



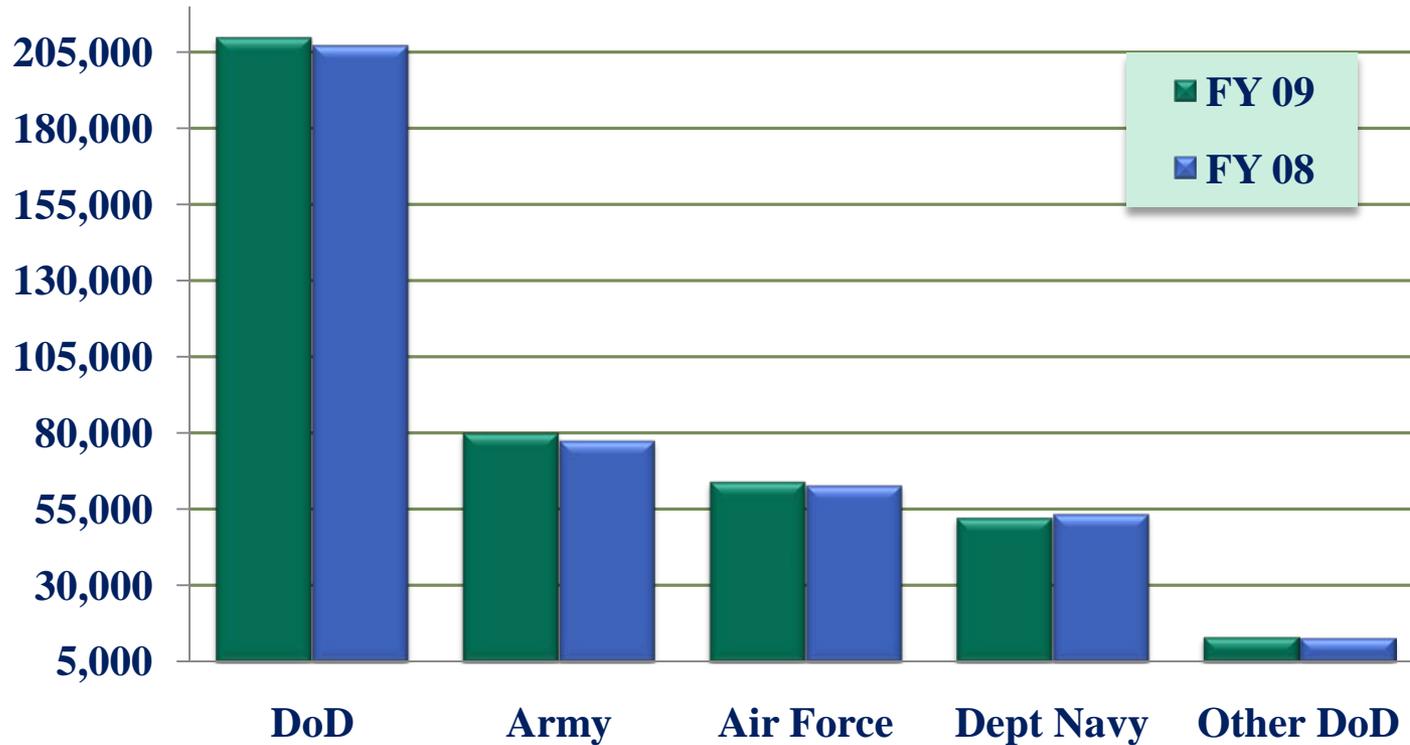
DoD Facilities Energy

FY 2009 Annual Energy Report: Overview and Status on NDAA 2010 Studies

Brian J. Lally, P.E.
**Deputy Director, Facilities Energy
and Utilities Privatization**
**Deputy Under Secretary of Defense
for Installations and Environment**

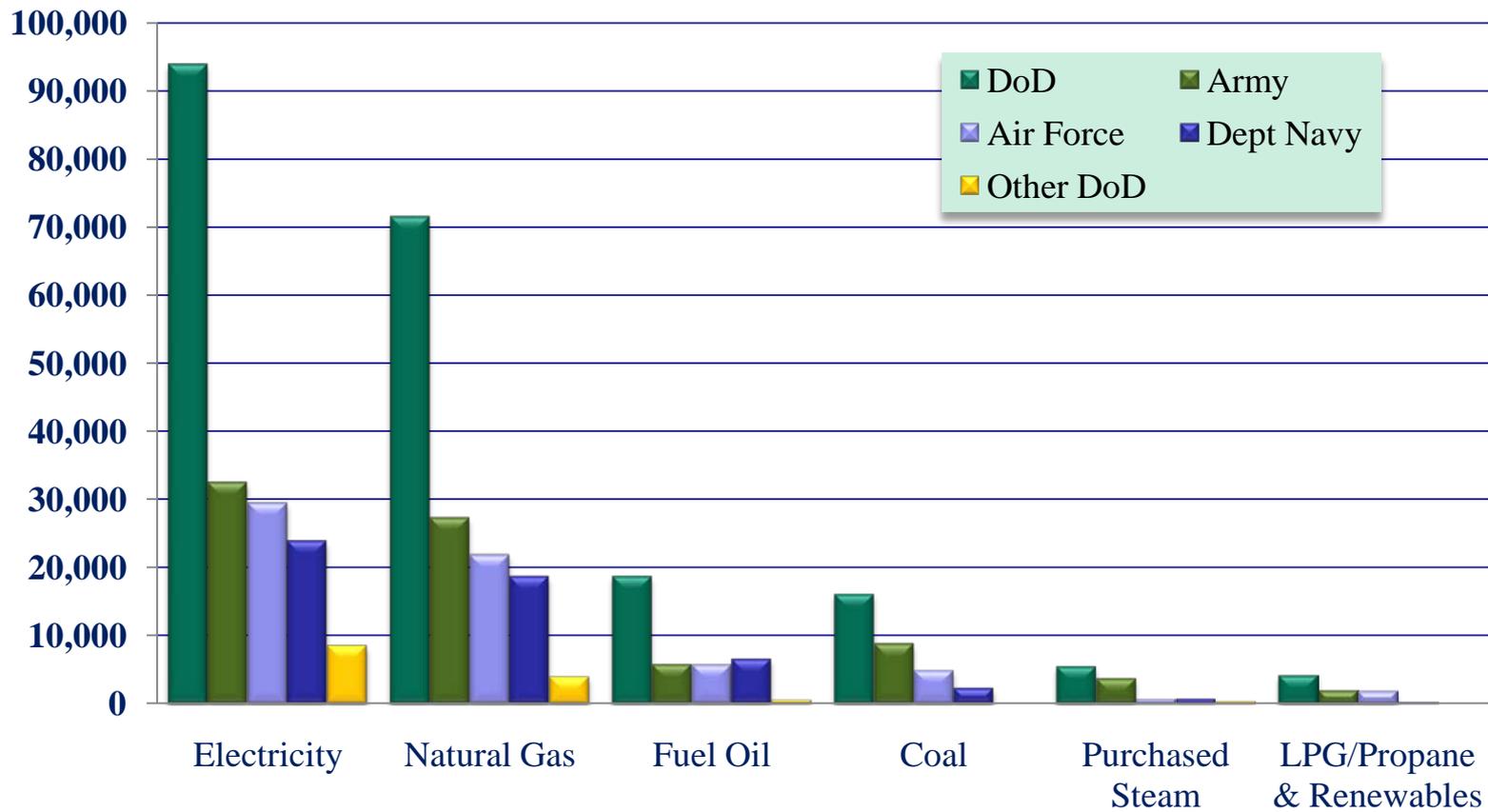


FY 09-08 Facilities Total Delivered Energy (Billions Btu)



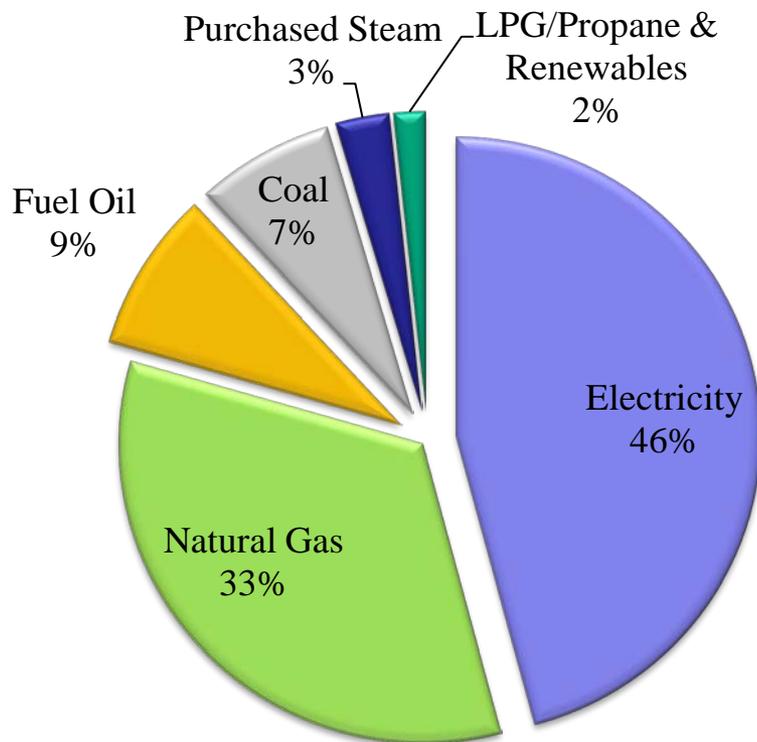


FY 09 Site Delivered Energy By Type (Billions Btu)



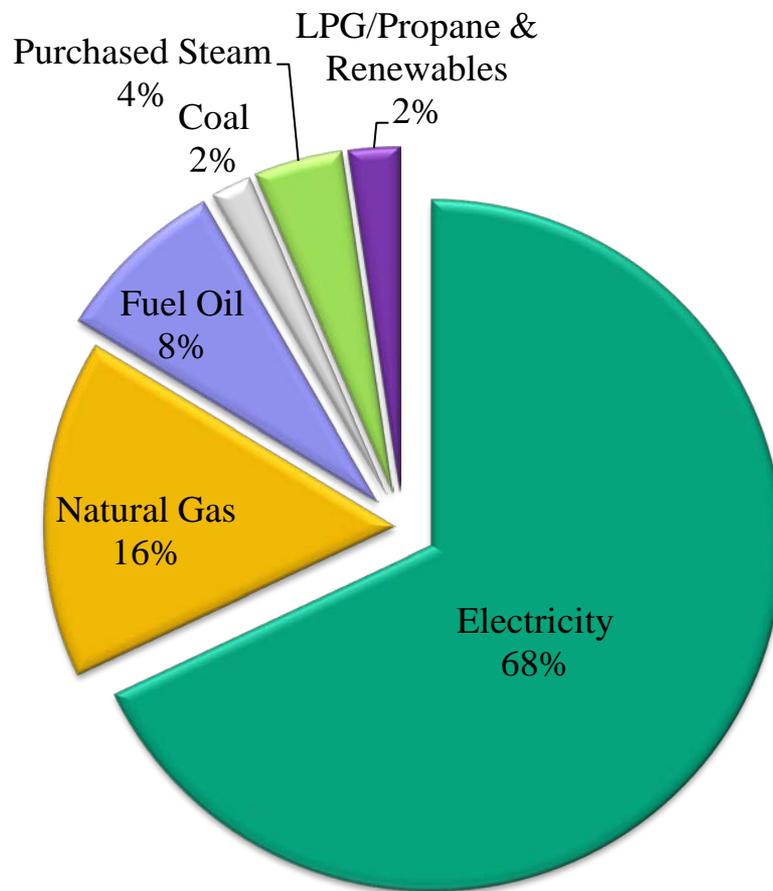


All Facilities Site Delivered Energy By Type (BTU)



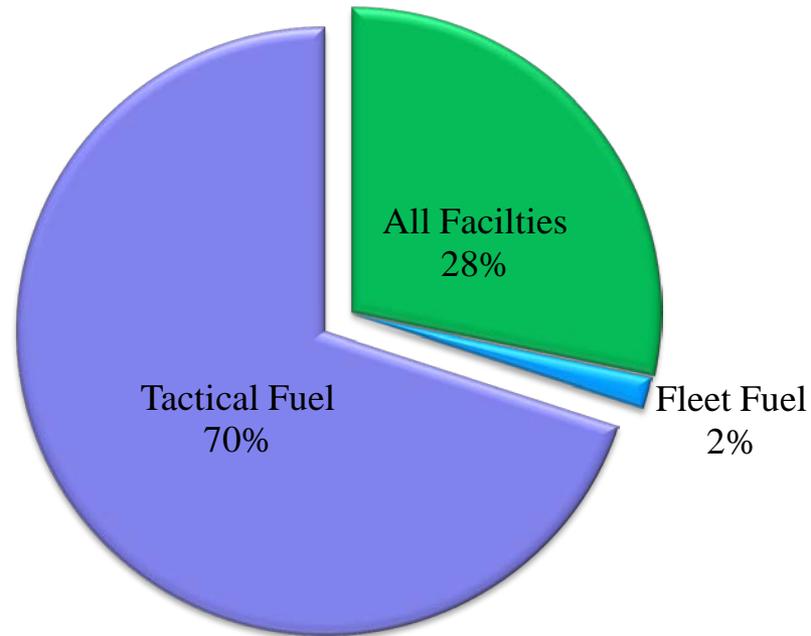


All Facilities Site Delivered Energy By Type (Cost)



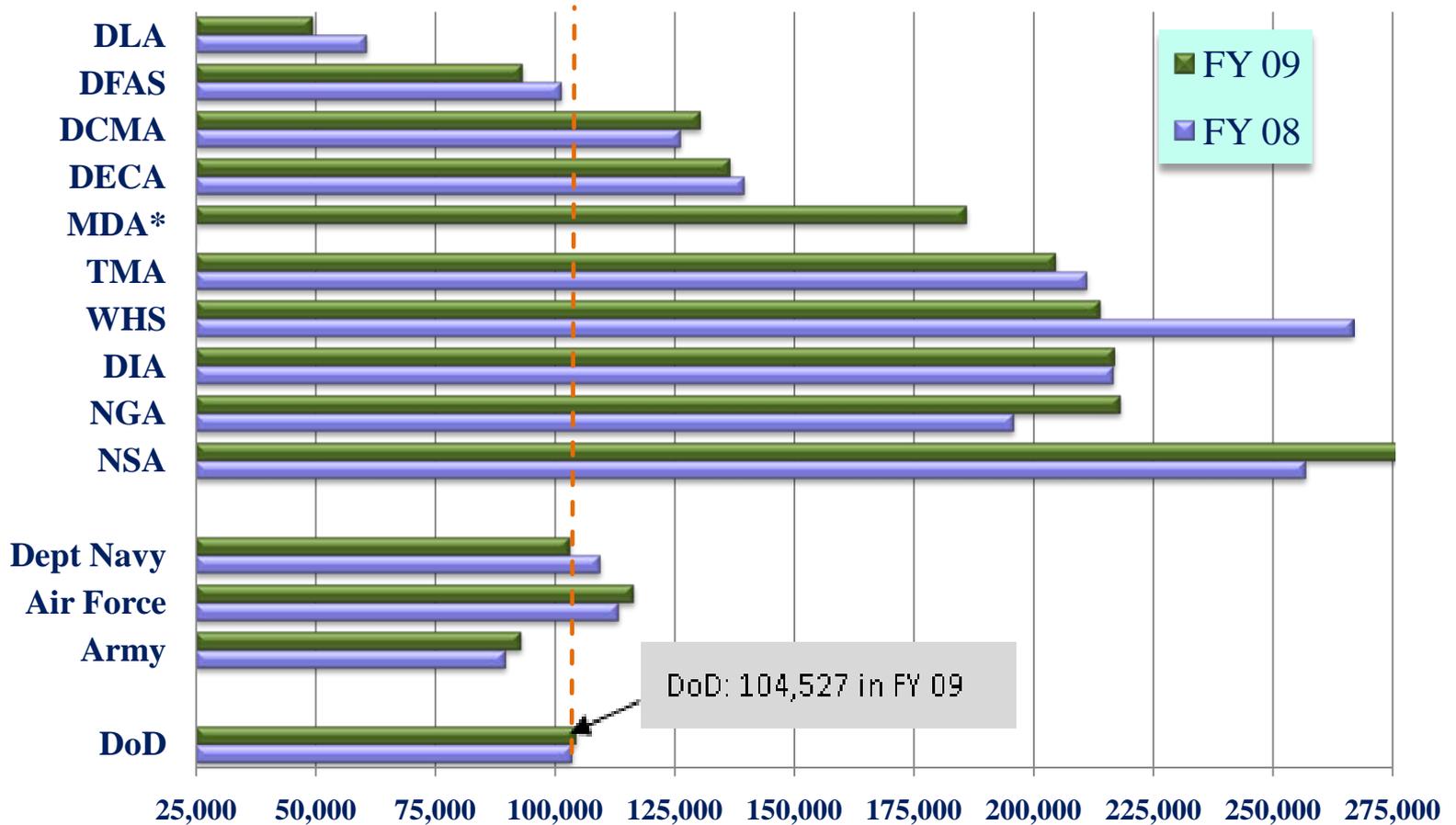


FY 09 DoD Energy Costs (\$13.7B)





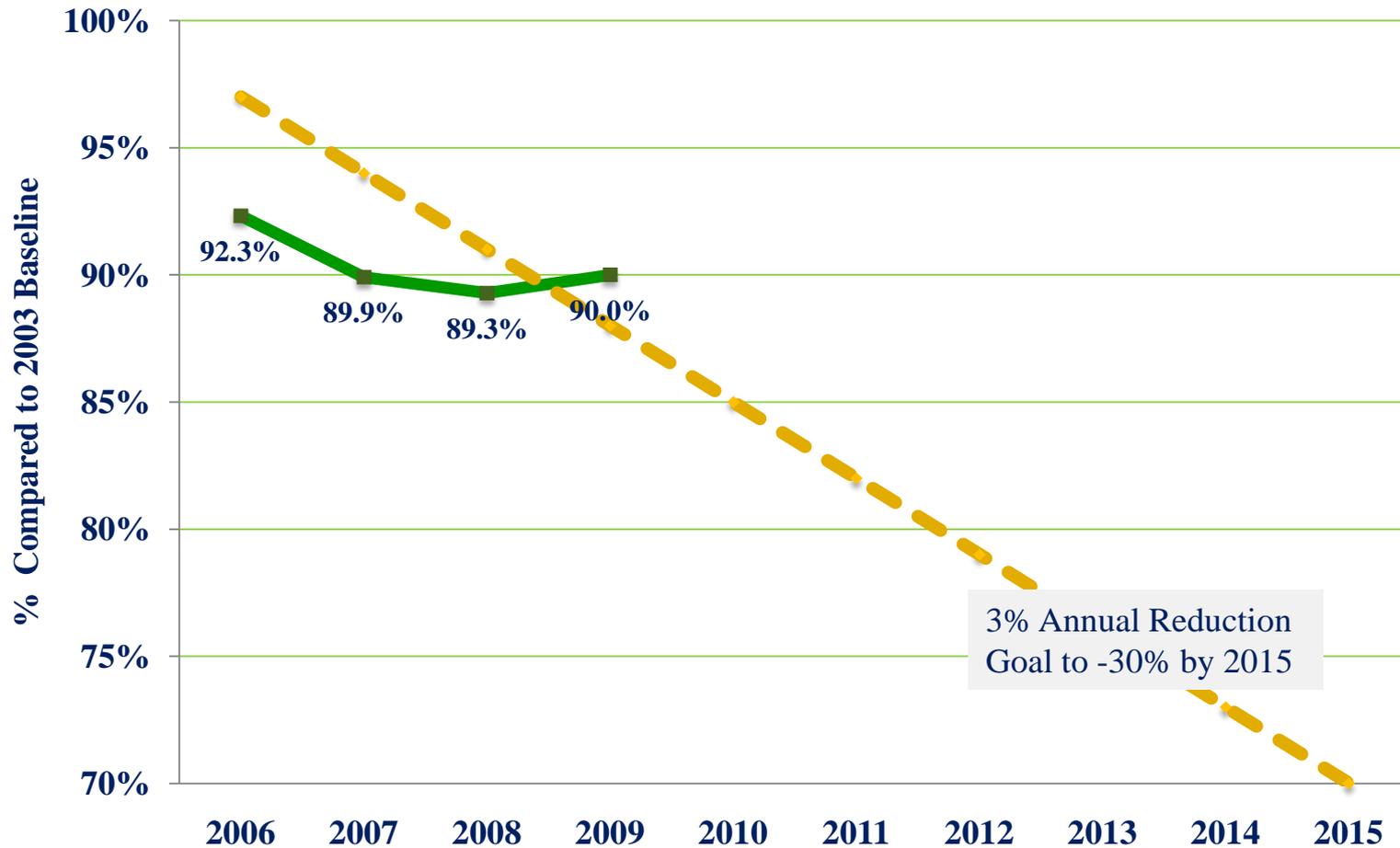
DoD FY 09-08 Energy Intensity (Btus/GSF)



* MDA did not report in FY 2008

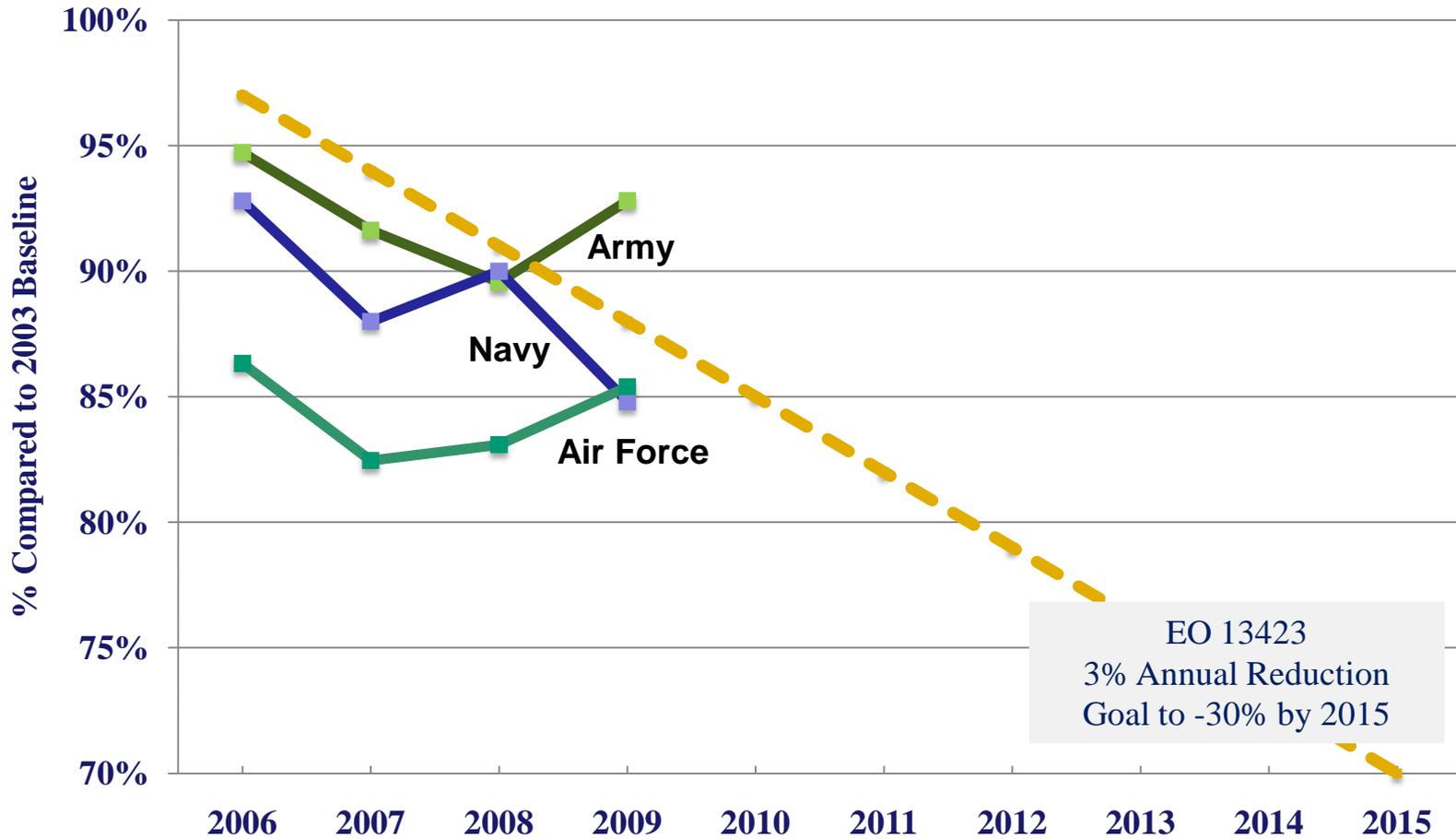


DoD Energy Intensity FY 06-09 Compared to Baseline



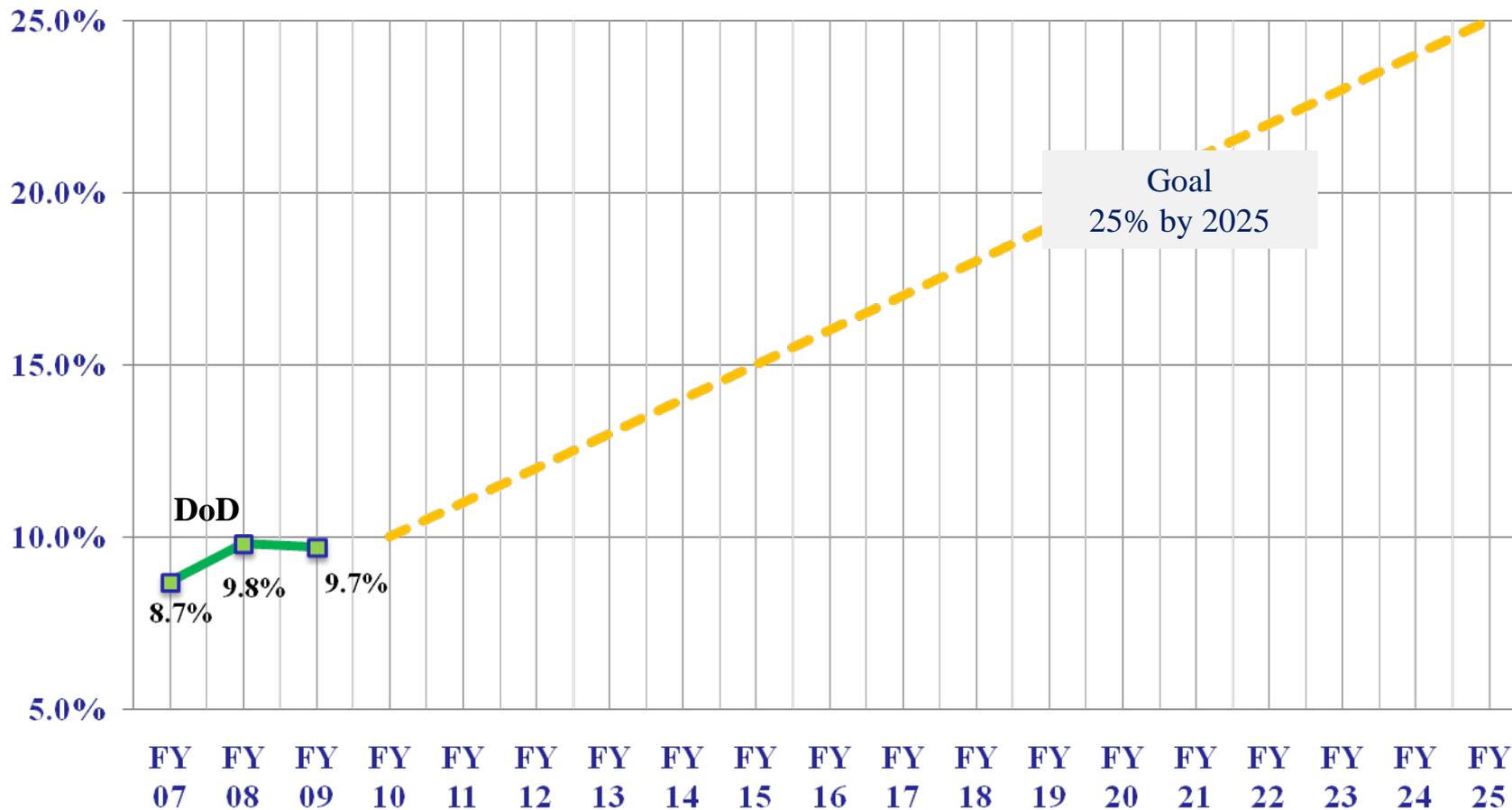


Military Departments Energy Intensity FY 06-09





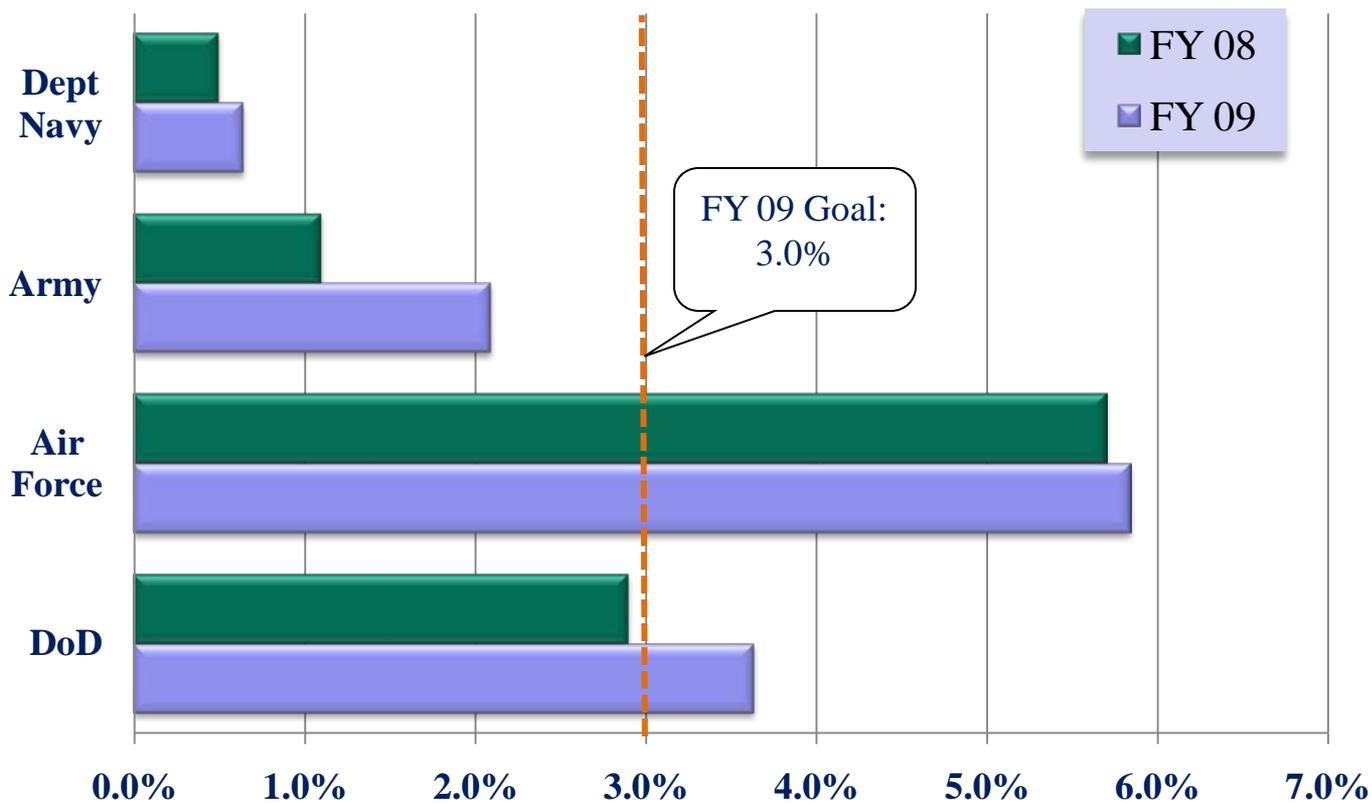
DoD Renewable Energy Use*



* % of all renewable energy procured or produced compared to total electricity use

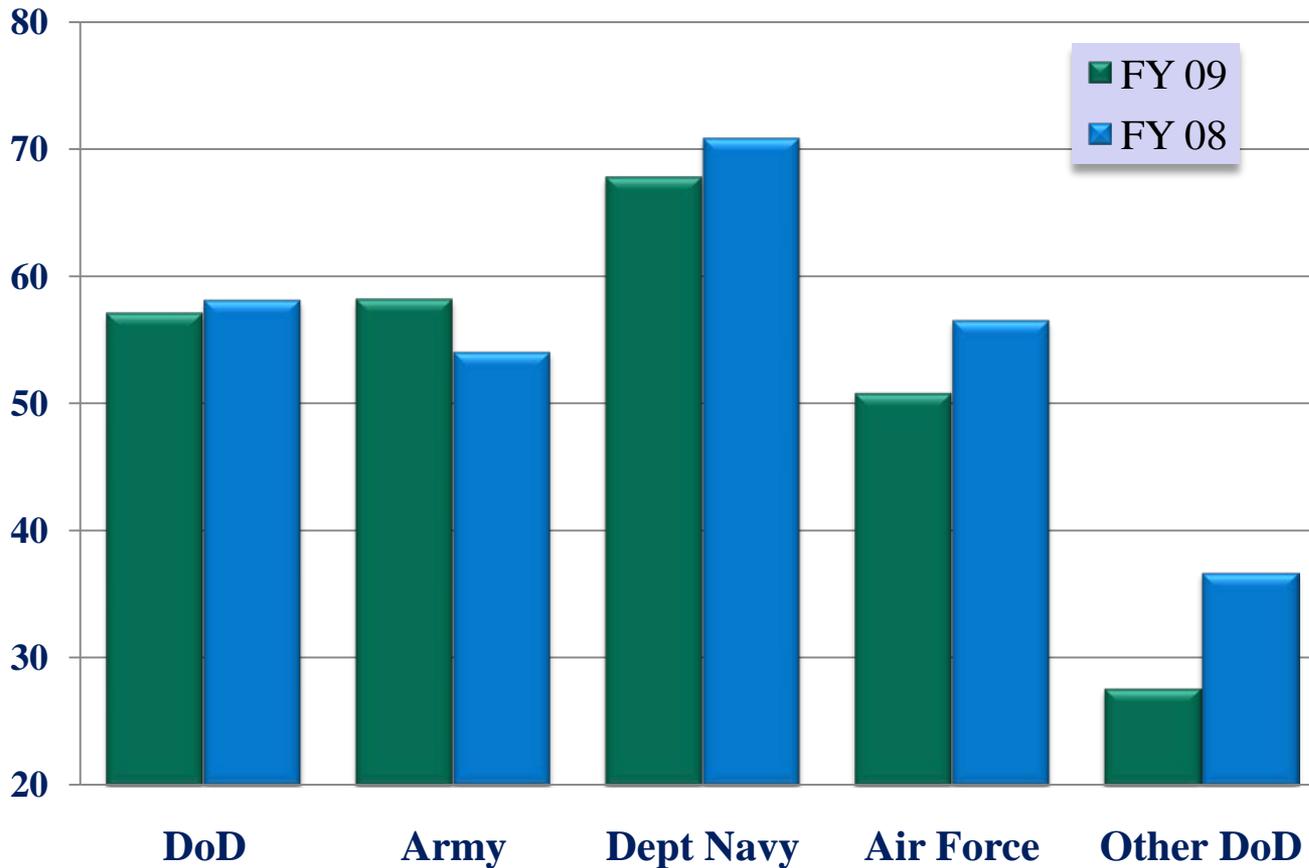


FY 09-08 Renewable Energy Use Compared to EPAct 2005 Goal



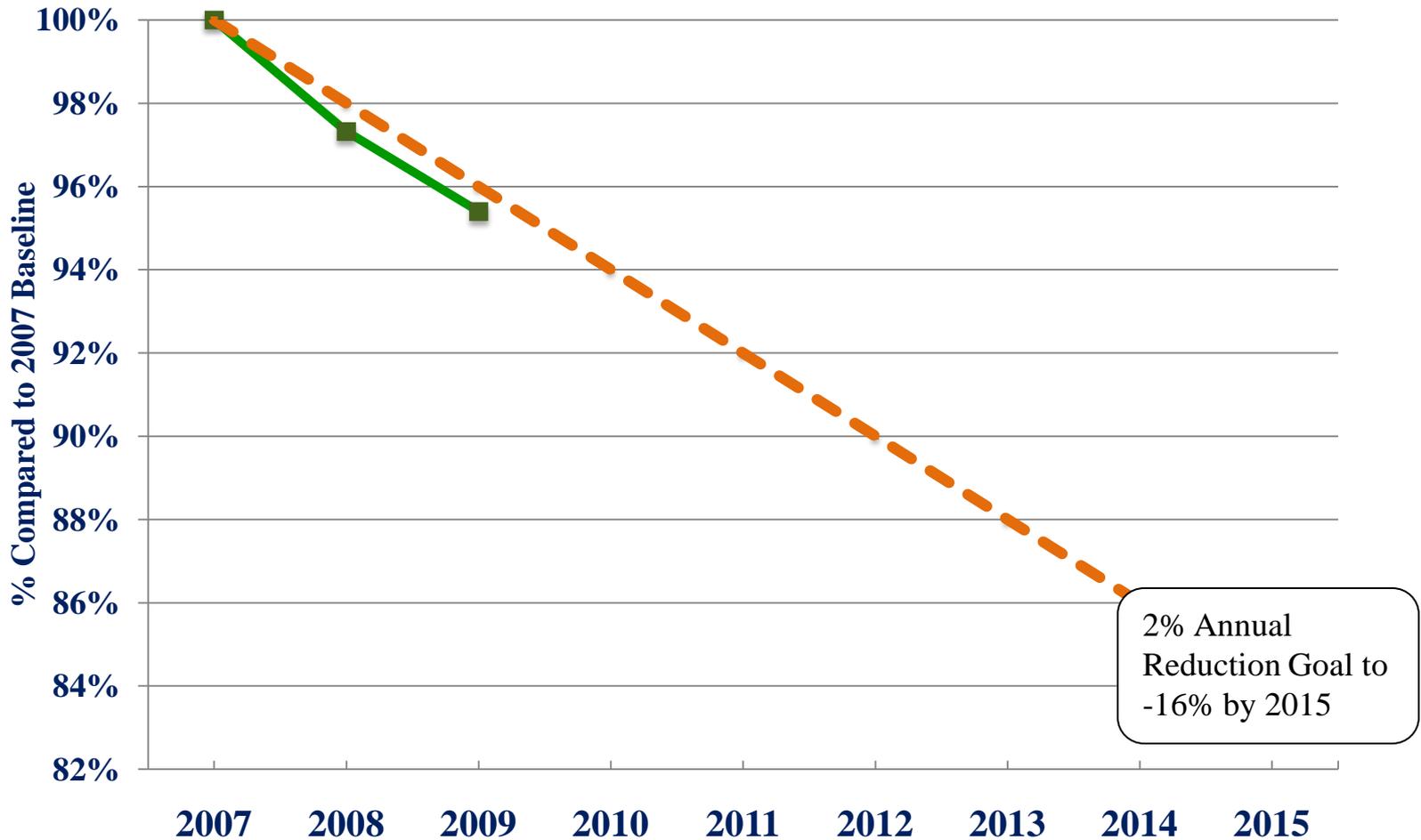


FY 09-08 Water Intensity (Gals/GSF)



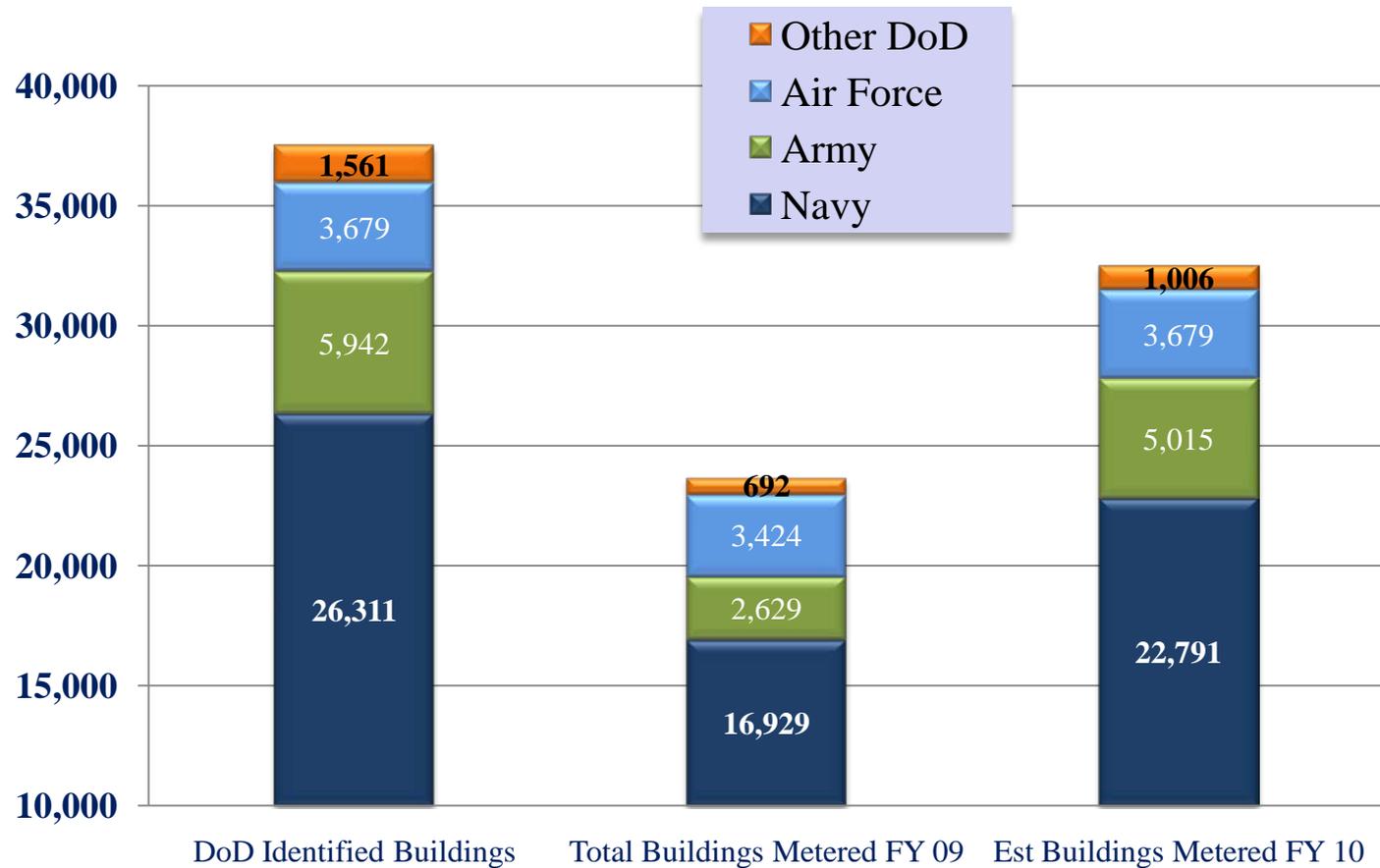


DoD Water Intensity FY07 – 09 Compared to Baseline



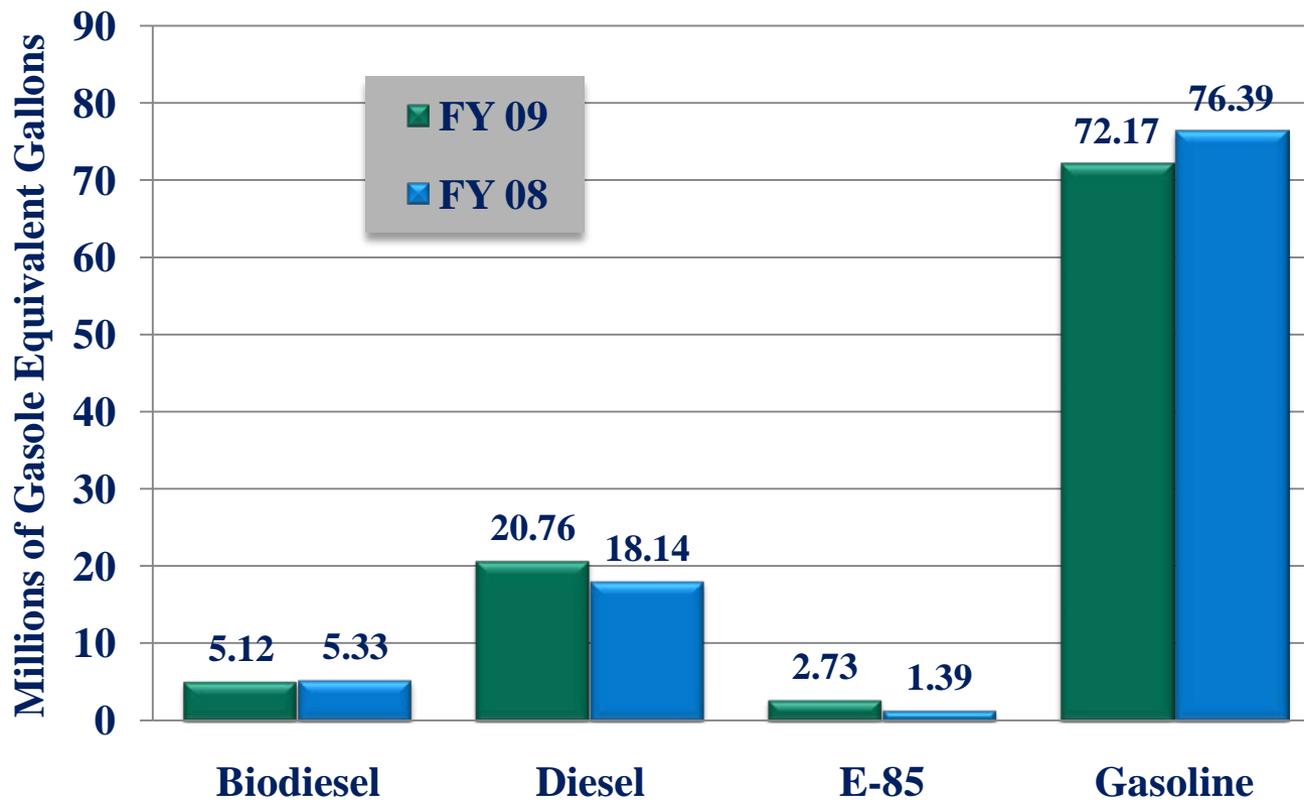


DoD Facilities Metering of Electricity Use (# of Buildings Metered)





FY 09-08 DoD Fleet Vehicle Fuel Consumption (GEG)





Status of Studies

NDAA 2010 and GAO



2010 NDAA, PL 111-084

28 October 2009

- Sec 332. Extension and Expansion of Reporting Requirements Regarding Department of Energy Efficiency Programs – *Under Contract*
 - Leveraging GAO Report #351446 Requirement
 - New Reporting Requirements:
 - Are existing contracting and funding resources adequate for meeting mandated DoD renewable and installation energy goals?
 - Assess costs and benefits of new electrical switchgear to provide power to installations in the event of grid failure
 - Assess obstacles & opportunities developing renewable energy
 - Assess costs and feasibility developing renewable energy in contingency locations
 - Assess costs and feasibility developing renewable energy on installations versus buying renewable energy credits



Section 332 – Renewables Study Cont'd

– New Reporting Requirements:

- Analyze new construction design standards (LEED) to determine if they are consistent with overall renewable energy goals
- Analyze feasibility and cost of net-zero energy installations
- Would a dedicated funding mechanism encourage greater use of renewable energy?
- Prepare a proposal for modifying the system DoD uses to calculate its progress towards meeting the renewable energy goals. Issue: ownership of the environmental attributes of the energy produced RECs
- Assess progress towards meeting all the mandated energy goals
- Provides tables in the AEMR 2010 for
 - All energy projects
 - Third-party financed projects
 - Financial incentives realized under section 2913
 - Progress towards Sec 433, Sustainable Building Standards



2010 NDAA, PL 111-084

28 October 2009

- Sec 335. Energy Security – *In-house work begun*
 - RISK ASSESSMENT.—The Secretary of Defense shall conduct a comprehensive technical and operational risk assessment of the risks posed to mission critical installations, facilities, and activities of the Department of Defense by extended power outages resulting from failure of the commercial electricity supply or grid and related infrastructure.
 - RISK MITIGATION PLANS.— (1) IN GENERAL.—The Secretary of Defense shall develop integrated prioritized plans to eliminate, reduce, or mitigate significant risks identified in the risk assessment under subsection
 - Prioritize the mission critical installations, facilities, and activities that are subject to the greatest and most urgent risks
 - Strategy for working with other public and private sectors to address vulnerabilities beyond DoD control
 - Schedule for actions to be taken



2010 NDAA, PL 111-084

28 October 2009

- 10 USC 2911(e). Energy Performance Goals

- (a) Energy Performance Goals.—

(1) The Secretary of Defense shall submit to the congressional defense committees the energy performance goals for the Department of Defense regarding transportation systems, support systems, utilities, and infrastructure and facilities.

(2) The energy performance goals shall be submitted annually not later than the date on which the President submits to Congress the budget for the next fiscal year under section 1105 of title 31 and cover that fiscal year as well as the next five, 10, and 20 years. The Secretary shall identify changes to the energy performance goals since the previous submission.

(b) Energy Performance Plan.— The Secretary of Defense shall develop, and update as necessary, a comprehensive plan to help achieve the energy performance goals for the Department of Defense.

**DoD has not developed an Energy Strategy
from which Performance Goals are linked**



2010 NDAA, PL 111-084

28 October 2009

- Sec 2841. Adoption of Department-wide, Open Protocol energy monitoring and utility control system specification for military construction and military family housing activities.
 - Amends Subchapter III of Chapter 169 of Title 10.
 - Status:
 - Papers shared on BACnet, LonWorks, and ModBus
 - Telecons with Army ERDC/CERL Spec Authors for LonWorks front-end building systems controls and supervisory level specs
 - Navy believes their BACnet spec fits their needs – not a universal supervisory system spec
 - Tri-Service Working Group telecons this week
 - April 26th: Tri-Service telecon to develop gameplan



2010 NDAA, PL 111-084

28 October 2009

- Sec 2845. Study to determine the feasibility of nuclear power plants on DoD installations.
 - Ten study requirements covering technical, financial, safety, social and time
 - Status:
 - SOW written,
 - Terms of Reference written
 - FFRDC contracting mechanism being used
 - Contract award very soon



QUESTIONS

AND HOPEFULLY ...

SOME DECENT ANSWERS