Doing Business With the Government
Key Personnel in Acquisition Process

- Government Laboratories
- Acquisition and Purchasing Agents
- Service Test and Evaluation Centers
- Operational Requirements Developers
- Contracting Officers
- Bankers (Congress, Military and Acquisition Leadership)
Government Laboratories

- Develop weapons and technologies of the future
- Lab Investments are usually 5+ from the end users, using the traditional acquisition processes
- Main Funding Sources*
  - Congressional Appropriations
  - Ear-marks (Congressional Adds)
  - Small Business Innovative Research (SBIR) Grants
- Research and Development: 4 Main Investments Areas
  - Basic Research
  - Applied Research
  - Advanced Technology Development
  - Manufacturing Technology
- Mainly Responsible for Six Levels of Technology Maturity (Technology Readiness Levels, or TRL)
  - TRL 1: Observe and report basic principles
  - TRL 2: Formulate technology concept and/or application
  - TRL 3: Analyze and experiment the critical function and/or characterize the proof of concept
  - TRL 4: Validate component and/or breadboard in laboratory environment
  - TRL 5: Validate component and/or breadboard in relevant environment
  - TRL 6: Demonstrate System/subsystem model or prototype in a relevant environment

* Special Funding Programs like TTI, DAC, FCT. Director’s also have ‘Slush Funds’ that can provide other sources of funding
Acquisition and Purchasing Agents

• Interface between industry and the operator during a system’s development and demonstration, Low Rate Initial Production, Full Rate Production and Sustainment.

• Main Funding Sources
  – Appropriations
  – Ear-marks (Congressional Adds)

• Responsible for 2 Levels of Technical Maturity
  – TRL 7: Demonstrate system prototype in an operational environment
  – TRL 8: Complete actual system and verify that system meets key performance requirements through test and demonstration
Service Test and Evaluation Centers

- Assures technology is safe for military use
- Compares performance against key performance parameters articulated in the requirements document
- Responsible for 1 Level of Technical Maturity:
  - TRL 8: Complete actual system and verify that system meets key performance requirements through test and demonstration
Operational Requirements Developers

• 3 Stages of Requirements Development
  – Initial Capabilities Document (ICD)
  – Capabilities Development Document (CDD)
  – Capabilities Requirement Document (CRD) (formerly Operational Requirements Document (ORD))
• Establishes Key Performance Parameters (KPP) and Performance Parameters
  – Objectives
  – Thresholds
• Document Instructs Acquisition what to Buy
• Document Instructs Test and Evaluation Community what to test against
• Document Articulates What Operators Want
• Requirements documents exist for equipment that sees broad use across a service
Contracting Officers

• Verifies that commercial companies can do business with the government—must be registered through Central Contractor Registration
• Signs agreements between Acquisition and Commercial Company
• Facilitates competitive procurement processes
• Determines when competition is necessary or when sole source will suffice
• Seeking ‘Best Value’ to government
  – Cost
  – Schedule
  – Technical Performance
  – Past Performance
DoD Market Research

• Energy Overview
  – Policy
  – Organization
  – Goals
  – Funding and Decision Makers
  – Other Considerations
Federal Energy Goals

2010
- All New Construction be LEED Silver Qualifiable

2015
- 65% Reduction over 2003 Baseline for Similar Building

2020
- All buildings entering the design phase achieve Net Zero

2030
- All new construction is Net Zero

New Construction

Existing Construction

Power Generation

Greenhouse Gas Emissions

7.5% of the total electricity consumed comes from renewables by 2013

30% Reduction of GHG Emissions by 2015

30% Energy Reduction over 2003 Baseline
The Caliber of Your Choice

DoD Facility Energy Users

Largest Energy Consumers

Navy

Army

Air Force

Missile Defense Agency

National Geospatial Intel Agency

Defense Logistics Agency

Defense Intelligence Agency

Defense Commissary Agency

Washington Headquarters Service

Defense Finance and Accounting Service

National Security Agency

Defense Contract Management Agency

Tricare Management Agency

Oversight: DUSD Installations and Environment

## DoD-Wide Progress Towards EPAct 2005, EISA 2007 and EO 13423*

<table>
<thead>
<tr>
<th>Category</th>
<th>2008</th>
<th>2013</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Construction</td>
<td>TBD</td>
<td>TBD</td>
<td>GOAL: 65% Reduction</td>
</tr>
<tr>
<td>Existing Construction</td>
<td>CURRENT: 10.9% Reduction</td>
<td>GOAL: 24% Reduction</td>
<td>GOAL: 30% Reduction</td>
</tr>
<tr>
<td>Power Generation</td>
<td>CURRENT: 2.9% of Total Energy Consumed from Renewable Energy</td>
<td>GOAL: 7.5% of Total Energy Consumed from Renewable</td>
<td>TBD</td>
</tr>
<tr>
<td>Greenhouse Gas Emissions</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
</tbody>
</table>

*2003 Baseline
Funding and Expertise

- **Funding Type**
  - Public Sector Funds (MILCON)
  - Public Sector Funds (Operations & Maintenance)
  - Private Sector Funds
  - Public Sector Funds (MILCON--ECIP)

- **Core Expertise**
  - USACE, NAVFAC, Etc
  - DPW, Civil Engineers
  - Energy/Utility Service Companies
  - Resource Efficiency Managers / Energy Managers

- **Amount (FY11)**
  - ~$12B
  - ~$6.1B
  - ~$500M
  - $120M
Customer Considerations

![Pie chart showing energy consumption breakdown](chart.png)

- Total Consumption: 6,523 trillion Btu
- Space Heating: 2,365 trillion Btu
- Lighting, 1,340 trillion Btu
- Cooling: 516 trillion Btu
- Water Heating: 501 trillion Btu
- Ventilation: 436 trillion Btu
- Refrigeration: 381 trillion Btu
- Cooking: 190 trillion Btu
- Computers: 156 trillion Btu
- Office Equipment: 69 million Btu
- Other: 569 trillion Btu

Source: Energy Information Administration, 2003 Commercial Buildings Energy Consumption Survey

- Capital / Up-Front Cost
- Break-Even Point
- Opportunity Cost
- Operations and Maintenance Cost
- Sunk Cost
- Familiarity / Comfort
Sabot 6
Understands the DoD Construction Space
### DoD, Largest Owner of Building Stock in the U.S. – Square Footage of Owned Buildings on Top 10 Installations

<table>
<thead>
<tr>
<th>Base</th>
<th>Total Owned Sq Ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ft Bragg, NC</td>
<td>24,090,344</td>
</tr>
<tr>
<td>Ft. Hood, TX</td>
<td>20,426,563</td>
</tr>
<tr>
<td>Ft. Lewis, WA</td>
<td>16,580,637</td>
</tr>
<tr>
<td>Wright-Patterson AFB, OH</td>
<td>16,507,470</td>
</tr>
<tr>
<td>Tinker AFB, OK</td>
<td>14,742,158</td>
</tr>
<tr>
<td>Camp Pendleton, CA</td>
<td>14,337,004</td>
</tr>
<tr>
<td>Ft. Sill, OK</td>
<td>14,296,772</td>
</tr>
<tr>
<td>Camp Lejeune, NC</td>
<td>14,071,510</td>
</tr>
<tr>
<td>Robbins AFB, GA</td>
<td>13,148,209</td>
</tr>
<tr>
<td>Redstone Arsenal, AL</td>
<td>11,299,682</td>
</tr>
</tbody>
</table>
## FY 2010 New Construction Appropriations

<table>
<thead>
<tr>
<th>Military Construction FY 2010 Summary</th>
<th>Authority ($000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Construction, Army</td>
<td>3,660,779</td>
</tr>
<tr>
<td>Military Construction, Navy</td>
<td>3,763,264</td>
</tr>
<tr>
<td>Military Construction, Air Force</td>
<td>1,145,434</td>
</tr>
<tr>
<td>Military Construction, Defense-Wide</td>
<td>3,097,526</td>
</tr>
<tr>
<td>NATO Security Investment Program</td>
<td>276,314</td>
</tr>
<tr>
<td>Military Construction, Army National Guard</td>
<td>426,491</td>
</tr>
<tr>
<td>Military Construction, Air National Guard</td>
<td>128,261</td>
</tr>
<tr>
<td>Military Construction, Army Reserve</td>
<td>374,862</td>
</tr>
<tr>
<td>Military Construction, Navy Reserve</td>
<td>64,124</td>
</tr>
<tr>
<td>Military Construction, Air Force Reserve</td>
<td>27,476</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$12,964,531</strong></td>
</tr>
</tbody>
</table>
Funding and Contract Mechanisms

• Funding Mechanisms
  – New Construction Funding (MILCON)
  – Energy Conservation Investment Program (MILCON)
  – Sustainment, Restoration and Modernization (O&M)
  – Private Funds

• Contract Mechanisms
  – Bid and Proposal
  – Energy Savings Performance Contracts
  – Utility Energy Savings Contracts
  – Sub-Contractors to New Construction Award Winners
DoD Military Construction (MILCON), Energy and Installation Management Organizations

U.S. Army Corps of Engineers (USACE)
Contract and construction mgmt of New Major MILCON and major Renovations on Installations; Ownership of USACE properties; Consult/Mgmt for NG and GSA construction and renovation when requested

U.S. Army Installation Management Command (IMCOM)
O&M; Security and Sustainability Planning; Mgmt of Minor* Construction and Renovations

AF Civil Engineer Support Agency (AFCESA) & AF Center for Engineering & the Environment (AFCEE)
Management of new MILCON and Renovations on USAF Bases

Naval Facilities Engineering Command (NAVFAC)
Contract and construction mgmt of new MILCON and Renovations on USN / USMC Bases

GSA

Natl Guard

Army & Reserve

Air Force & USAFR

Navy/USMC
U.S. Army Corps of Engineers (USACE)

USACE Headquarters

Dir of Mil Programs (CEMP)
(J. Joseph Tyler)
- Military Construction (Army, Air Force and other DOD Agencies);
- Environmental support
- Interagency Services (EPA, DHS, DOS, etc.)
- Installation Sprt (181 Army, 71 USAF)

Installation Spt CoP
(Fred Spenser)

Environmental CoP
(James Balocki)

USACE Divisions (x 7)

Dir of Civil Works (CECW)
- Technical aspects of engineering, construction management, environmental protection and restoration, operations, maint. and repair activities.
- Technical Policy; new technologies; management of technical aspects of military and civil infrastructure - policy for architecture - value engineering assurance

USACE Engineer Research and Development Center (ERDC)

USACE ERDC Construction Engineering Research Laboratory (CERL)

Dir of R & D (CERD)

Dir of Civil Works (CECW)

Contracting Firms, ESCOs, etc.

USACE Engineers often rely on contractors to include technologies in design to meet LEED or other mandates. BUT, contractors default to what’s familiar and cost-effective for them – not necessarily high performance technologies.

USACE Districts are the prime targets

Sabot 6 Proprietary
USACE Organization (Military Construction Projects)
NAVFAC Organization

NAVFAC Far East, Yokosuka, Japan
NAVFAC Northwest, Silverdale, Wash.
NAVFAC Marianas, Naval Base, Guam
NAVFAC Engineering Service Center
NAVFAC Expeditionary Logistics Center
Naval Facilities Institute
Port Hueneme, Calif.
NAVFAC Southwest, San Diego, Calif.
NAVFAC Pacific & NAVFAC Hawaii

NAVFAC Midwest (Great Lakes, Ill)
NAVFAC Atlantic
NAVFAC Mid-Atlantic
Navy Crane Center (NCC) (Norfolk, Va.)

NAVFAC Europe/Southwest Asia (Naples, Italy)

NAVFAC HQ & NAVFAC Washington (D.C.)

Caribbean

Sabot 6 Proprietary
Air Force Facilities Organizations

AF Civil Engineer Support Agency (AFCESA) (Lackland AFB, San Antonio)

- Operations and Maintenance programs
  - Surge requirements of local installations
  - Infrastructure SRM
  - Energy, utilities privatization, service contracts
- Centralized Energy expertise w/ the AF Facility Energy Center (AFFEC) –
  - Capital Investment Program Management Office executes infrastructure energy dollars
  - Facility Capital Investment Strategy -- 6 years, $2.3B
    - Energy Conservation
    - Energy-related facility audits
    - Third Party contract buy-outs
    - Water Conservation
    - Renewable energy Projects

AF Center for Engineering & the Environment (AFCEE) (Tyndall AFB, Florida)

- Centralization of Capital investment programs
  - Design/construction management for all Active AF MILCON
  - New / current mission Military Construction
  - Military Family Housing MILCON
  - Sustainment, Restoration, Modernization (SRM)
- Realigned from decentralized MAJCOM execution (MILCON now better aligned with execution agents (USACE & NAVFAC))