



# Global Security, Sustainability, and Climate Change

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# Militaries – Largest Users of Fossil Fuels

- US Military – Single largest user of energy in US
- Among top 60 energy consuming nations
- Among top 50 greenhouse gas emitters
- Renewable energy < 5% of total energy



# Weapons Stockpile Management

- Over 100,000 tons of US obsolete munitions destroyed annually
- Most burned or detonated in open pits and fields (OB/OD)
- Releases thousands of tons of pollutants, including carbon



# Unexploded Ordnance (UXO)

- Thousands of old, abandoned, and unexploded weapons are found yearly
- Typically they are detonated in place to avoid injury
- Releasing their toxic contents to the environment





# Chemical Weapons Destruction

- Over 72,000 MTs declared in 8 countries to date
- 90% – 65,000 MTs destroyed since 1990
- 23,000+ MTs burned in incinerators
- 100,000+ MTs of toxic effluent burned



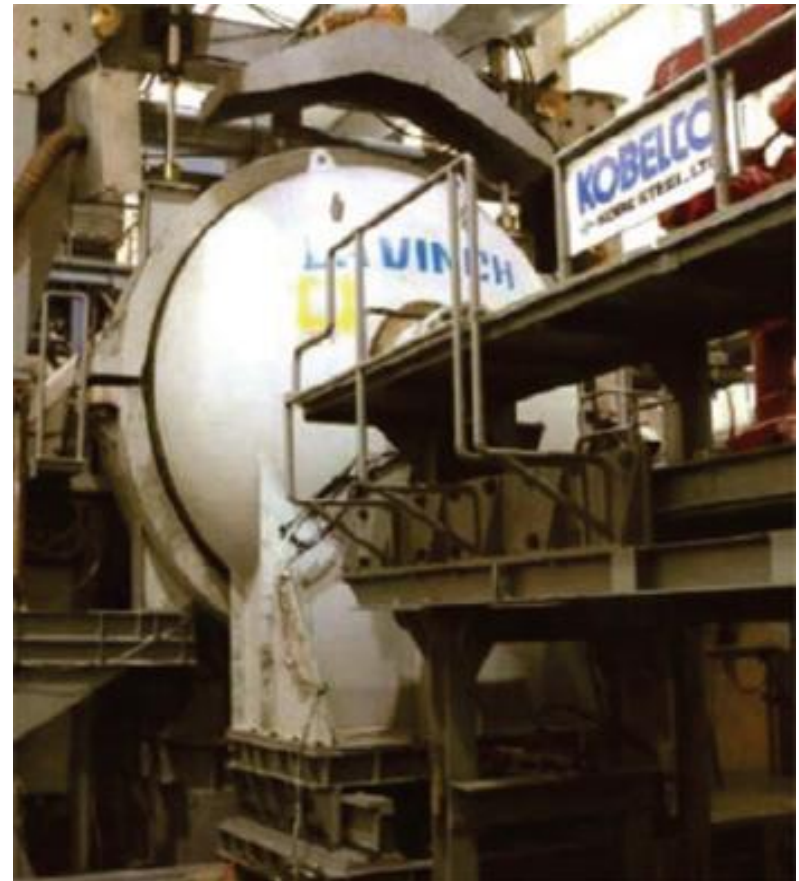
# Rocket Motor Destruction

- Thousands of missile stages open-burned or open-detonated with toxic propellant under bilateral US-RF arms control agreements
- Thousands of tons of toxic fumes and pollutants drift downwind



# What's to be Done?

- Require environmental impact statements and permits for all military programs
- Stop OB/OD and utilize closed burn/detonation practices
- Utilize more controllable technologies





# What's to be Done?

- Expand use of renewable technologies in military practices
- Expand energy efficiency on military bases
- Continue R&D in controllable technologies
- Promote recycling & reuse







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