ENERGY CAMPAIGN PLAN

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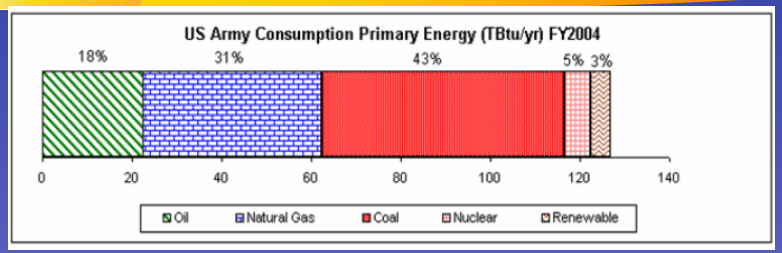
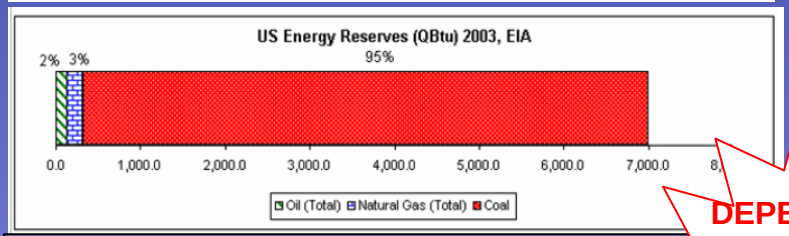
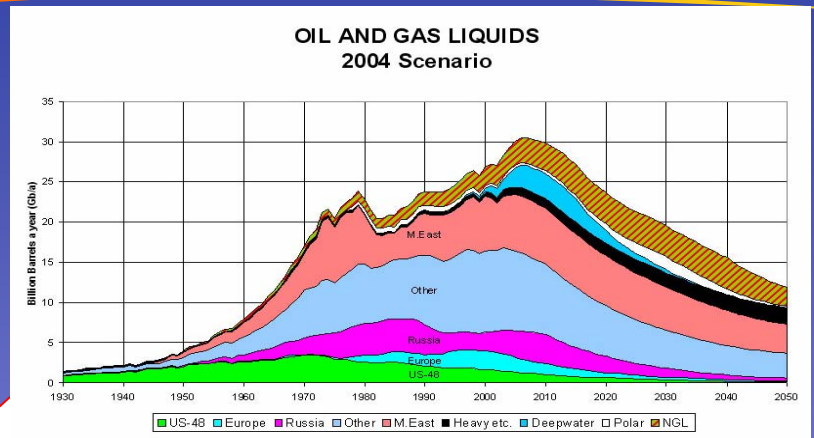
Challenges To Managing The Future

- World population growing: 2006 = 6.5 Billion, by 2030 estimate is 7.9 Billion
- World oil demand up since 2000: Up 7 million barrels/day (mbd), 2 mbd increase in China, 1.4 mbd increase in India.
- Hurricanes Katrina and Rita shut down 27% of US oil refining capacity, production is still off 400,000 barrels/day.
- US oil imports increasing: 33% in 1973, 58% in 2006, current rate will require 70% by 2020.
- In 1973 North America consumed twice as much oil as Asia. In 2005 Asian consumption exceeded that in North America
- US oil consumption up: 20.7 mbd in 2004, 21.1 mbd in 2006.

World Energy Situation



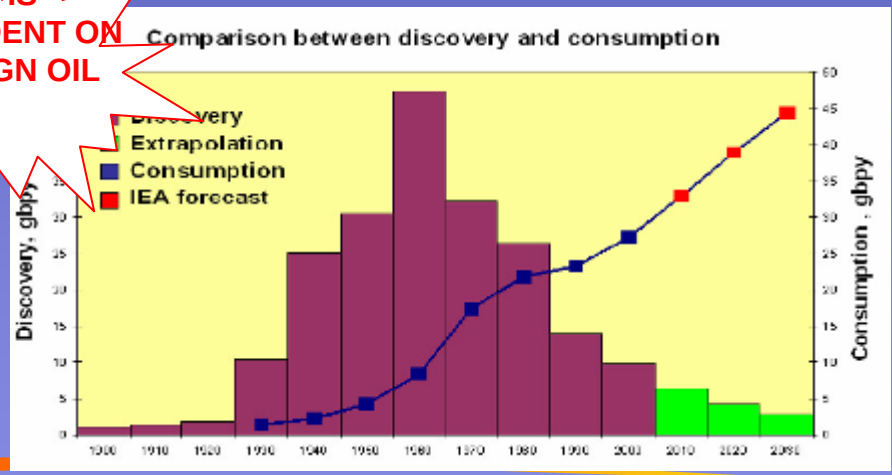




US IS DEPENDENT ON FOREIGN OIL

Army Energy

- 38% Rise in NTV Fuel Use
- 35% of DoD utilities
- 21% of Fed government
- 11% of installations' budget



GovEnergy
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Oil Experts: Contrasting Peak Theories

Peaking Sooner	Peaking Later
There is a growing disparity between increasing production (dues to increasing demand) and declining discoveries of new oil reservoirs.	Heavy investment in new discovery, new technology and refining capacity will increase supply.
OPEC countries are producing at near 100% capacity; spare capacity is almost nonexistent. Supply and demand are almost equally matched.	Advanced recovery technologies will extend the lives of oil reservoirs. Technology will increase supply and decrease demand.
Consumption levels are increasing alarmingly, at an unsustainable rate given the amount of oil currently estimated to be in the ground.	Non-traditional oil sources, such as oil shale, tar sands and heavy crude, are now more marketable due to advances in technology, and will increase supply.
Oil reserves data is an estimated guess at best and is unaudited. Many countries have cause to over-inflate reserve estimates in order to increase profit share.	Oil reserves data is an estimated guess at best, and can therefore not be used to determine when oil will peak.
No alternative energy source yet exists to take the place of oil.	Market forces will ensure that by the time oil peaks, viable alternative energy sources will be developed.
Oil has already peaked or will peak before 2010, and, without mitigation, the global consequences will be severe.	Oil will not peak until after 2025, and the transition from oil to alternative sources will be smooth.

Energy Strategy

Establishes vision of Energy Program built on five initiatives:

- ✓ ***Eliminate energy waste in existing facilities;***
- ✓ ***Increase energy efficiency in renovation and new construction;***
- ✓ ***Reduce dependence on fossil fuels;***
- ✓ ***Conserve water resources; and***
- ✓ ***Improve energy security.***

Next Step: Implement -- "*Energy and Water Campaign Plan*"

Initiative 1: Eliminate Energy Inefficiencies

- *Establish and gain funding support for energy initiatives & projects*
- *Establish energy use accountability at all levels*
- *Provide Full Time trained energy staff*
- *Revamp energy rewards and recognition programs*
- *Foster sustainable construction standards*
- *Develop energy management plans*
- *Develop information management systems and controls*

Initiative 2: Increase Energy Efficiencies

- *Set energy performance criteria for new & renovated projects*
- *Improve energy monitoring to meet goals of EPACT 2005*
- *Enforce requirement for energy savings to be retained and used for energy programs*
- *Reduce utility costs through controlled price volatility & utility procurements*
- *Institute peak load management practices*
- *Incorporate Sustainable Design and Development Standards using LEED*
- *Use a formal guide for energy assessments*

Initiative 3: Reduce Dependence on Fossil Fuels

- *Use renewable energy resources when life-cycle cost effective*
- *Increase use of renewable energy through investment in technical advancements*
- *Reduce fossil fuel usage by:*
- * *Expanded use of alternative fueled vehicles*
- * *Increased use of alternative methods of space and hot water heating*
- *<u>Modernize central heating & cooling energy systems</u>*

Initiative 4: Reduce Water Use to Conserve Water Resources

- ***Reduce water storage and distribution system losses***
- ***Reduce domestic water consumption by employing innovative methodologies and technologies (boilers, cooling towers, ETC)***
- ***Use increased efficiency plumbing fixtures***
- ***Alternative irrigation techniques (non-potable water) & zero landscaping***
- ***Reclaim and recycle water including rainwater and condensate***

Initiative 5: Increase Energy Security

- ***Develop viable energy security plans and water vulnerability assessments that are incorporated into force protection plans***
- ***Insure that privatized utility systems meet reliability and security criteria***
- ***<u>Diversify energy portfolio, to include distributed generation, particularly at critical mission facilities</u>***

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