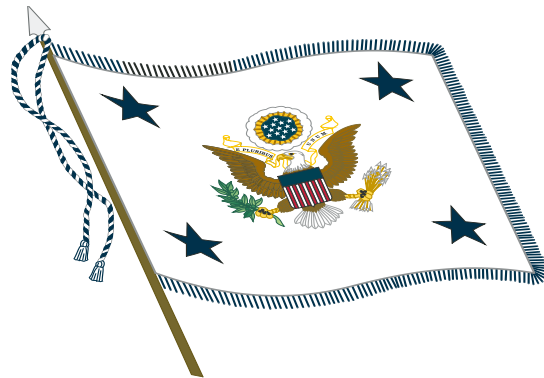




# Assistant Secretary of the Army Installations, Energy & Environment



**Honorable Katherine Hammack**

**DOE Energy Exchange  
11 August 2016**

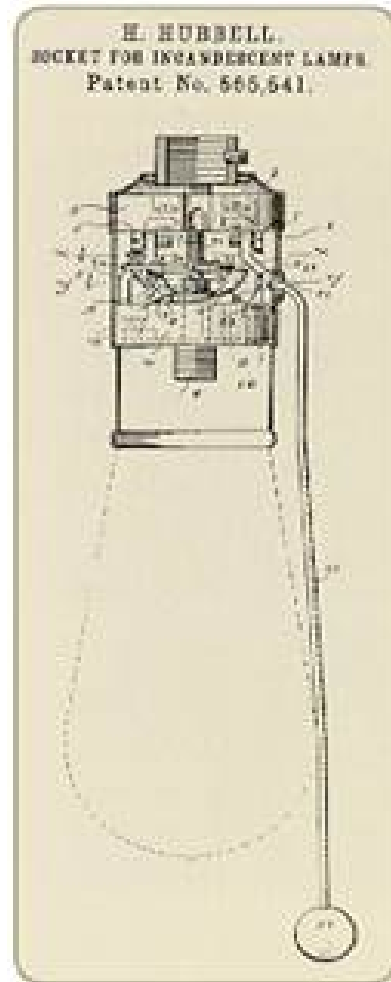
*Assistant Secretary of the Army (Installations, Energy & Environment)*



- Energy Technologies
- Better Building Energy Management
- Integrated Energy
- Renewable Energy

# 11 August – this day in history

1896



2016





# Renewable Energy



- Office of Energy Initiatives
  - Develop, implement and oversee **large-scale** renewable
  - Projects 10MW or greater
  - Uses existing DoD land-use and third-party financing authorities
  - Install 1GW of renewable energy projects by 2025



York



Reserve Center, Arizona



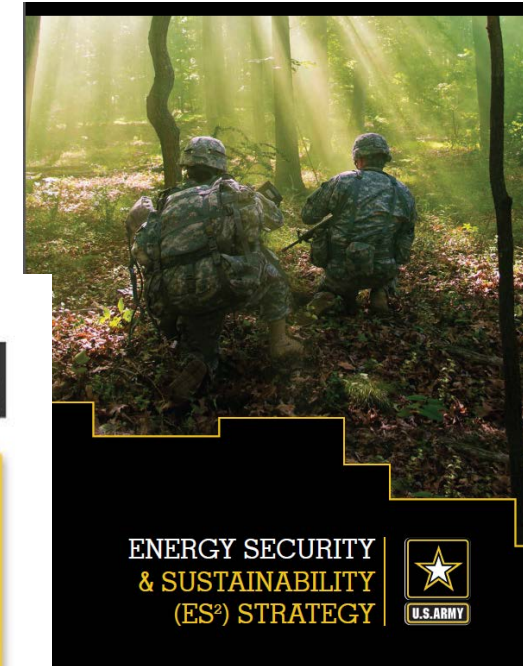
# ES<sup>2</sup> Strategy



## Purpose:

Army's strategic roadmap for energy and sustainability plans, programs and processes

Adopts security, resiliency, and future choice as organizing approaches





# ES<sup>2</sup> Strategic Goals



1. Inform Decisions
2. Optimize Use
3. Assure Access
4. Improve Resilience
5. Drive Innovation





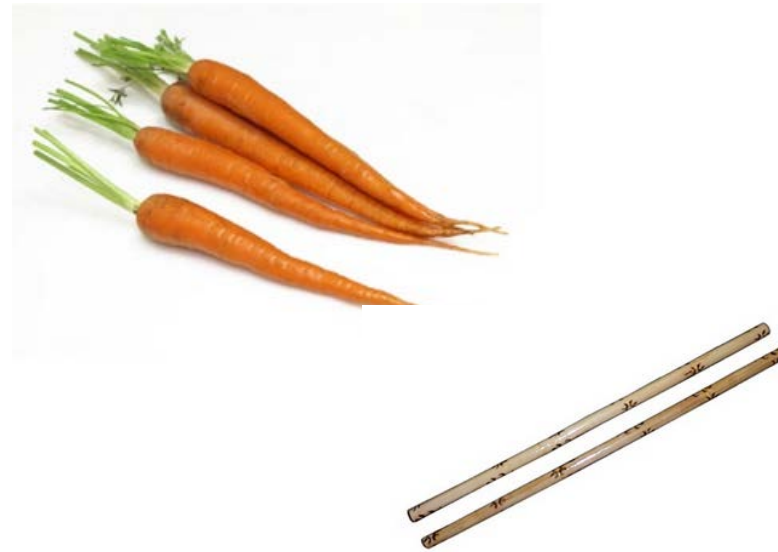
# ES<sup>2</sup> Strategy 2025



## 1. Inform Decisions

- Incorporate Resource Sustainability into Plans and Processes
  - New Executive Order 13693
  - Energy/greenhouse gases (GHG)
- Educate and Train
  - Individual recognition – positive and negative
- Lead by Example

## Behavioral Change





# ES<sup>2</sup> Strategy 2025



## 2. Optimize Use

- Decrease Resource Demand
  - ESPC's
- Increase Resource Efficiency
  - ITEP, Net Zero
- Support Resource Recovery
  - Combined Heat and Power







# ES<sup>2</sup> Strategy 2025



## 3. Assure Access

- Diversify and Expand Resource Supply
  - Renewable Energy
- Maximize Flexibility in System Design and Use
  - Microgrids
- Reduce Vulnerability and Risks
  - Physical and Cyber



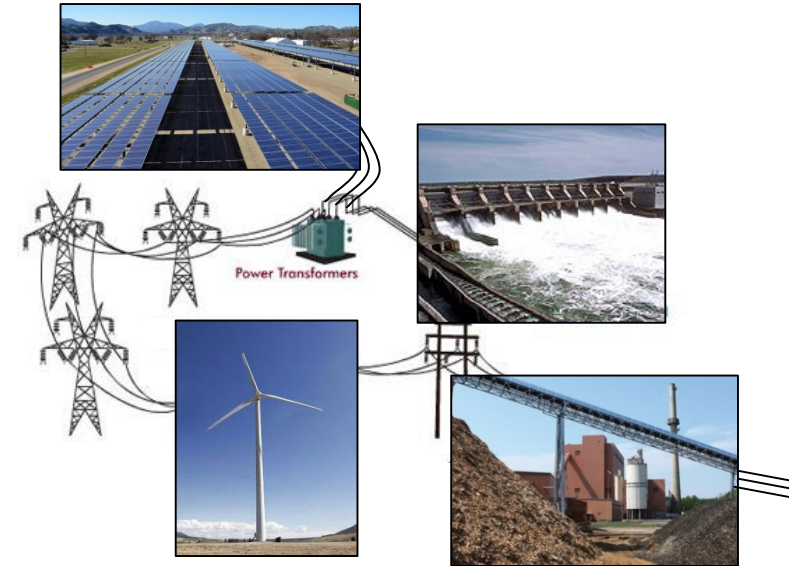


# ES<sup>2</sup> Strategy 2025

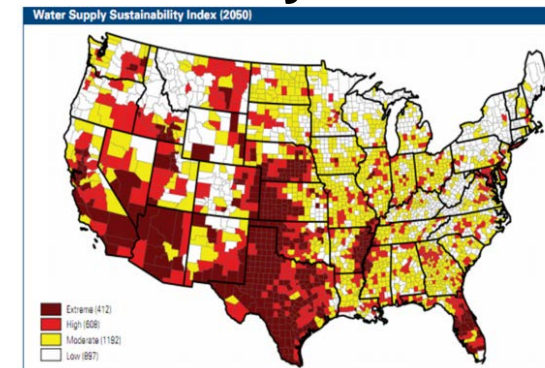


## 4. Build Resiliency

- Maintain Continuity of Operation
  - Integration of technologies and information
- Foster Adaptability
  - Diversity of options
- Adapt to Uncertain, Changing Conditions
  - Climate Change



## Hot & dry climate



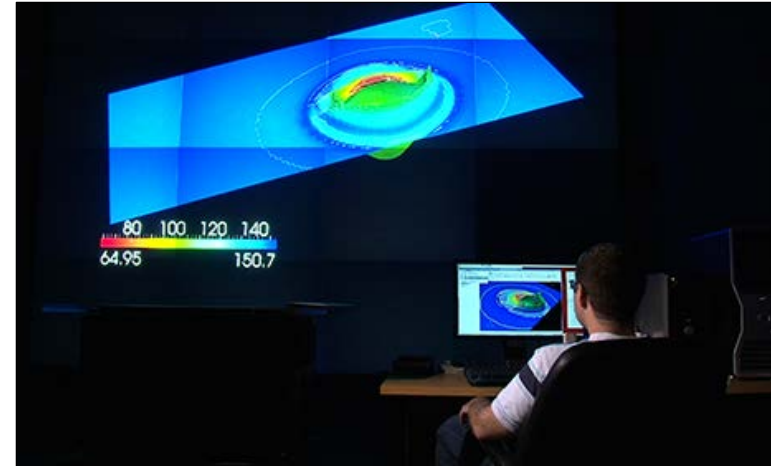


# ES<sup>2</sup> Strategy 2025



## 5. Drive Innovation

- Leverage Expertise
  - Army scientists and engineers
- Expand Collaboration
  - academia, labs, industry
- Continuously Improve
  - Continuous process improvement





**ARMY STRONG**