

U.S. Army Engineering and Support Center, Huntsville

Executive Order 13693: *Federal Sustainability in the Next Decade*

Jeff Watts

Chief, Energy Planning Branch

U.S. Army Engineering and Support
Center, Huntsville



EO 13693

Summary of Requirements

➤ **Goals:**

- Agency Green House Gas (GHG) - Reduce agency Scope 1 (all direct GHG) and 2 (indirect GHG emissions from consumption of purchased electricity, heat or steam) GHG emissions by at least 40% by 2025
 - Baseline – relative to a fiscal year 2008 baseline
- Agency Sustainability - Reduce Building Energy Use Intensity (EUI) measured in BTU/SF by 2.5 percent annually through end of fiscal year 2025
 - Baseline – Agency’s building use in fiscal year 2015
 - Utilize Agency progress to-date
- Foster innovation
- Reducing spending
- Strengthen communities

➤ **How:**

- Increase efficiency
- Improve environmental performance
- Use remote building energy performance assessment auditing technology



❖NOTE: Scope 3 – Other indirect emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. T&D losses) not covered in Scope 2, outsourced activities, waste disposal, etc.



EO 13693 Contents

- Revokes and builds on EO 13514 and EO 13423 and others
- GHG and Sustainability Goals
 - ❑ Building efficiency and management
 - ❑ Energy portfolio, including clean and renewable alternatives
 - ❑ Water use efficiency
 - ❑ Fleet efficiency
 - ❑ Sustainable acquisition and supply chain GHG management
 - ❑ Pollution prevention
 - ❑ Electronic Stewardship
- Regional and cross-agency coordination
- Employee training
- Federal facility climate preparedness and resilience
- Prescribed duties for
 - ❑ CEQ Chair
 - ❑ OMB Director
 - ❑ Federal Chief Sustainability Officer
 - ❑ Principal Agencies
 - ❑ Contributing Agencies
 - ❑ Agency Chief Sustainability Officers



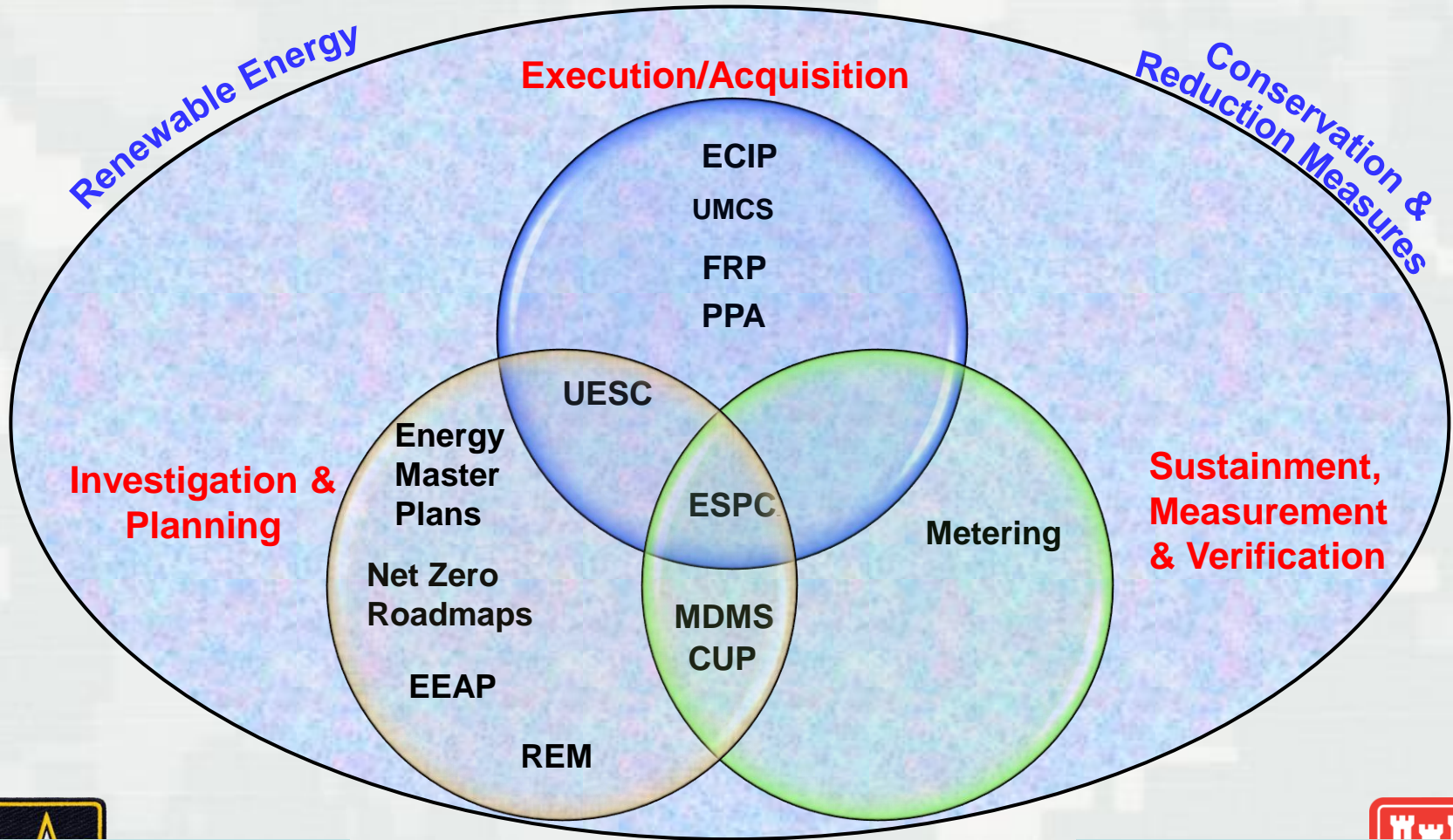
Highlights

- Federal government-wide Scope 1 and 2 reduction goal
 - ❑ EO 13514: General statement to reduce GHGs
- Added NF3 to the list of gases defined as GHGs
- Expanding Scope 3 categories: start reporting building energy for leased space >10,000 sq ft in FY2016
- New specific targets for data center energy efficiency
- Pollution prevention
 - ❑ GHG inventory impact set as a consideration criterion for chemical acquisition, use, and disposal decisions
 - ❑ No specific goals or limits specified. Essentially no change from EO 13514
- Sustainable acquisition
 - ❑ Purchase SNAP chemicals or other alternatives to high global warming potential hydro fluorocarbons to the maximum extent practicable
 - ❑ Specific requirements for the largest 7 procuring agencies (to be identified annually) to consider GHGs in their supply chains and contracts
 - EO 13514 looked at feasibility of contractor requirements



Energy Toolbox

Pathway to Net Zero, Energy Security and Meeting Federal Mandates



Investigation & Planning

Execution/Acquisition

Conservation & Reduction Measures

Sustainment, Measurement & Verification

Behavioral Changes

REM – Resource Efficiency Manager
 CUP – Commercial Utility Program
 MDMS – Metering Data Monitoring System
 FRP – Facility Reduction Program
 EEAP – Energy Engineering Analysis Program

PPA – Power Purchase Agreements
 UMCS – Utility Monitoring and Control Systems
 ECIP – Energy Conservation and Investment Program
 UESC – Utility Energy Services Contracting
 ESPC – Energy Savings Performance Contracting

USACE Strategies

- **Huntsville Center manages a portfolio of energy programs and acquisition vehicles to support Army and DoD in meeting energy mandates**
 - ▶ Achieving net zero / energy goals requires full utilization of the energy toolbox
 - ▶ Leverage best practices – comprehensive planning; resource efficiency managers; alternative financing, energy management control systems; building envelope

- **Moving to holistic, multi-dimensional approach to energy solutions**
 - ▶ Resource Efficiency Manager (REM) workshop

- **FEMP-USACE Memorandum of Understanding (MOU) for Performance Contracting**
 - ▶ Better standardize efforts across Federal government
 - ▶ Create channel for Federal agencies to execute ESPCs through FEMP IDIQ utilizing USACE services / model
 - ▶ USACE ESPC MATOC III to support Army and DoD agencies

- **Strengthen FEMP partnership -- align to support FEMP execution needs**
 - ▶ Assisting Federal agencies to achieve President's Performance Contracting Challenge (PPCC) goals
 - ▶ Assisting Federal agencies with broader energy goals / mandates



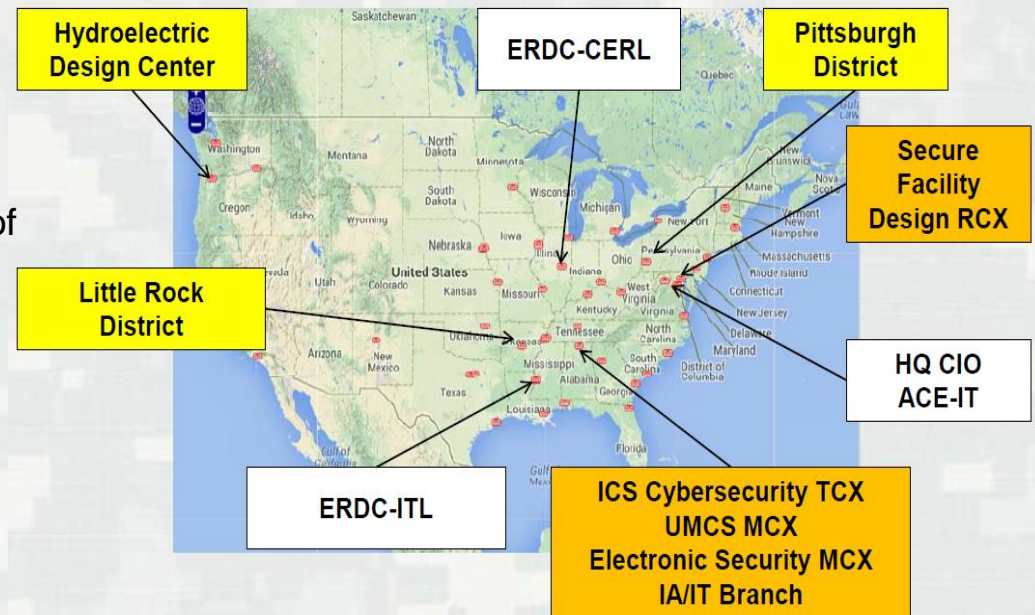
Support to Office of Energy Initiatives (OEI)

- HNC awarded \$7B Power Purchase Agreement (PPA) MATOC in FY15. Ninety-four companies awarded technology specific base contracts: 50 solar; 21 wind; 17 biomass and 6 geothermal.
 - ▶ Critical tool for support of the Army's large scale renewable energy goals.
 - ▶ Current Acquisitions:
 - Redstone Arsenal – 14 MW Solar PV (PPA MATOC)
 - Redstone Arsenal 25+MW Cogeneration Heat and Power facility (Full and Open Competition)
 - Fort Campbell – 3.1MW Solar PV (PPA MATOC)
- HNC provides total funds management services, third party financed contract development (PPA), program management and technical support by HNC and Corps Districts
- PPA MATOC has 28 small businesses in the 4 technology groups (Biomass, Geothermal, Wind, Solar). We are currently reviewing the Ft Campbell solar solicitation packages that were offered to the solar small business pool.



Industrial Control System (ICS) Cybersecurity TCX

- **Program Description:** Leverages ICS cybersecurity technical expertise throughout USACE and, on a reimbursable basis, to ensure that USACE delivers secure facilities to its military missions clients
- **Responsibilities:**
 - Provide ICS cybersecurity technical services for MILCON, SRM and O&M projects
 - Assist HQ USACE with development of policy and guidance as it pertains to ICS/PIT cybersecurity
 - Expand ICS cybersecurity community knowledge
 - Influence Army and Office of Sec Def ICS Cybersecurity Policy



Questions?



Questions

US. ARMY CORPS OF ENGINEERS – ENGINEERING AND SUPPORT
CENTER, HUNTSVILLE

Paul Robinson
Chief, Energy Division

256-895-1541

ray.p.robinson@usace.army.mil

Jeffery Watts
Chief, Energy Planning and Outreach Branch

256-895-1298

jeffery.o.watts@usace.army.mil

Michael Norton
Chief, Energy Implementation Branch

256-895-8232

lawrence.m.norton@usace.army.mil

