



# **Energy**

## **Developing and Implementing a Successful Energy Management Program**

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### **Energy 2003**

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# New Age of Energy Security

## Conclusions

- ◆ DoD - long step recognizing importance of U&E
- ◆ Crucial backbone
- ◆ Proactive
- ◆ Need your input / help / innovations
- ◆ To get to the next level with energy / energy security, we must do it together

## Advantages

- ◆ Achieve through comprehensive energy strategy
  - Infrastructure modernization
  - Energy source flexibility
  - Energy waste reduction
- ◆ Proactive
  - Risks → Our management
  - Mission accomplishment

## Challenges / Drawbacks

- ◆ New territory to explore
- ◆ More risky -- from inexperience
- ◆ Requires investment

## Summary

- ◆ Energy Reliability = Energy Security
- ◆ Energy Reliability supports Readiness
- ◆ We need your partnership

A TIME FOR  
TRANSFORMATION

## Plan/Proposal

- ◆ Modernize the infrastructure
  - ◆ Invest in
    - Energy conservation
    - Energy efficiencies
    - Demand reductions
  - ◆ Exploit flexible energy sources
- ➔ Focus on leadership / execution / results

## Introduction

- ◆ Statistics
  - DoD infrastructure
  - DoD commodity costs
  - DoD size
- ◆ VP's study/report
- ◆ WIIFT
  - No longer just throwing our weight around – now demonstrating
    - Leadership
    - Execution
    - Results

## Problem

- ◆ Old school
  - Manage consumption
  - Manage goals
  - React to industry
- ◆ Stovepipe treatment

## BUT

- Will not lead us to the future
- Will not leave us much of a legacy to enjoy
  - Will fall behind in transformation

## Facts at Hand

- ◆ CA energy crisis
- ◆ Poor state of infrastructure
- ◆ Critical infrastructure
- ◆ Poor information management
- ◆ Energy source dependence



# *Utilities and Energy Management*

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## **Vision**

**100 %  
reliability  
of utility  
services  
to the  
Warfighter**



# *Perspectives*

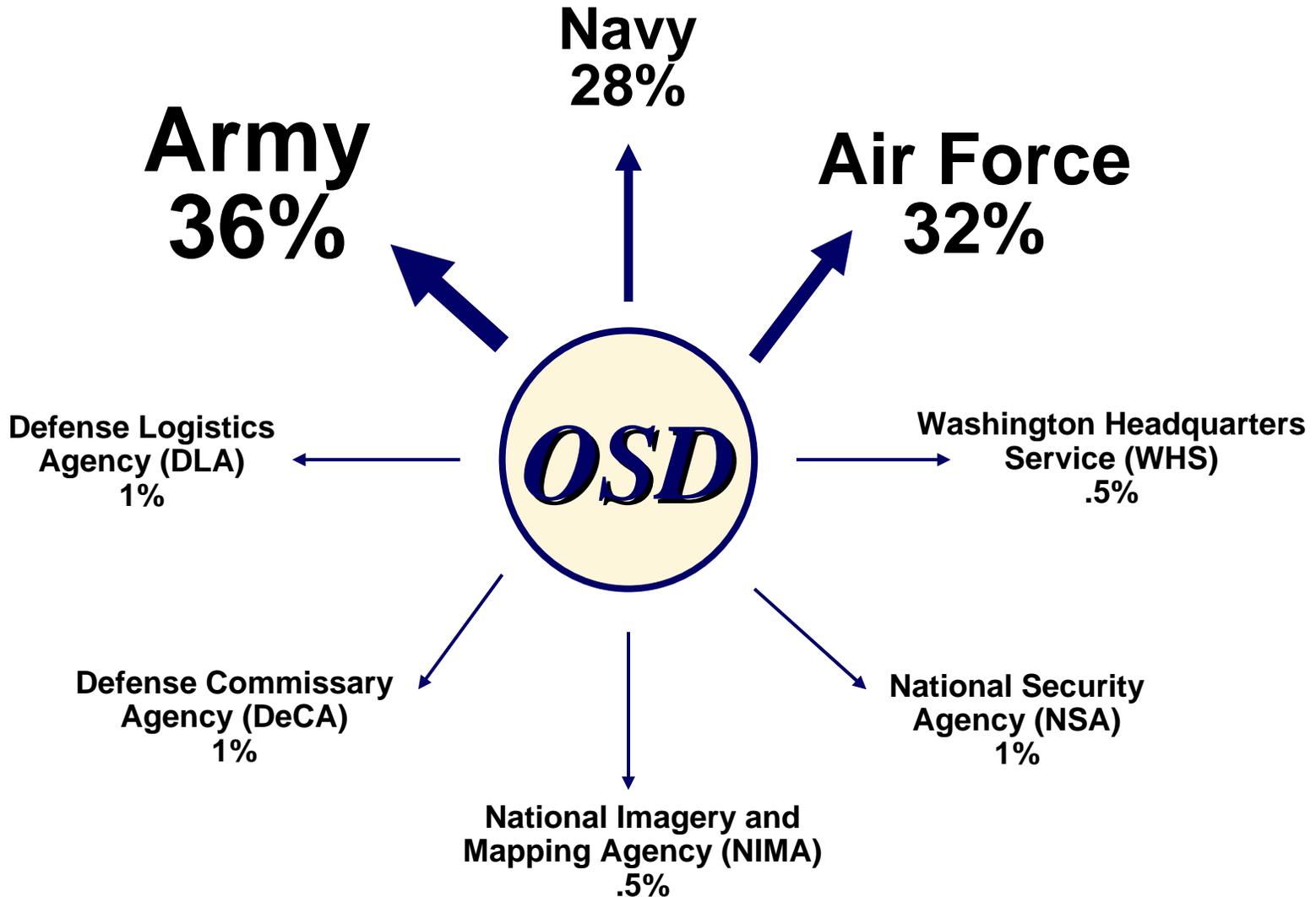
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## **DoD Infrastructure**

- ◆ **Value** **\$600 B**
- ◆ **Buildings and structures** **621,850**
- ◆ **Square Miles** **46,425**

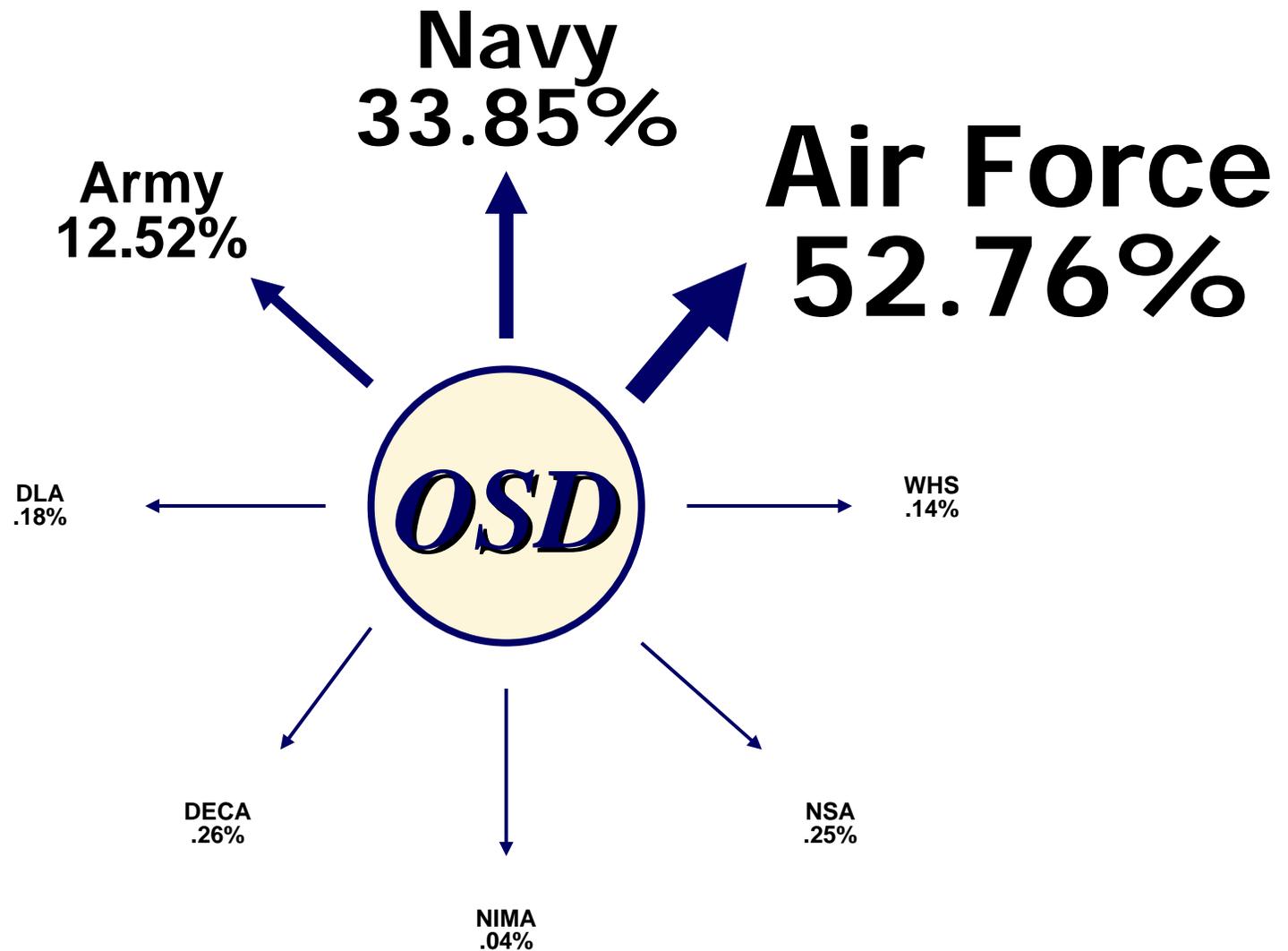


# *Military Services and Defense Agencies (Buildings)*





# *Military Services and Defense Agencies (Total)*

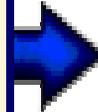




# *Utilities and Energy Management*

## **Mission**

Ensure that the DoD utility infrastructure is secure, safe, reliable and efficient, that energy and water commodities are procured effectively and efficiently, and that the components maximize energy and water conservation efforts.

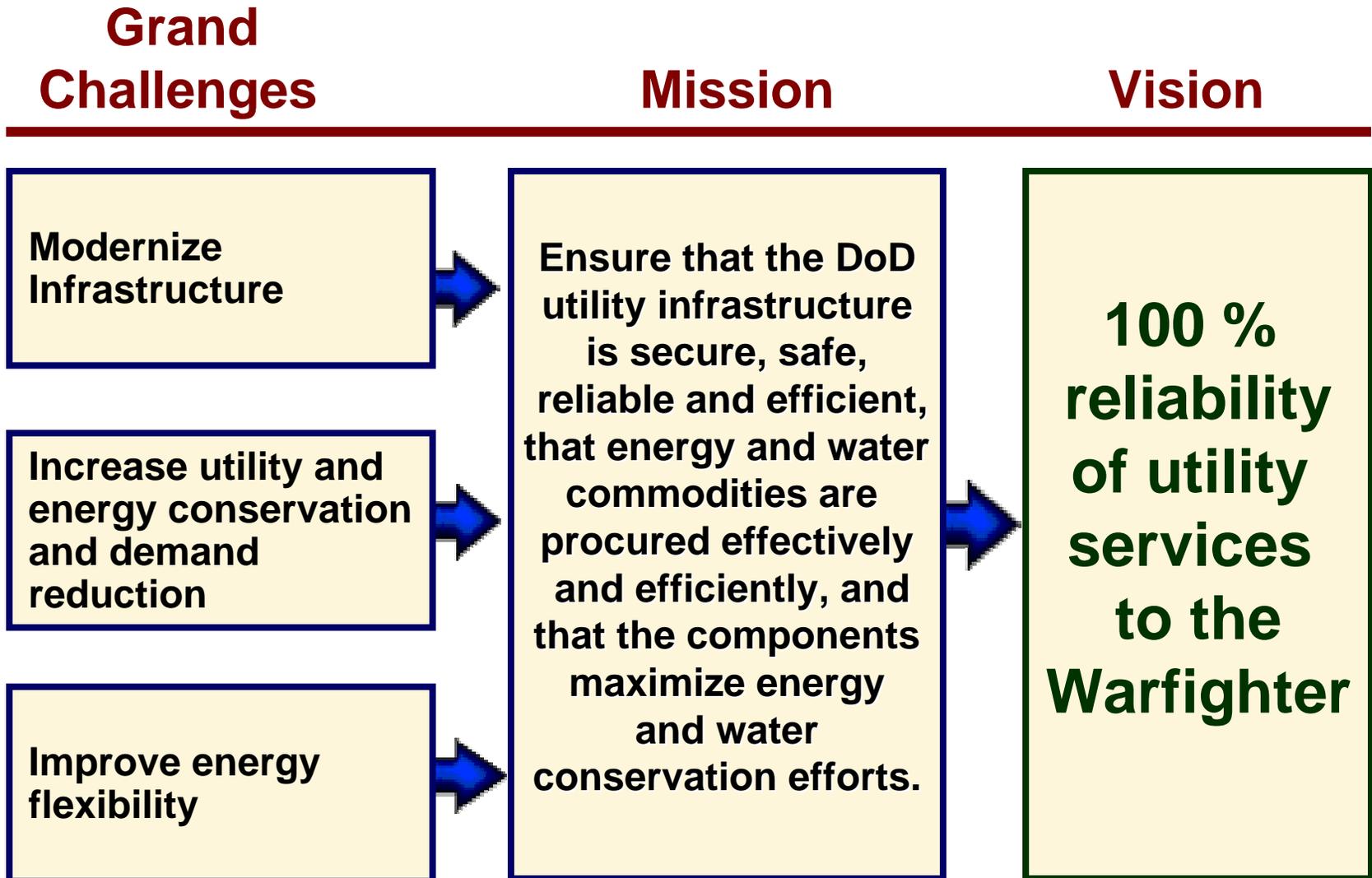


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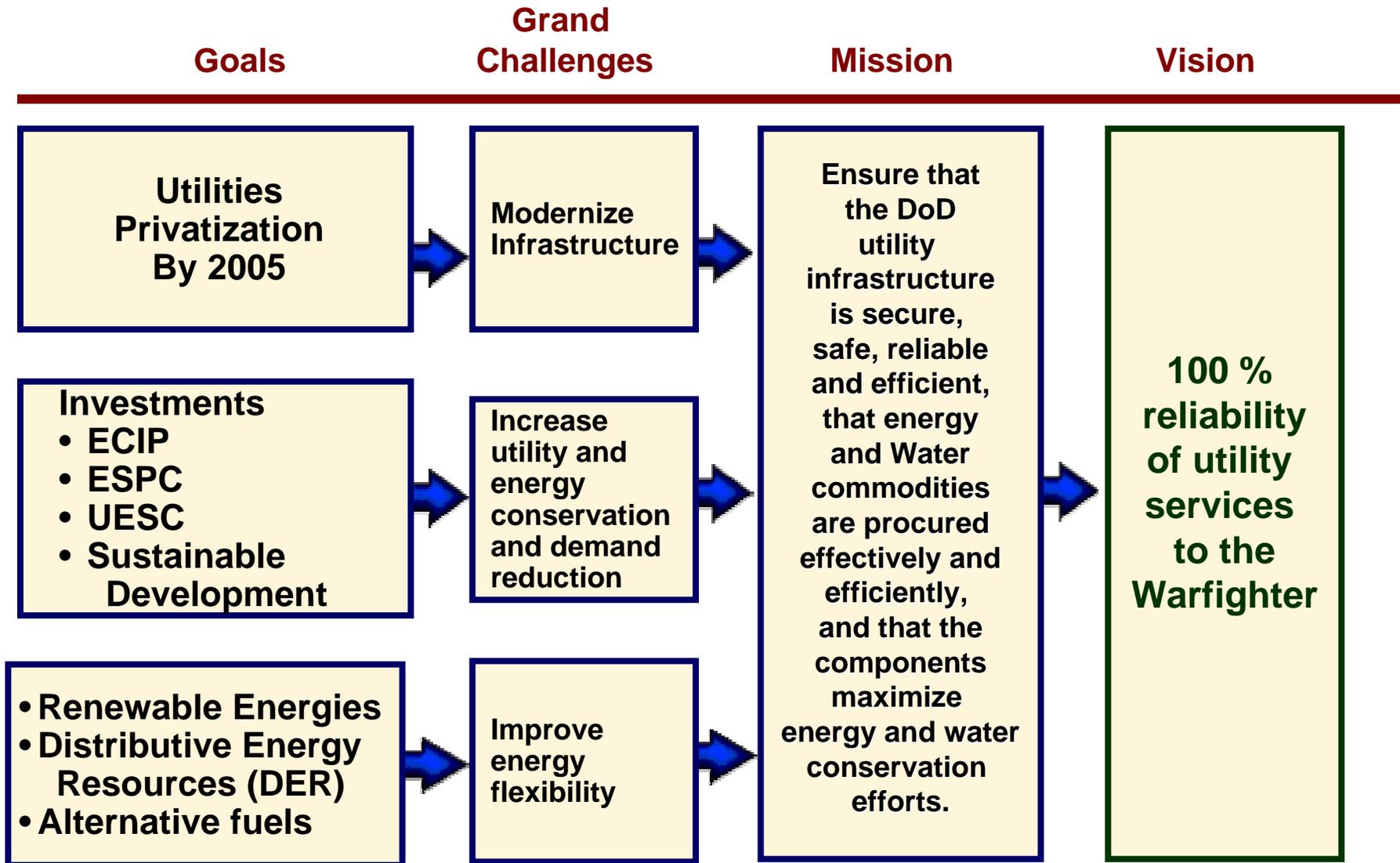


# *Utilities and Energy Management*



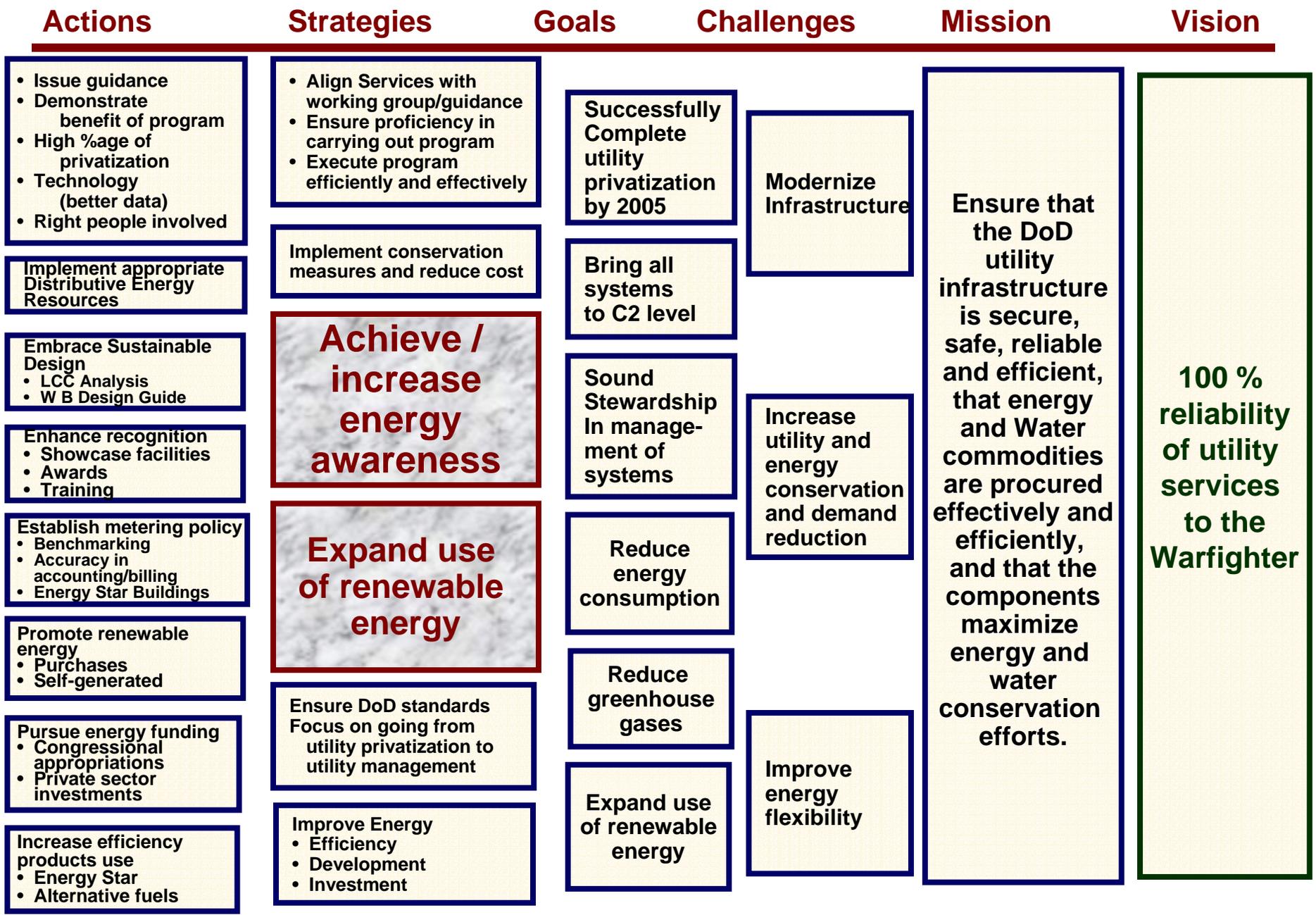


# *Utilities and Energy Management*

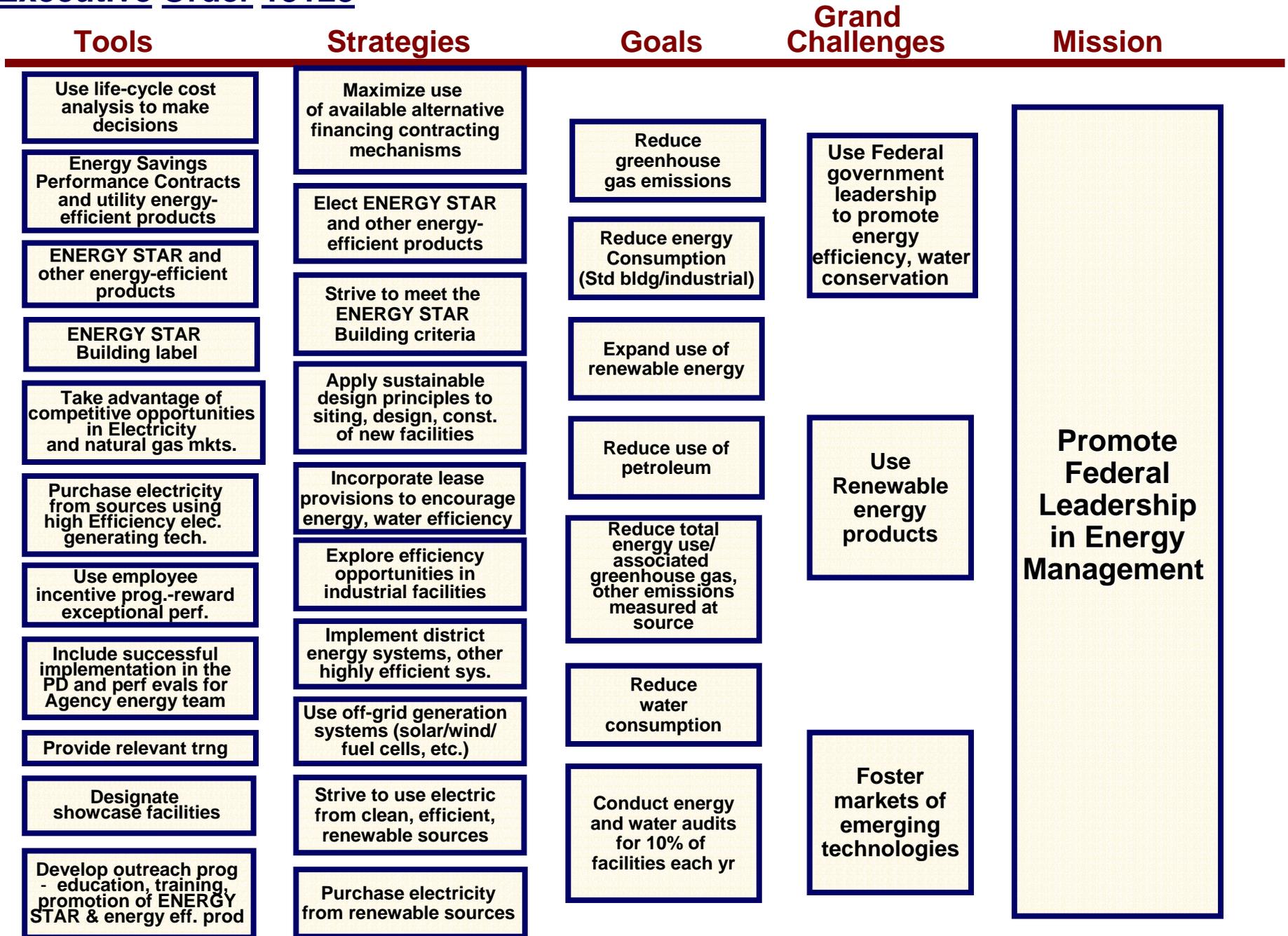


# DoD ENERGY POLICY

## Initiatives



# Executive Order 13123



# NATIONAL ENERGY POLICY

## Initiatives / Recommendations

## Goals

## Grand Challenges

## Mission

## Vision

- Fed Agencies conserve energy/reduce peak demand
- Increase \$ - renewable energy/energy efficiency
- Income tax credit hybrid/fuel cells
- Extend Energy Star
- Fund intelligent trans. sys/clean buses/fuel cell buses
- Tax incentive CHP tech.
- Establish CAFÉ stds.

Modernize conservation

Wise use of energy

- Improve pipeline safety/expedite permitting
- Expedite permits for energy-related projects/establish task force
- Grant elect. Transmission line (right-of-way)
- Enact energy legislation-Promote competition/new generation/renewable energy/reliability
- Improve interstate transmission
- Expand R&D on trans-mission reliability/superconductivity

Modernize energy infrastructure

Repair/expand energy infrastructure

- Issue EO – energy impact statement
- Open ANWR
- Earmark \$1.2B from ANWR for alternative/renewable
- Expand alternative fuel tax (wind/biomass)
- Provide \$2 billion – clean coal technology
- Streamline hydropower
- Expansion of nuclear energy

Increase energy supply

- Enact “multi-pollutant” legislation
- Increase technology exports
- Est. “Royalties Conservation Fund” – ANWR revenue
- Implement truck idling guidelines

Accelerate protection / improvement of environment

Increase supply / Protect environment

- Dedicate \$ Low Income Home Energy Asst Program
- Double funds for DoE Weatherization Assistance Prog
- Direct Fed Emergency Mgt Adm prepare – emergencies
- Support North American Energy Framework – invest/permits w/ Mexico, Canada; Fed agencies expedite permits – pipeline Alaska to lower 48

Increase Energy security

A comprehensive long-term strategy that uses leading edge technology to produce an integrated energy, environmental and economic policy.

Reliable, affordable, and environmentally sound energy for America's future.



# *Installation Energy and Water Management Framework*

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## **Implementation strategy**

- ◆ **Awareness programs**
- ◆ **Energy efficient investments**
- ◆ **Energy security/flexibility**
- ◆ **Conservation measures**
- ◆ **Infrastructure modernization**



# Statistics



By FY02 DoD had reduced building energy use by 25%, since 1985

## Consumption \$ 6.8 B

Vehicles/Ships	70%
Buildings	25%
Industrial	4%

## Goals

Building energy per GSF  
↓ 30% by 2005; 35% by 2010  
Industrial / lab energy  
↓ 20% by 2005; 25% by 2010

## DoD Performance

25.4%  
24.5%



## Performance Awards

Presidential	DoD received 3 of 5 awards
FEMP Awards	DoD received 29 of 54 awards (Army 13; DON 12; AF 4)



# ***Utilities and Energy Governance***

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## **Installations Policy Board**

**Utilities  
Privatization  
Working Group**

**Energy  
Management  
Working Group**



# *Benchmarking for Success*

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**GM**



**DoD**



**Disney**

## **Best practices in energy**

- ◆ **Allows cooperative environment to share "best in class"**
- ◆ **Provides reference point for comparison of performance / lessons learned**
- ◆ **Facilitates process improvement**



# *In Summary*

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