Traditional Army Installation Power & Energy Requirements

Department of the Army

Army Energy Strategy
for Installations

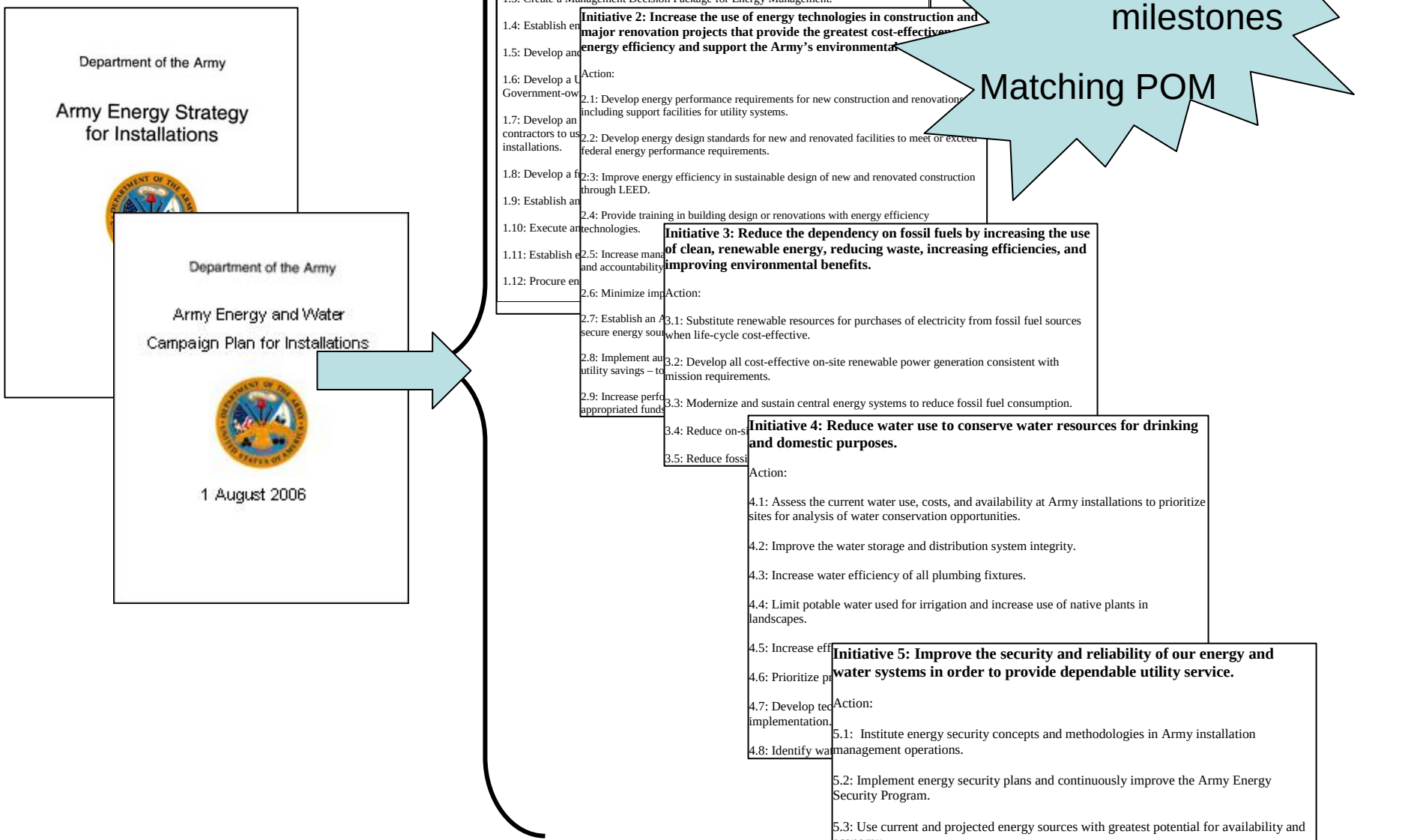
8 July 2005

Department of the Army

Army Energy and Water
Campaign Plan for Installations

1 August 2006

http://army-energy.hqda.pentagon.mil/programs/plan.asp


Department of the Army
Army Energy Strategy for Installations
Department of the Army
Army Energy and Water Campaign Plan for Installations
1 August 2006
Initiative 1: Eliminate energy inefficiencies that waste natural and financial resources.
Action:
1.1: Develop effective national, regional, and installation energy management plans.
1.2: Provide full-time, trained, and certified staff to lead the energy and water management program and its initiatives.
1.3: Create a Management Decision Package for Energy Management.
Initiative 2: Increase the use of energy technologies in construction and major renovation projects that provide the greatest cost-effectiven energy efficiency and support the Army's environmental
Action:
2.1: Develop energy performance requirements for new construction and renovations including support facilities for utility systems.
2.2: Develop energy design standards for new and renovated facilities to meet or exceed federal energy performance requirements.
2:3: Improve energy efficiency in sustainable design of new and renovated construction through LEED.
2.4: Provide training in building design or renovations with energy efficiency technologies.
Initiative 3: Reduce the dependency on fossil fuels by increasing the use of clean, renewable energy, reducing waste, increasing efficiencies, and improving environmental benefits.
Action:
3.1: Substitute renewable resources for purchases of electricity from fossil fuel sources when life-cycle cost-effective.
3.2: Develop all cost-effective on-site renewable power generation consistent with mission requirements.
3.3: Modernize and sustain central energy systems to reduce fossil fuel consumption.
Initiative 4: Reduce water use to conserve water resources for drinking and domestic purposes.
Action:
4.1: Assess the current water use, costs, and availability at Army installations to prioritize sites for analysis of water conservation opportunities.
4.2: Improve the water storage and distribution system integrity.
4.3: Increase water efficiency of all plumbing fixtures.
4.4: Limit potable water used for irrigation and increase use of native plants in landscapes.
Initiative 5: Improve the security and reliability of our energy and water systems in order to provide dependable utility service.
Action:
5.1: Institute energy security concepts and methodologies in Army installation management operations.
5.2: Implement energy security plans and continuously improve the Army Energy Security Program.
5.3: Use current and projected energy sources with greatest potential for availability and economy.
130 pages of tasks, milestones
Matching POM

AR 11-27

AR 420-21

Energy Mgt Plns

Metering Plan

Utilities Modernization

AR 420-49

ESPC Guidance

Utilities Procurement

Utilities Privatization

Sustainable Design

ECIP Guidance

Code of Fed Regs

EPAct 2005

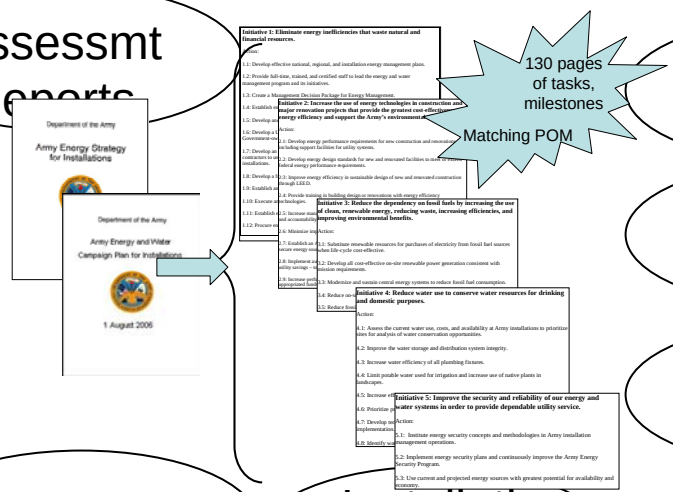
Renewables

Corrosion Program

Utilities Svcs Reimbursement

Annual Energy Rpt

Assessmt Reports



Energy Security

Water Conservation

Sec Army Energy Awds

Water Mgt

DoDI 4170.11

AEWRS

Energy Star

Exec Orders

CEM

FEMP

Installation Audits

PREP

UFCs

Energy 2007

3rd Wkshp Energy Eff'y

Energy Showcase Awd

UESC

Installation Design Stds

MCA

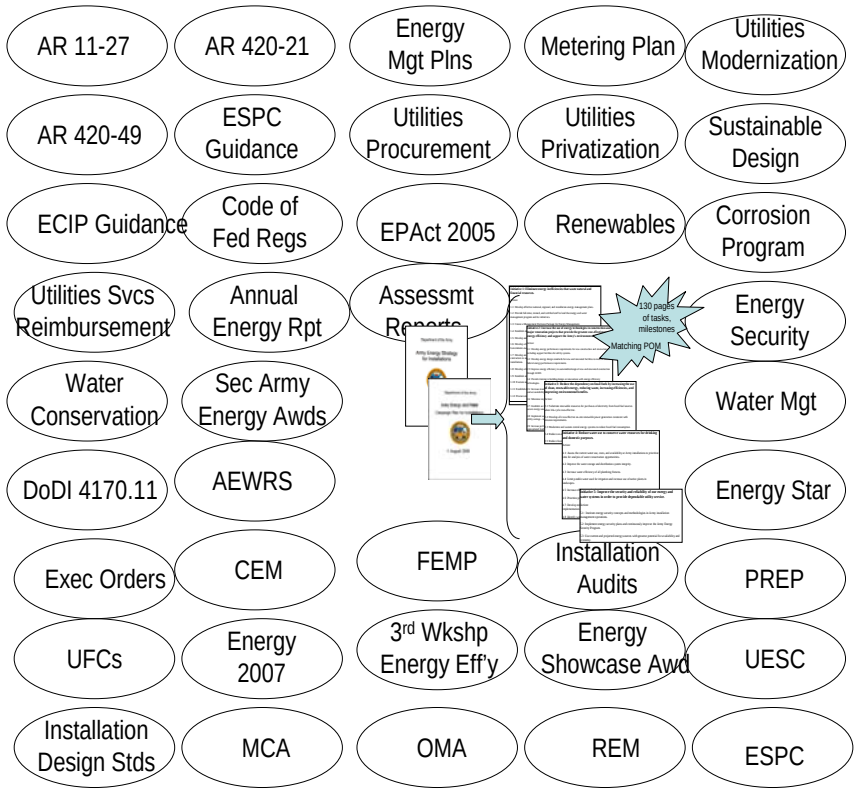
OMA

REM

ESPC

Challenge – Dealing With & Benefiting from all of these Parallel Requirements & Initiatives

- Installations served by
  - ACSIM & IMCOM
  - USACE Districts, Labs, HNC
  - DOE Labs
  - Contractors
  - Etc., Etc
- How prioritize/proceed?
- Meetings, meetings?
- AKO, EKO, other web sites?
- How fund today/tomorrow?



All views and ideas are welcomed for a logical 'way forward'

Objectives for Today's Session

- Forum for Energy Managers, IMCOM, ACSIM, engineers and researchers from the Corps of Engineers to discuss:
  - How to collectively reach the Army Energy Efficiency goals in building retrofit projects & in new construction
  - What tools do we have and what are we missing: technical, organizational, and financial to optimally achieve these goals for the whole Army…..given that central funding and human resources are limited
  - What are the lessons collectively learned at different installations, Corps districts, HQ, etc and what are the best ways to disseminate these experiences