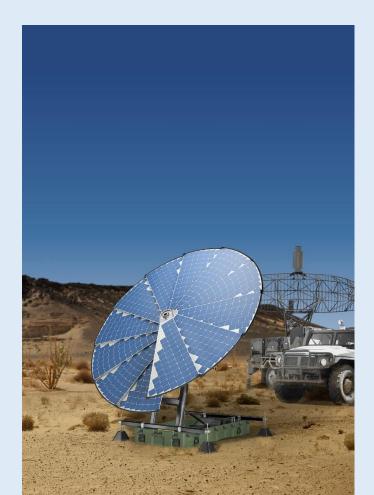




What nations are doing

Renewables (to power individual soldiers and

camps)





What nations are doing

Insulation





- Get an overview over national efforts of Allies and partner countries
- Focus on most promising technologies with shortterm return on investment (e.g. LED, insulation)
- Prepare the ground for STANAGs (NATO Standardization Agreements) on energy efficiency



- Bring companies together
- Engage Ministries of Defence
- Demonstrate interoperability of energy-efficient military equipment
- Demonstrate military adequacy of "smart energy" equipment
 - must be as good as "traditional" equipment



- Encourage nations to measure their military energy consumption
- Offer education and training on energy efficiency
 - Change attitude and behaviour of soldiers
 - "Every soldier is an energy manager"
- Link military energy efficiency to environmental issues
 - Military cannot stand aside re. environmental concerns



Practice what we preach!



• ... reduced heating, cooling and ventilating power thanks to thermal insulation, thermal inertia and effective solar protection of glazing.