

A presentation from the 2009 Topical Symposium:

***Energy Security: A Global Challenge***

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By  
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**INSS**



INSTITUTE FOR NATIONAL  
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*“No Energy Security...  
without a Fight”*

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Vice President Strategic Energy Programs

SAIC



# Energy Security Drivers

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- Defense Science Board Report *“More Fight – Less Fuel”* February 2008 (2001 Report)
- Air Force Senior Focus Group on Energy 07
- Army Senior Energy Council 08
- Navy Executive Energy Steering Committee 08
- Marine Corps Energy Initiative 09



# Energy Goals for Military

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- Reduce Consumption
- Increase Efficiency
- Expand use of alternative and renewable energy
- Ensure critical mission capability 24/7/365
- Create a culture of energy awareness

# Federal Energy Mandates

<u>Directive Issues</u>	<u>Energy Performance Target</u>	<u>Source</u>
Installations Energy	Reduce by 3%/year from FY08-15 30% energy reduction by 2015	EO 13423/EISA 2007
Electricity from Renewable Sources	Must be 3% by FY05-09; 5% by FY10-12; and, 7.5% by FY12+	EPAct 2005
Fossil Fuel Use in new/renovated buildings	Reduce 55% by 2010; 100% by 2030	EISA 2007
Hot water in new/renovated buildings solar power	At least 30% of hot water demand from solar hot water heating by 2015	EISA 2007
Non-Petroleum Fueled Vehicles	Increase annually by 10% until 100%	EO13423
Energy Metering	Meter electricity by Oct. 2012; and, Meter natural gas/steam by Oct 2016	EPAct 05/EISA 07

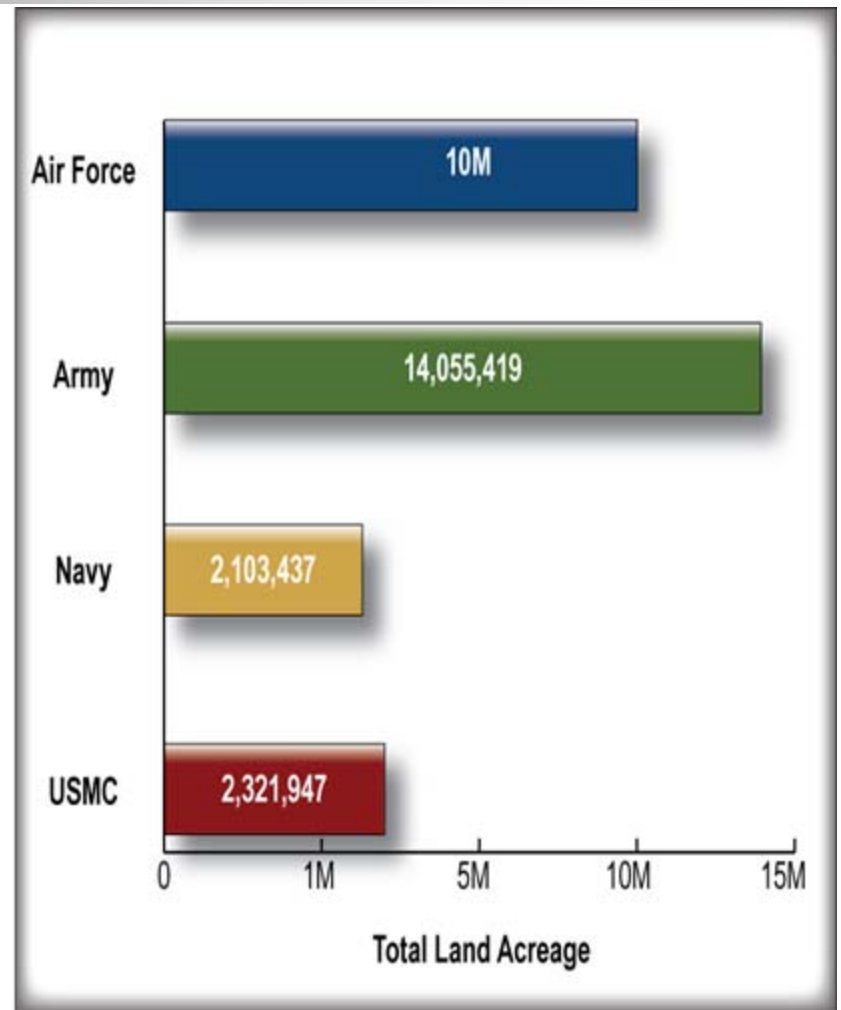
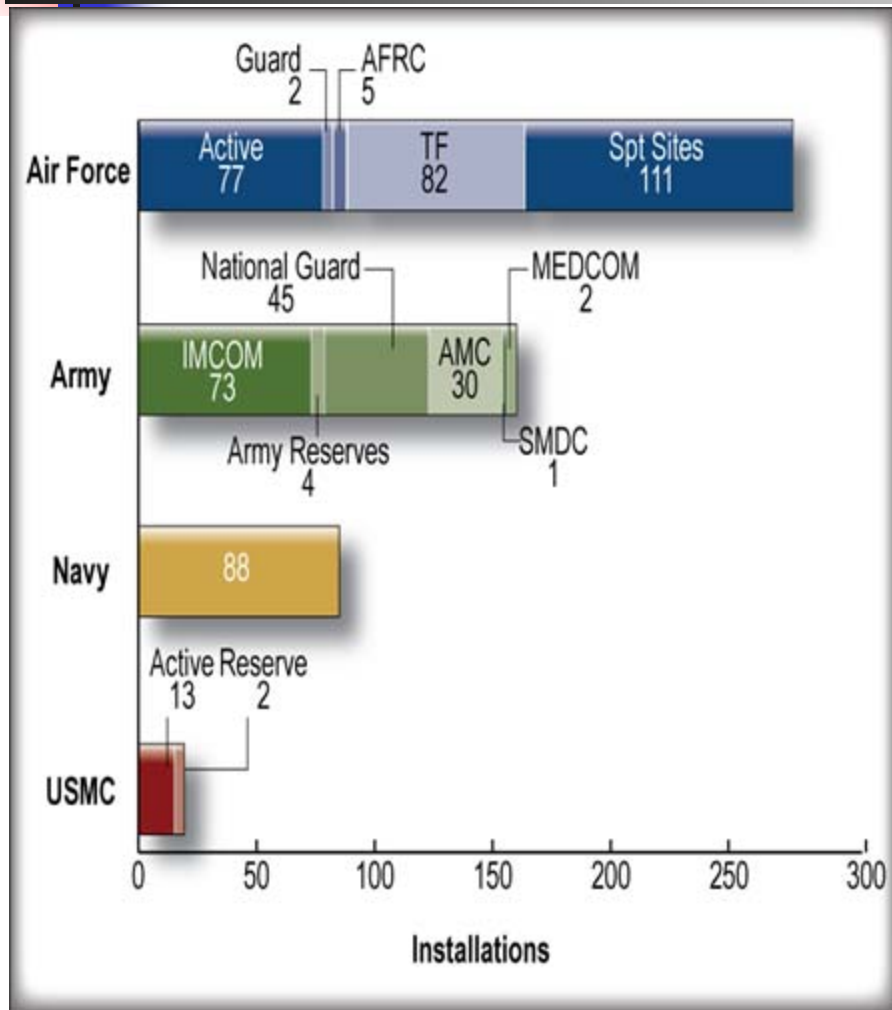
# Major Projects Today & Future



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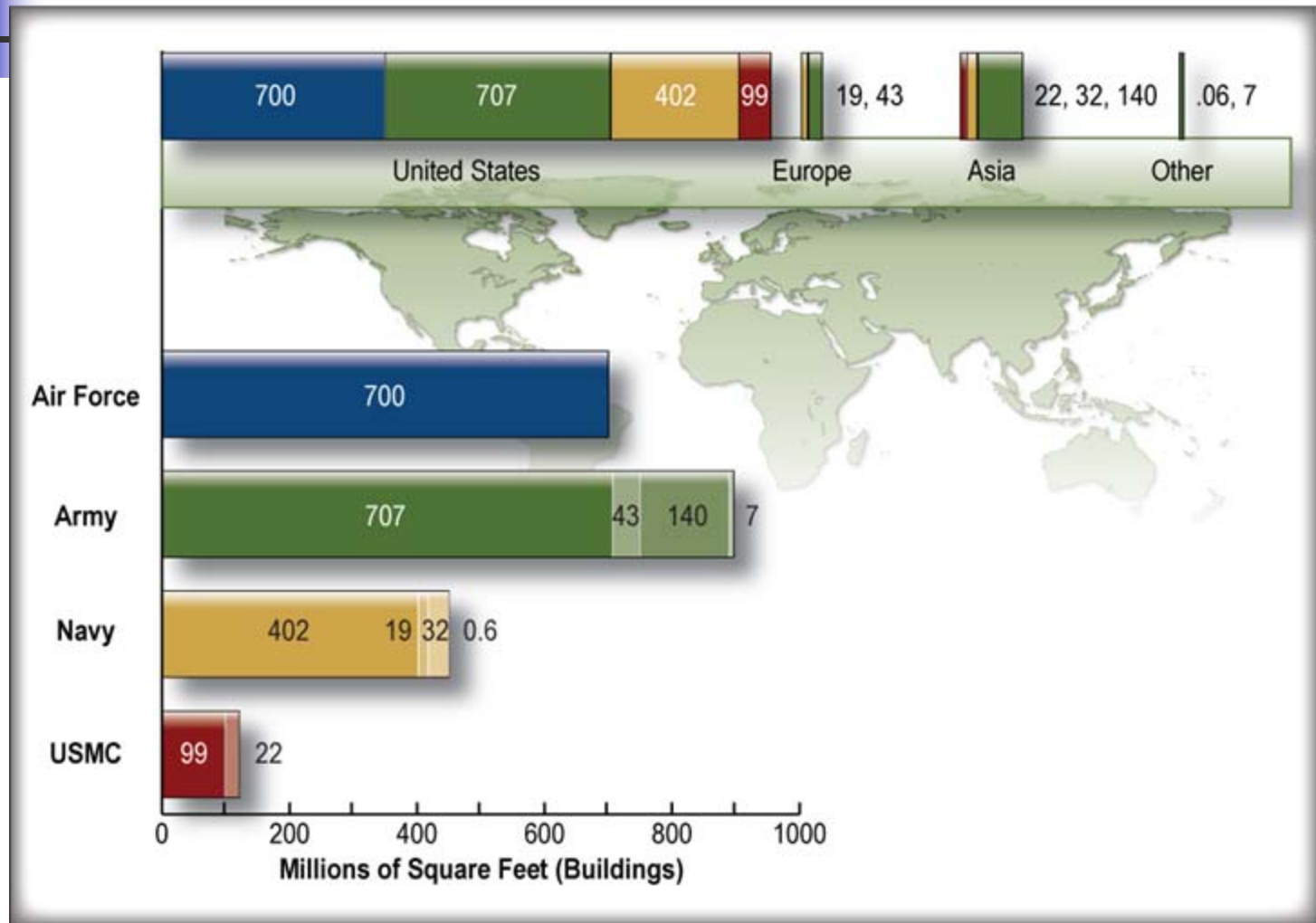
- 1987 Navy NWS China Lake – 200Mw
- 2007 Air Force Nellis AFB – 14.2Mw
- 2009 Army Ft. Irwin – 500Mw
- 2010 Army Hawthorne Depot – 30Mw
- 2010 Marines In-Theatre Programs - ??
- 2010 Air Force Edwards AFB – 300Mw
  
- Non-Infrastructure
  - Air Force, Navy and Army fleet certification on alternative fuels by 2011

# Installations and Land

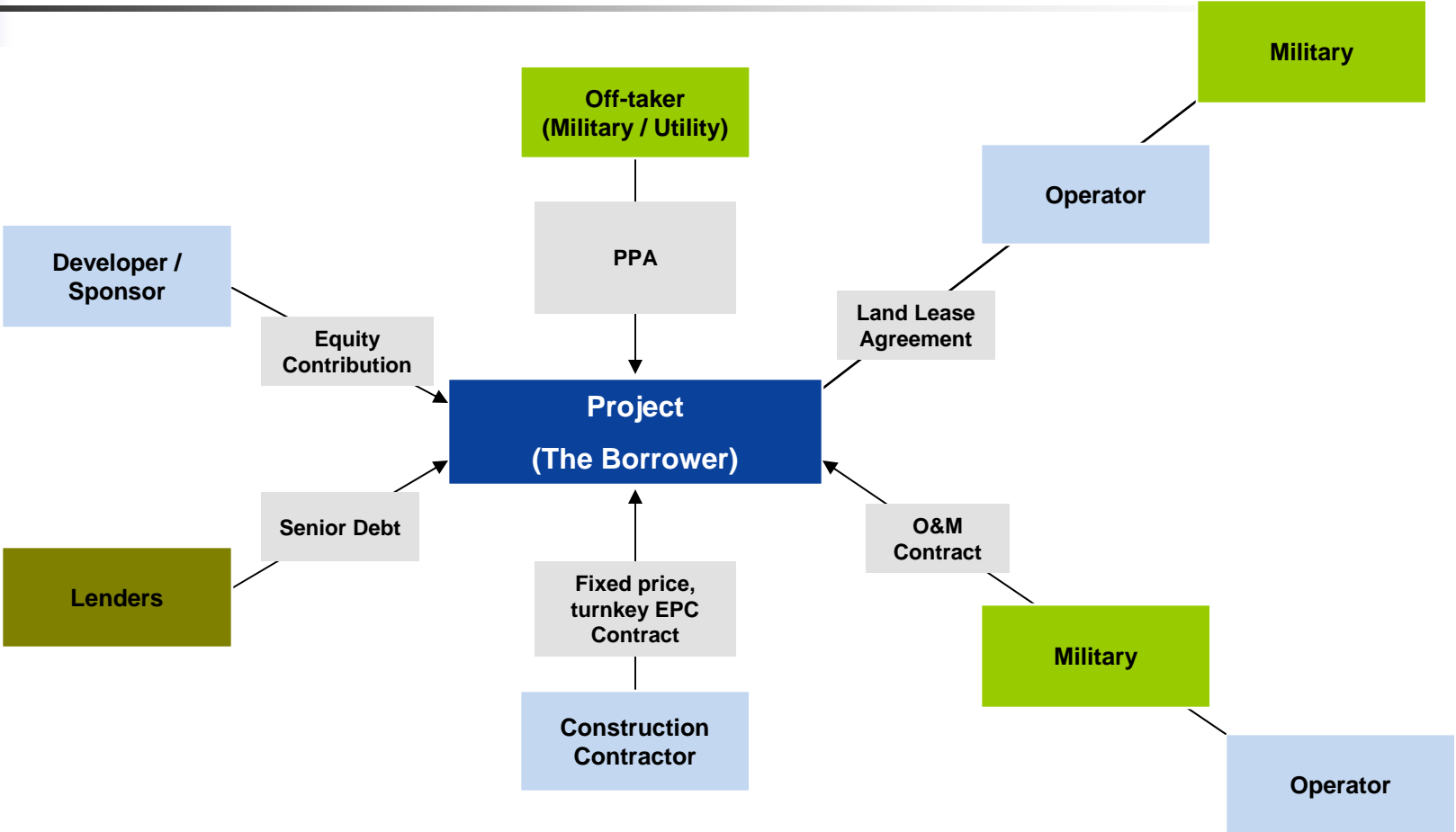




# Buildings (millions of square feet)



# Energy Project structure





# Major Challenges

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- Financial Markets
- Regulatory Markets
- Transmission & Distribution
- OMB Scoring of Projects
- Enterprise Approach by Services
  - Align Policy, Programs, People & Budget

# Thank You!

*"Don't feed the monster"*



*We've tamed some very scary energy problems.*

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