U.S.ARMY

SUSTAINABILITY REPORT 2007

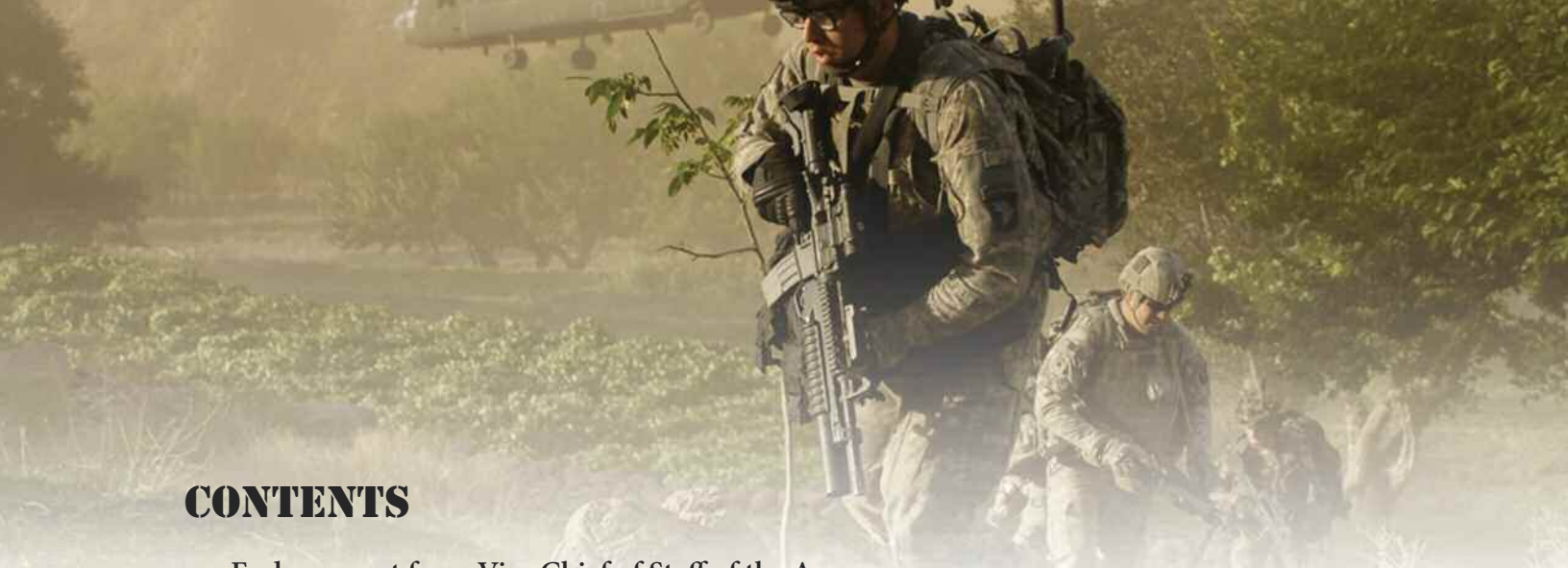
SUSTAIN THE MISSION
SECURE THE FUTURE

U.S.ARMY

THE ARMY SUSTAINABILITY REPORT 2007

5 SEPTEMBER 2008

SUSTAIN THE MISSION • SECURE THE FUTURE



CONTENTS

Endorsement from Vice Chief of Staff of the Army and Assistant Secretary of the Army (Installations and Environment) 5

Introduction: The Army's Journey toward Mission, Environmental and Community Sustainability—Our True North 6

Overview of the Army Operations During Fiscal Year 2007 8

- The Army's Mission 9
- The Army Vision 9
- Army Leadership in FY07 9
- Army Organization 9

The Army's Triple Bottom Line—Plus 11

- Mission 11
- Environment 11
- Community 12
- Plus 12

Army FY07 Performance Highlights Toward the Triple Bottom Line—Plus 13

- Mission Performance Highlights 13
- Environmental Performance Highlights 15
- Community Performance Highlights 21
- Summary of Army Sustainability Performance FY04 to FY07 24

The Army Strategy for the Environment(ASE): Sustain the Mission, Secure the Future 26

FY07 ASE Highlights and Initiatives 27

- ASE Goal: Foster a Sustainability Ethic 27
- ASE Goal: Strengthen Army Operations 31
- ASE Goal: Meet Test, Training, and Mission Requirements 34
- ASE Goal: Minimize Impacts and Total Ownership Costs 36
- ASE Goal: Enhance Well-Being 38
- ASE Goal: Drive Innovation 43

Closing: We Still Have Work to Do 45

Annex: Army FY07 Sustainability Performance Information with Index to Global Reporting Initative (GRI) Metrics 46

CONTENTS—FIGURES & TABLES

FIGURES

Figure 1. Army FY07 Sustainability Highlights 6

Figure 2. Army Report Standard Disclosure Summary for GRI Application Level.....7

Figure 3. Headquarters, Department of the Army (HQDA) (as of 1 Oct 07) 10

Figure 4. Army Military End Strength (Active, USAR, and NGB) and Net Operating Costs (FY04 to FY07).....14

Figure 5. Total Army Environmental Funding by Type (FY04-FY07).....16

Figure 6. Status of Installation Sustainability Plans (as of 1 Oct FY07) 27

Figure 7. Army Sustainability Web Page 28

Figure 8. FY07 ACUB Status 35

TABLES

Table 1. Summary of Trends for Key Army Environmental Performance Metrics (FY04 to FY07) 15

Table 2. Army Casualties Related to Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) by Active Army, National Guard, and Reserves from 7 Oct 01 Through 1 Dec 07 22

Table 3. Key Army TBL Sustainability Annual Performance Data and Trends FY04 to FY07 25

Table 4. Army Photovoltaic Power System Projects 37

Table 5. Global Reporting Initiative (GRI) Content Index to Army FY07 Information.....47

Table 6. Summary of Army FY07 Performance Against GRI Recommended Economic Performance Indicators.....50

Table 7. Summary of Army FY07 Performance Against GRI Recommended Environmental Performance Indicators 53

Table 8. Summary of Army FY07 Performance Against GRI Recommended Social Responsibility Performance Indicators.....57

America's Army – The Strength of the Nation

When thinking globally, there are few better examples of public service than the men and women serving in the United States Army. The Soldiers and the Families who support them are selflessly devoted to protecting America today while building an enduring peace that will sustain our Nation into the future. As stewards of a safe and secure future, they truly are the "Strength of the Nation."

While the Army is known for its efforts to promote stability through combat and humanitarian operations around the world, the Army Sustainability Report highlights its commitment to this end through sustainability. We issue this report to outline the Army's accomplishments in sustainability and to set the baseline from which to build our commitment to sustaining a healthy environment in the future.

This report details how the Army is learning to achieve its mission through the practice of transformational systems-thinking, as inspired by our applied concept of sustainability called the "Triple Bottom Line - Plus."

The "Triple Bottom Line - Plus" integrates the goals of accomplishing the mission while maintaining a healthy environment and a stable community, plus realizing the economic benefits that come from the efficiencies and economies of scale. By seeking solutions that maximize a focus on "mission, environment, and community," we build an enduring future and create synergies that make us more effective and efficient in our present operations.

We challenge ourselves and every one of our Soldiers, Family members, Army Civilians, contractors and suppliers to strive to cultivate our Nation's strength as we "Sustain the Mission - Secure the Future."

Peter W. Chiarelli
General, United States Army
Vice Chief of Staff

Keith E. Eastin
Assistant Secretary of the Army
(Installations and Environment)

INTRODUCTION

The Army's Journey toward Mission, Environmental and Community Sustainability—Our True North

In June 2007, Army Headquarters received one of three White House Closing the Circle "Sowing the Seeds of Change" Awards from the Office of the Federal Environmental Executive for the future vision established and implemented through our sustainability strategy—***The Army Strategy for the Environment (ASE): Sustain the Mission, Secure the Future.***[1] Through this strategy, released in 2004, Army leadership challenged all Army personnel to incorporate our 'triple bottom line' (TBL) of Mission, Environment, and Community into all of its plans, processes and actions. The principles laid out in the Strategy provide a compass, pointing to a true north, which will continue to guide us well into the 21st Century as we navigate the terrain toward sustainability.

This Sustainability Report is an important milestone on that journey. It marks not only the release of the Army's first annual sustainability report, but the first[2] report from any major federal government agency using the Global Reporting Initiative's (GRI) sustainability reporting framework.[3] It serves to both inform and engage our primary stakeholders, the American people, and other interested parties on our progress to embody the principles of sustainability in our operations, installations, systems, and community engagements.

Army leadership is committed to realizing the principles laid out in the ASE and, as can be seen in this report, we have made substantial progress in many areas over the last four years (Figure 1). Though much work remains, our performance must be put in context. Six years of war and the demands of repeated deployments have stretched and stressed our institutions, support structures, equipment, Soldiers, Army Civilians, and Families. While the Army remains a resilient, committed, professional force, we are out of balance. To restore balance, we are focusing on four imperatives in fiscal year 2008 (FY08): implement a series of new programs and resources to support our Wounded Warriors, Army Families, and specifically the Spouses and Families who have lost their loved ones since September 11, 2001; prepare our forces to succeed in the current conflict; reset and repair units and equipment; and transform and grow the Army to be ready for current operations and future contingencies.

Since this is our first stand alone sustainability performance report, we chose to publish it in accordance with the world's most widely used sustainability reporting framework by corporations and public agencies, the GRI's Sustainability Reporting Guidelines (Version 3.0 (G3)) in conjunction with the GRI's Sector Supplement for Public Agencies (Pilot Version 1.0).

Figure 1. Army FY07 Sustainability Highlights

Released the first Army-wide Annual Sustainability Report—first of any major U.S. Federal Agency using the GRI sustainability reporting framework

Sixteen Army installations with comprehensive Installation Sustainability Plans in place

78% (301) of FY07 Army Military Construction projects designed to at least U.S. Green Building Council's LEED® new construction certification standards

FY04-FY07 Environmental Performance Trends

- **100% (161) installations with an Environmental Management System (EMS) in place with 31% in conformance to ISO14001**
- **8.4% reduction in facility energy use intensity (KBtu/gross square foot/per year, since FY03)**
- **35% increase in Hazardous Waste (HW) generation as reported for CY03 to CY06 and an 8% increase in pounds HW generated per $1000 net Army cost of operations**
- **11% increase in absolute Toxic Release Inventory (TRI) releases as reported for CY03 to CY06, but a 13% decrease in pounds TRI released per $1000 net Army cost of operations**

FY04-FY07 Soldier and Community Well-being Performance Trends

- **3% and 18% increases in total Army retention and recruitment, respectively**
- **Held steady military accident fatalities rate per 1000 service members**
- **62% decrease in Army civilian lost time injuries and fatalities rate per 1000 civilians**

[1] *The Army Strategy for the Environment (ASE): Sustain the Mission, Secure the Future* is available on the web at http://www.sustainability.army.mil/overview/overview.cfm.

[2] GRI maintains a database of Organizational Stakeholders. The Army will be the first U.S. Federal Agency on this list: http://www.globalreporting.org/griportal/GRI/OSManagement/frmOSMemberSearch.aspx.

[3] For a detailed background on the GRI, visit the GRI website at http://www.globalreporting.org.

As recommended by the GRI guidelines, the Army self declares that this report is in accordance with GRI Application Level B (see Figure 2)

The Army is a vast and complex enterprise that includes operational (training and war fighting) organizations, institutional support organizations, and the United States Army Corps of Engineers Civil Works Mission. As such, this report includes just a few highlights of our initiatives in support of each of the ASE goals. Where appropriate, it provides links to detailed information about these initiatives presented in other publicly available Army reports. Beyond highlighting success stories, this report provides a summary of our annual performance data[4] for key mission, environmental, and community metrics for the fiscal years 2004 to 2007. In addition, we provide a complete index to all the recommended GRI sustainability performance metrics (Tables 6 through 8 in the Annex). These tables provide links, where applicable, to the publically available Army reports that contain information related to each of the GRI recommended economic, environmental, and social responsibility performance metrics.

As can be seen throughout this report, the Army is at the very early stages of its sustainability journey. Although we applied the GRI reporting framework for this first report, there is still much progress to be made and still much to learn. We continue to reassess our progress and to seek partnerships and opportunities to collaborate, both within the Army structure, as well as with other stakeholders. Only with feedback from our stakeholders, can we work to improve our future sustainability reporting. So we invite readers to submit comments directly to the Deputy Assistant Secretary of the Army for Environment, Safety, and Occupational Health, Chief of Sustainability Programs. See back cover for contact e-mail and mail address.

Figure 2. Army Report Standard Disclosure Summary for GRI Application Level

Standard Disclosures	C	C+	B	B+	A	A+
Report Application Level						
G3 Profile Disclosures (OUTPUT)	Report on: 1.1, 2.1 - 2.10, 3.1 - 3.8, 3.10 - 3.12, 4.1 - 4.4, 4.14 - 4.15	Report Externally Assured	Report on all criteria listed for Level C plus: 1.2, 3.9, 3.13, 4.5 - 4.13, 4.16 - 4.17	Report Externally Assured	Same as requirement for Level B	Report Externally Assured
G3 Management Approach Disclosures (OUTPUT)	Not Required	Report Externally Assured	Management Approach Disclosures for each Indicator Category	Report Externally Assured	Management Approach Disclosures for each Indicator Category	Report Externally Assured
G3 Performance Indicators & Sector Supplement Performance Indicators (OUTPUT)	Report on a minimum of 10 Performance Indicators, including at least one from each of: Economic, Social and Environmental.	Report Externally Assured	Report on a minimum of 20 Performance Indicators, at least one from each of Economic, Environmental, Human rights, Labor, Society, Product Reponsibility.	Report Externally Assured	Report on each core G3 and Sector Supplement* Indicator with due regard to the Materiality Principle by either: a) reporting on the Indicator or b) explaining the reason for its omission.	Report Externally Assured

Source: http://www.globalreporting.org/ReportingFramework/G3Guidelines/.

*Sector supplement in final version

[4] All data included in this first report covers the period up to the end of the September 2007 (fiscal year 2007) and was collected from publically available Army reports. The basis for reporting the performance data, including data measurement techniques, calculations, and the basis for reporting on joint ventures/leased facilities/contracted operations, is explained in each source document.

OVERVIEW OF THE ARMY OPERATIONS DURING FISCAL YEAR 2007[5]

The Army today is a battle-hardened, All-Volunteer Force that has performed with courage, resourcefulness and resilience in the most grueling conditions. We have entered the seventh year of major combat operations in the Global War on Terrorism (GWOT). This war is the third longest war in American history, after the Revolutionary War and the Vietnam War, and it is the first extended conflict Americans are fighting with an All-Volunteer Force since the Revolutionary War.

The Army—Soldiers, Civilians, and their Families—is stretched to meet the demands of the current conflict. At the end of FY07, more than 150,000 Soldiers were in Iraq and Afghanistan. From the beginning of combat operations to the end of FY07, more than 550,000 Soldiers have served in combat zones, with more than 200,000 deployed multiple times, many serving three or four tours. The time between tours back home is neither sufficient to reintegrate fully with the Family nor to train for the full spectrum of combat operations expected of our Army under the National Military Strategy.[6] The Army's Civilians in the Army Corps of Engineers continue to tirelessly support infrastructure reconstruction missions in Iraq and Afghanistan. Since 2004 the Corps Gulf Region Division has completed 3,641 projects at a cost of 5.85 billion dollars, providing electricity, oil and natural gas, water, village roads, and health and education, security and other facilities.[7] Yet, our resilient Soldiers, Civilians, and their Families continue to answer the call to duty and to display courage, professionalism and distinction. Our Soldiers reenlist and go back to the fight again and again, and their Families continue to stand with them. These actions demonstrate that our Army is the strength and a unifying force of our Nation.

While we remain a resilient and committed professional force, our Army today is out of balance. Soldiers, Families, support systems and equipment are stressed by the demands of lengthy and repeated deployments, and insufficient recovery time. Equipment used for long periods in harsh environmental conditions is wearing out at a far greater pace than expected. Army support systems, including health care, education and family programs designed for the pre-September 11 peacetime Army, are straining under the accumulated pressure of six years of war.

Restoring this essential balance as rapidly as possible will be no easy task, and it will require the full support of the Congress and the American people. To read more about the Army's mission, vision, organization, and plan to restore balance, read the Army's 2008 Posture Statement, available on the web at ***http://www.army.mil/aps/08/.***

U.S. Army Staff Sgt. Michael Kaman helps secure an area along the Pech River during a meeting between key leaders in the Kunar province of Afghanistan Photo by Staff Sgt. Joshua Gipe, U.S. Army. Date: Feb. 4, 2007.
Photo courtesy of US Army from: *www.army.mil/-images*.

[5] **Operational overview presented from the Fiscal Year 2007 United States Army Annual Financial Statement: Commitment to Current and Future Readiness. The full report can be found on the web at** http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.

[6] **FY07 Army Annual Financial Report, pg 1:** http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.

[7] **Army Corps of Engineers Gulf Region Division September 2007 Factsheet** http://www.grd.usace.army.mil/index.asp, Afghanistan Engineers District: http://www.aed.usace.army.mil/index.asp.

The Army's Mission

The Army's mission is to support the National Military Strategy by providing well-trained, well-led and well-equipped forces to the combatant commanders. This mission encompasses the intent of the U.S. Congress, as defined in Title 10 of the U.S. Code, for the military to:

- Preserve the peace and security of, and provide the defense for, the United States, the Territories, Commonwealths and Possessions of the United States, and any areas occupied by the United States;
- Support the national policies;
- Implement national objectives; and
- Overcome any nations responsible for aggressive acts that imperil the peace and security of the United States.

This mission has remained constant since June 14, 1775; however, the environment and nature of conflict have changed dramatically over that same time, especially in the context of today's Global War on Terrorism. New adversaries and the growth in asymmetric warfare have compelled the Army to transform how it trains and equips its Soldiers, how those Soldiers are organized and how they fight. This is progressing rapidly, and it must not slow or falter if the Army is to continue to meet the Nation's domestic and international security obligations today and into the future.

The Army Vision[8]

The Army is committed to remaining the world's preeminent land power—relevant and ready at all times to serve the Nation and to support our allies. The Army will continue to supply U.S. Combatant Commanders with the forces necessary to defeat any adversary, in any situation, at any time. The Army, therefore, must fully train and appropriately organize its forces, develop innovative and adaptive leaders, and design support structures appropriate for the new global security environment.

Army Leadership in FY07

This past year saw new leadership at the highest levels. In July 2007, Secretary Pete Geren was confirmed as Secretary of the Army. In April 2007, General George Casey assumed his duties as the new Army Chief of Staff. To learn more about the Army leadership structure in FY07 visit the Army web site at ***http://www.army.mil/institution/leaders.***

Army Organization

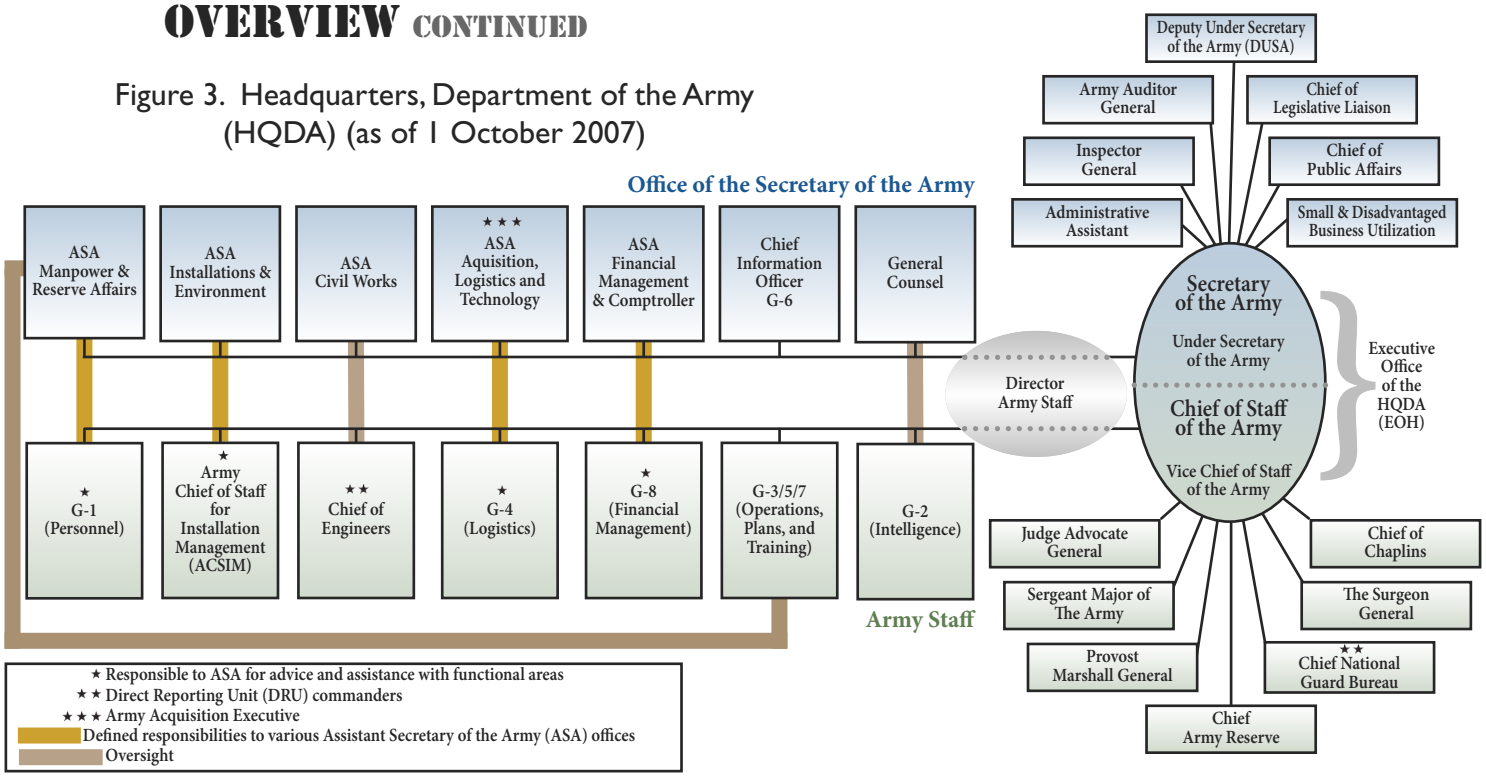
The Army is one of the three military departments (Army, Navy and Air Force) reporting to the Department of Defense (DoD). It is a large and complex organization, with more than 522,000 active-duty Soldiers and approximately 264,000 active and reserve component Soldiers deployed or forward-stationed in nearly 80 countries overseas. These warfighters are supported by more than 250,000 Army Civilians, who are critical members of the institution at every level.[9]

A U.S. Army Soldier with 3rd Stryker Brigade Combat Team moves with his squad as they clear palm groves in Buhriz, Iraq. Photo by U.S. Air Force Staff Sgt. Stacy L. Pearsall.
Date: March 20, 2007. Photo courtesy of US Army from: *www.army.mil/-images.*

[8] **FY07 Army Annual Financial report,** http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.

[9] **FY07 Army Annual Financial report, pg 3,** http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.

Figure 3. Headquarters, Department of the Army (HQDA) (as of 1 October 2007)



Source: FY07 Army Annual Financial Report, pg 4. http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf

The Army is organized with the primary objective of supporting and sustaining the mobilization, training and deployment of its Soldiers anywhere in the world. The Headquarters, Department of the Army (HQDA) (Figure 3), under the direction of the Secretary of the Army and the Chief of Staff, leads and manages the entire Army.

The Army's organizational structure consists of three interdependent pieces: (1) the war fighting, or operational Army; (2) the institutional Army, which supports those operational forces by providing the training, facilities and equipment necessary to prepare and to sustain Soldiers; and (3) the United States Army Corps of Engineer's Civil Works Mission.[10]

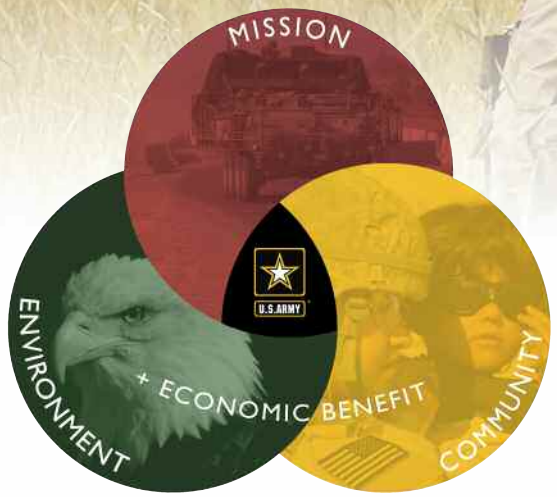
Viewed by its constituent elements, the Army can be separated into the active and reserve components. The active component consists of full-time Soldiers assigned to the operational and institutional organizations that perform day-to-day Army missions. The Congress annually reviews and mandates the number of Soldiers that the Army may maintain. The reserve component consists of the Army National Guard (ARNG) and the U.S. Army Reserve (USAR). The ARNG has two missions: federal and state. Its federal mission is to provide trained and ready forces for wartime, national emergencies and other requirements, as necessary. Its state mission is to train for, and respond to, domestic emergencies and other missions as required by state law. Unless federally mobilized, ARNG units are commanded by their state executive, usually the governor.

The USAR is the primary federal reserve force of the Army. The USAR provides specialized units and resources to support the deployment and sustainment of Army forces around the globe. In addition, the USAR is the main source of individual Soldiers to augment headquarters staff and to fill vacancies in the active component.

Visit the Army web site to learn more about how the Army is organized and the location of its worldwide facilities and operations at ***http://www.army.mil/institution/organization.***

[10] Congress funds the United States Army Corps of Engineers Civil Works Fund through the energy and water development appropriations process separate from the Army's General Fund and Working Capital Fund.

THE ARMY'S TRIPLE BOTTOM LINE—PLUS



Many of the sustainable practices the Army seeks to institutionalize are modeled on practices adopted by a growing number of corporations achieving a competitive advantage by taking a thorough look at how their processes impact not only their financial status, but environmental and social well-being—the "triple bottom line". By finding common ground where financial interests merge with the interest of doing what is right by the environment and society, corporations have found tremendous savings, more effective business models, and new markets.

To illustrate the concept of sustainability in an Army context, the Army adopted its own "triple bottom line—plus": Mission, Environment, Community, plus the economic benefits that sustainability provides by reducing costs and impacts, and accelerating innovation.

Mission

Army Sustainability establishes a long-range vision that enables the Army to meet its mission today and into the future. Sustainability is a paradigm that focuses our thinking to address both present and future mission needs while strengthening community partnerships that improve our ability to organize, equip, train, and deploy our Soldiers as part of the Joint force. Sustain the Mission, Secure the Future is inspired by the need to address global factors influencing our Nation's security and stability. Advances in technology, ever-increasing global population, and urbanization have effectively made the world smaller. They have placed greater stresses on the world's interconnected human, economic, and natural systems. Local and regional issues, such as famine, natural disasters, ecological degradation, economic decline, political upheaval, and disputes over precious and sometimes scarce natural resources are evolving into global issues that influence how the United States must respond and act.

Although much is changing, certain things remain constant. The Army's primary mission is to defend the United States—its people, its land, and its heritage. Our core values endure. While remaining true to our primary mission and these values, Army practices must continually evolve to remain relevant and ready to meet these global challenges. In this rapidly changing environment, meeting mission requirements worldwide will increasingly require both safeguarding the natural systems upon which our quality of life depends, and more effectively partnering at the global, federal, state, and local levels.

Environment

Sustainability connects our activities today to those of tomorrow with sound business and environmental practices. Environmental compliance with federal, state and local laws ensures that we manage our activities and the natural resources for which we are responsible in a manner that the American people expect. However, to sustain our mission we have to do more than comply with current environmental regulations.

Utilizing sustainability as a conceptual planning framework helps the Army to proactively identify and manage future problems by eliminating threats to human health and the environment today. We are also taking responsibility for our past actions and actively cleaning up environmental contamination through our Army Environmental Cleanup Strategic Plan.[11] The Army Cleanup Strategic Plan and our continuous progress toward the triple bottom line seek to protect not only our natural resources, but also the health and safety of the Soldier, the Army Family, and our local communities.

Community

Sustainability is more than biodiversity and ecosystem management. It can not be achieved alone or on a single Army Installation. To achieve the vision outlined in the ASE, the Army must integrate the needs of the Soldier, the Army Family, and the local community.

The Army must implement effective policies and practices inside and outside the fence that safeguard our quality of life, health care, education and other community issues in a manner that our Nation expects of us. To sustain the future requires a deep and personal commitment from every member of the Army team—every leader, every Soldier, every Civilian, and every Family member. Sustainability requires the involvement of our local communities as well as cooperation, collaboration, and commitment from the Administration, Congress, DoD, industry, and the general public.

Plus

The Army recognizes that sustainable practices reduce the true cost of doing business and reduce impacts on the environment and the community. Army sustainability is aligned closely with the Army's Business Transformation efforts to improve Army processes, lower total ownership costs, and accelerate innovation. Sustainability and Business Transformation act together as a flywheel that constantly drives and accelerates Army innovation and can be measured in reduced total ownership costs, as well as reduced environmental and community impact.

Fort Lewis Community Covenant Signing. Participants gather on stage after the signing of the Puget Sound Army Community Covenant at Clover Park Technical College in Lakewood, Wash. Photo by Jason Kaye. Date: May 05, 2008 Photo courtesy of US Army from: *http://www.flickr.com/photos/soldiersmediacenter/2473344183/*

[11] The Army Environmental Cleanup Strategic Plan can be found at: http://aec.army.mil/usaec/cleanup/07stratplan.pdf.

ARMY FY07 PERFORMANCE HIGHLIGHTS TOWARD THE TRIPLE BOTTOM LINE—PLUS

For the past 30 years, environmental management in the Army had been primarily compliance-based, with the ultimate goal of any environmental program being to reduce releases of pollutants and avoid costly violations. Over the past decades, we learned that simply complying with environmental regulations will not ensure that we will be able to sustain our mission. Many of the sustainable practices the Army seeks to institutionalize are modeled from practices adopted by a growing number of corporations achieving competitive advantage by taking a thorough look at how their processes impact not only their financial status, but environmental and social well-being—the "triple bottom line."

The Army, like other Federal Agencies, realizes that we must do more than just promote sustainable practices; we must lead by example by implementing them in our mission activities. The following sections contain annual performance data for key Army mission, environmental, and community performance metrics for FY04 to FY07. These metrics are based on a subset of the economic, environmental, and social responsibility performance metrics recommended by the Global Reporting Initiative (GRI's) Sustainability Reporting Guidelines (Version 3.0) (G3), and the GRI's Sector Supplement for Public Agencies (Pilot Version 1.0).

In addition, we provide a complete index to all the recommended GRI sustainability performance metrics (Tables 6 through 8 in the Annex). These tables provide links, where applicable, to the publically available Army reports that contain information related to each of the GRI recommended economic, environmental, and social responsibility performance metrics.

Although it is essential to measure and report progress, it is difficult to adequately summarize an organization's sustainability performance with a few key indicators. The summary performance information listed in Table 3, provide a good baseline, but limited insight into the Army's overall sustainability. There is much still to learn as we continue our journey toward a sustainable Army. As such, in 2008 the Army will roll out a comprehensive sustainability strategic action plan that sets objectives and ambitious targets to achieve each of our sustainability goals.

Mission Performance Highlights

Three mission performance metrics are highlighted in this first report to provide a context to the scale of our operations in terms of dollars and people: Net Cost of Army Operations, Army End Strength, and Reserve End Strength. The detailed FY04 to FY07 data for these key mission metrics is presented in Table 3, along with a list of other environmental and community metrics. The collection of metrics in Table 3 indicates the Army's baseline performance in implementing the Army Strategy for the Environment.

The Net Cost of Army Operations as defined in the FY07 US Army Annual Financial Statement is the cost in billions of dollars. As can be seen in Figure 4, the Army has realized operational increases since FY04 with the net cost of operations increasing over 24 percent by FY07: ***http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.***

Army End Strength is defined as the number of Soldiers (measured in thousands) on active duty at the end of the year. The Army slightly surpassed its Active Army End Strength FY07 goal, having increased by 5.8 percent since FY04. Due to the global war on terrorism, several special skills are in high demand. To fill them, it has been necessary to augment recruiting and retention incentives. More information can be found on the web at ***http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf, page 24.***

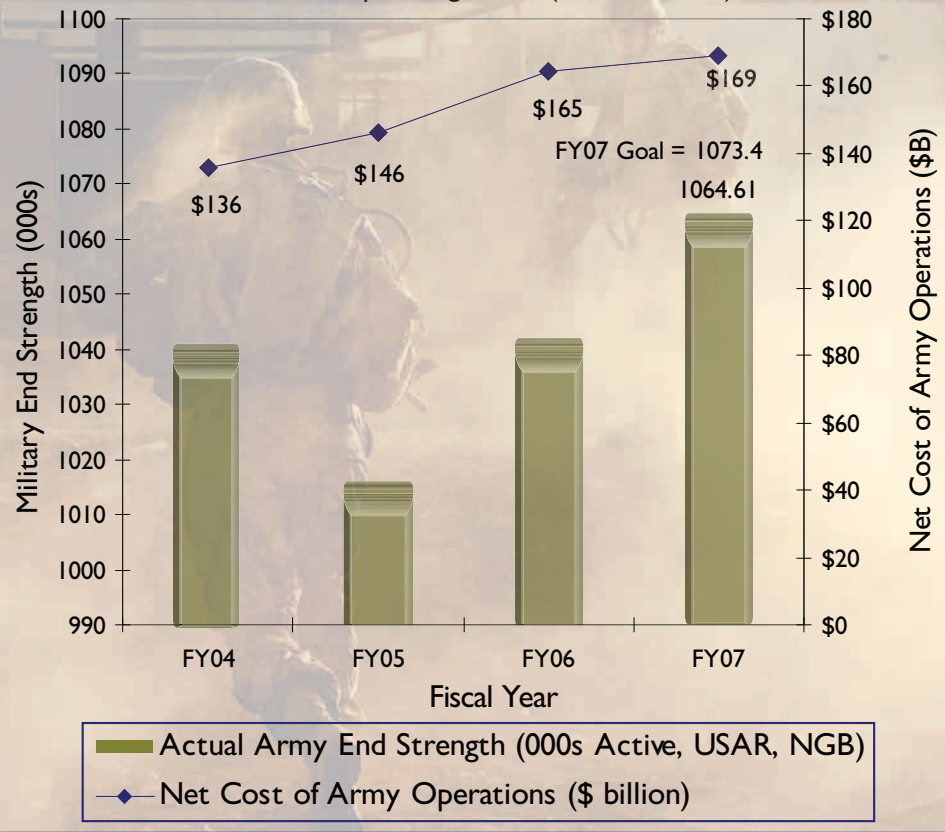
The Reserve End Strength, defined as the number of persons (measured in thousands) who are part of either the Reserve or of the National Guard unit, remained relatively constant, with a 1 percent decrease since FY04 while being just 2 percent away from meeting its FY07 goal *(See http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf, page 24).* As Figure 4 shows, the overall Army Military End Strength (Active, Reserve, and National Guard) displays a positive trend from FY04 to FY07.

While we continue to accomplish the increase in mission demands due to the exceptional capabilities and dedication demonstrated by our Soldiers and Army Civilians, our Army is out of balance. Soldiers, Families, support systems and equipment are stretched by the demands of lengthy and repeated deployments, and insufficient recovery time.

To learn more about the Army's FY07 performance and future plans to reestablish balance, read the annual Army Posture Statement (APS) and the Army Fiscal Year Financial Statement. The annual APS is an unclassified summary of Army roles, missions, accomplishments, plans, and programs. Designed to reinforce the Secretary and Chief of Staff of the Army posture and budget testimony before Congress, the APS serves a broad audience as a basic reference on the state of the Army. The FY08 APS and past APSs for fiscal years 1997 to 2007 are available on the web at ***http://www.army.mil/institution/leaders/posturestatement.***

The Army Annual Financial Statement includes discussion and analysis of the performance and financial statements for the Army General Fund, Army Working Capital Fund, and the Civil Works Fund. The Fiscal Year 2007 United States Army Annual Financial Statement: Commitment to Current and Future Readiness can be found on the web at ***http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.***

Figure 4. Army Military End Strength (Active, Reserve, and National Guard) and Net Operating Costs (FY04 to FY07)



Source: FY07 Army Financial Report, pg 24 and Consolidated Financial Statements, *http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf*

Environmental Performance Highlights

Every year since 1994, the Army has published its environmental performance as part of the Fiscal Year Defense Environmental Programs Annual Report to Congress. The Annual Report to Congress fulfills Congressional reporting requirements under 10 United States Code (USC) 2706; the Comprehensive Environmental Response, Compensation, and Liability Act; the Resource Conservation and Recovery Act; and various other laws and regulations. This report summarizes each of the DoD's environmental activities over each fiscal year, and includes discussions of past budget appropriations and anticipated funding requests. The complete reports for FY94 to FY07 are available on the web at ***https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC.*** In addition to an environmental report, DoD publishes an Annual Energy Management Report which includes Army specific information. The FY99 to FY07 DoD Annual Energy Reports are available at ***http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/main.shtml.***

A summary of the Army's annual performance trends for key environmental metrics is shown in Table 1 as well as described in the subsections that follow. For each metric, Table 1 presents the percent change from FY04 to FY07, the year the Army Strategy for the Environment was published. As shown by the color coding in the table, the Army made progress in all (in green boxes) but five (in red boxes) of its key metrics over the last four years. The four year data for these metrics is presented in Table 3, along with other environmental, community, and mission indicators.

Table 1. Selected Trends for Key Army Environmental Performance Metrics (FY04 to FY07)[1]

Key

Metric trended in desired direction	No change	Metric trended in undesired direction

Metric Definition	FY04-07 Change
Environmental funding	2.5%
Facilities with Environmental Management Systems (EMS) in place	97%
Installation Sustainability Plans complete	129%
Solid waste (SW) and construction and demolition (C&D)debris generated	-5%
SW and C&D debris recycled rate	10%
TRI releases indexed to net cost of Army operations (lb TRI per $1000)	-13%
New military construction (MILCON) projects designed to LEED® standards (in FY07)	78%
Army facility water use (Billion gallons)	-32%
Facility energy use intensity (KBtu/Gross Square Footage (GSF))[3]	-8.4%
Installations with up-to-date Integrated Natural Resource Management Plans (INRMP)	0%
Army new environmental enforcement actions	6%
Violation rate (new enforcement actions/inspections)	8%
Hazardous waste (HW) generated[2]	35%
HW generated indexed to net cost of Army operations (lb HW per $1000)	8%
Toxics Release Inventory (TRI) chemical releases to land, air, and water (CY06)[2]	11%

Note: LEED® = The U.S. Green Building Council's Leadership in Energy and Environmental Design

Sources: Trends were calculated using: Defense Environmental Programs Annual Reports to Congress: ***https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC*** Annual Defense Energy Management Reports, ***http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/main.shtml***

[1] Army Corps of Engineers Civil Works program data not included

[2] In FY07 TRI and Hazardous waste numbers were reported for CY03 to CY06

[3] The trend in facility energy use intensity is measured from a FY03 baseline

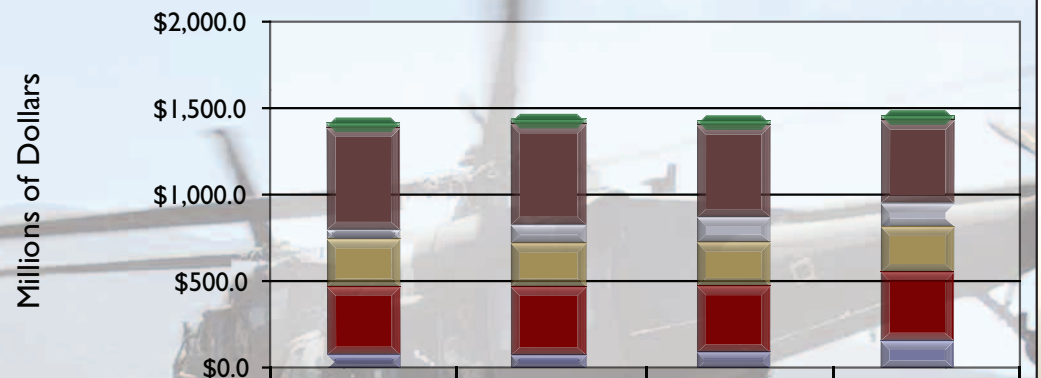
ENVIRONMENTAL FUNDING

The Army's total environmental funding (measured in millions of dollars) improved slightly—by 2.5 percent—since FY04 (Figure 5). Although the Army categorizes its spending across six funding categories, we believe it is also important to track two types of activities: environmental funding for clean-up (of past operations) and environmental funding for compliance, pollution prevention and conservation (related to current operations) (see Table 3, pg. 25).

The Army's environmental funding for clean-up includes Environmental Restoration (ER), which, as Table 3 indicates, decreased from FY04 to FY 07 by 2 percent. The Army's budget for ER includes Base Realignment and Closure (BRAC) funds. The number presented in Table 3 also includes the budget for formerly used defense sites (FUDS). As the executive agent for FUDS, the Army executed approximately $262.8 million in FY07 to address cleanup resulting from historical DoD activities at properties no longer under the Department's control. The Office of the Secretary of Defense budgets for cleanup at FUDs and presents this as part of the Army's data in the FY07 Defense Environmental Programs Annual Report to Congress. Source: ***https://www.denix.osd.mil/portal/page/portal/content/environment/ARC/FY2007/04_FY07DEPARC_App_B_EM_Budget_final.pdf, (page B-4).***

The Army's environmental funding for compliance, pollution prevention and conservation is also measured in millions of dollars and increased by 6 percent since FY04. Figure 5 shows the annual environmental expenditures by type from FY04 to FY07. In FY07, the Army obligated $1.5 billion for environmental programs and this budget continues to provide sufficient funds to meet legal requirements. ***(https://www.denix.osd.mil/portal/page/portal/content/environment/ARC/FY2007/04_FY07DEPARC_App_B_EM_Budget_final.pdf, page B-4).***

Figure 5. Total Army Environmental Funding by Type (FY04-FY07)



	FY04	FY05	FY06	FY07
Pollution Prevention	$25.1	$19.9	$17.7	$30.7
Compliance	$602.1	$602.0	$540.8	$494.0
BRAC	$64.5	$95.1	$145.6	$135.7
FUDS	$284.2	$265.7	$262.8	$262.8
ER	$394.1	$401.3	$395.3	$402.8
Conservation	$86.2	$82.6	$91.7	$166.6

Notes: BRAC: Base Realignment and Closure; FUDS: Formerly Used Defense sites; ER: Environmental Remediation

Source: FY07 Defense Environmental Programs Report Annual Report to Congress (Appendix B), ***https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC/FY2007***

FACILITIES WITH ENVIRONMENTAL SYSTEMS IN PLACE

The Army is on track to achieve the requirements of Executive Order (EO) 13423, Strengthening Federal Environmental, Energy, and Transportation Management, related to implementing an Environmental Management System (EMS) at its facilities by FY09. An EMS is a formal framework for integrating the consideration of environmental issues into the overall management structure that, when properly implemented, identifies the environmental aspects of the mission, highlights and prioritizes areas of risk, promotes pollution prevention, and tracks progress toward environmental goals. The Army is utilizing EMSs to improve performance and compliance, and to integrate sustainability into all activities. At the end of FY07, all Army installations had an EMS in place—a 97 percent increase since FY04—and 31 percent were in conformance with ISO 14001 standards. More information can be found on the web at ***https://www.denix.osd.mil/portal/page/portal/content/environment/ARC/FY2007/03_FY07DEPARC_App_A_EMS_final.pdf, page A-2.***

U.S. Army Sgt. Rick D. Peevy, a crew chief from Alpha Company, 2nd Battalion, 135th Aviation Regiment, Colorado Army National Guard, surveys the scene...at Fort Carson, Colo., June 12, 2008. Photo courtesy of US Army from: *www.army.mil/-images.*

INSTALLATION SUSTAINABILITY PLANS

The Army is making strides in implementing comprehensive Installation Sustainability Plans (ISPs) as part of their installation strategic planning process that establishes long term goals, objectives, metrics, targets, and resource requirements. This metric is measured by the number of installations with ISPs. Since FY04 the number of Army ISPs more than doubled (a 129 percent increase). For more information on ISPs please refer to ***http://www.sustainability.army.mil/tools/programtools_guide.cfm (and to the section of this report titled ASE Goal: Foster a Sustainability Ethic).***

ENVIRONMENTAL ENFORCEMENT ACTIONS, INSPECTIONS AND VIOLATION RATES

Every year, the Army dedicates substantial financial and personnel resources to administering and upholding compliance with federal, state, and local environmental laws and regulations. Despite these efforts, noncompliance and the resulting related fines and penalties continue to take place. Fines are tracked by DoD in the following statutes and categories: Clean Air Act; Clean Water Act; Safe Drinking Water Act; Resource Conservation and Recovery Act (RCRA) Subpart C (which addresses hazardous waste); RCRA Subpart D (which addresses solid waste); RCRA Subpart I (which addresses underground storage tanks); and Other (which addresses other federal, state, and local statutes). A formal, written notification from a regulatory agency specifying a violation of any applicable statutory or regulatory requirement is considered an enforcement action (ENF) by DoD. The Army's number of new compliance ENFs increased by 6 percent since FY04, indicating a slight negative trend. However it is worthwhile to note that the number of enforcement actions decreased from 101 in FY06 to 94 in FY07. The number of Federal, State and Local inspections on Army facilities decreased by 4 percent from FY04 to FY07. The violation rate, defined as the number of new ENFs per inspection, increased slightly by 8 percent. More information can be found on the web at ***https://www.denix.osd.mil/portal/page/portal/content/environment/ARC/FY2007/34_FY07DEPARC_App_V_EnforcementActions_final.pdf, (page V-2).***

SOLID WASTE/CONSTRUCTION AND DEMOLITION DEBRIS AND RECYCLING RATES

To face the many challenges associated with waste management, the Army has effectively maintained its solid and hazardous waste reduction programs, realizing successes through regulatory compliance as well as economic benefits. Integrated solid waste management programs promote successful waste diversion through a comprehensive approach encompassing waste prevention, recycling, composting, and disposal programs. The Army continues to integrate solid waste (SW) management practices into its operations to enhance and sustain mission readiness, comply with requirements, and reduce resource consumption.

DoD established the total SW diversion rate metric (measured in percent of waste diverted) to support goals for diversion and to calculate the rate at which installations prevent non-hazardous municipal SW from entering a disposal facility. In FY05, DoD revised the SW reporting metric to separately identify construction and demolition (C&D) debris and municipal SW diversion rates. The Army achieved not only a 5 percent reduction in SW and C&D debris generation since FY04 but also achieved a 10 percent increase in its rate of recycling, indicating an overall positive trend.

Diversion accounted for 65 percent of all Army solid waste disposal in FY07. The Army effectively demonstrated commitment to solid waste reduction in C&D processes, with 79 percent of this debris being diverted from landfills into productive reuse. In addition, the Army diverted 40 percent of non-hazardous municipal solid waste from entering the waste stream. The Army's efforts to divert waste from landfills and incinerators have resulted in an avoidance of $105 million in solid waste disposal costs. The qualified recycling program posted gross revenues of $24 million. Most of these proceeds went toward operation and improvement of the program. For more information please go to ***https://www.denix.osd.mil/portal/page/portal/content/environment/ARC/FY2007/35_FY07DEPARC_App_W_SolidHazardousWaste_final.pdf.***

HAZARDOUS WASTE

DoD has sustained a strong dedication to reducing hazardous waste (HW) and has achieved a 50 percent decrease in the total amount of hazardous waste disposed since CY96. The HW reduction rate is calculated as a calendar year (CY) metric (in million pounds per CY) and includes hazardous waste that is shipped off site, treated on site, and shipped off-site overseas. In the DoD Annual Environmental Report to Congress, the amount of Hazardous Waste (HW) generated is reported each fiscal year for the previous CY. The trend described in this report is based on the four-year span of CY03 to CY06, which are reported in the FY04 to FY07 columns on Table 3. Although the Army has increased total disposal of hazardous waste since CY03, we have also shown a marked improved efficiency in operating processes. Increases in hazardous waste generation are largely due to the increase in ammunition production, depot activity and operational training required by the Global War on Terror.

U.S. Army Corps of Engineers Bob Mabry, right, and U.S. Army Maj. John Schulz, from Bravo Company, 418th Civil Affairs Battalion, survey construction at Al Neel Elementary School in Baghdad, Iraq. Photo by: U.S. Air Force photo by Staff Sgt. Jason T. Bailey. Date: Feb. 27, 2008. Photo courtesy of US Army from: *www.army.mil/-images.*

The Army disposed of over 45 million pounds of hazardous waste during CY06.[12] Although this amount represents a 35 percent increase in total hazardous waste disposal for the Army compared to CY03 and an 8 percent increase in pounds generated per $1000 of net annual Army cost of operations, the Army achieved a 29 percent reduction in overall HW generation from CY05. More information can be found on the web at ***https://www.denix.osd.mil/portal/page/portal/content/environment/ARC/FY2007/35_FY07DEPARC_App_W_SolidHazardousWaste_final.pdf, (page W-3).***

Sgt. Keith Yohnke (left) and Staff Sgt. Steve Brouillet from the Iowa National Guard's 71st Weapons of Mass Destruction, Civil Support Team take a water sample from a flooded area near Manchester, Iowa, to assist state and federal authorities identify hazardous materials released in the Midwest floods. Photo by the Iowa National Guard. Date: June 19, 2008. Photo courtesy of US Army from: *www.army.mil/-images.*

TOXIC RELEASE INVENTORY AMOUNTS

The Toxics Release Inventory (TRI) provides information about toxic chemicals (measured in million pounds by CY) that enter into the environment at a facility or are transferred offsite for further waste management. Annual TRI reports are filed by facilities and sent to the U.S. Environmental Protection Agency (EPA) where the data is collected and maintained in a publicly accessible toxic chemical database, known as TRI Explorer available at ***http://www.epa.gov/triexplorer.*** Citizens, businesses, and governments can use this database to determine which toxic chemicals are present in their communities, and prepare for any potential emergency releases.

Like HW in the FY07 Defense Environmental Programs Report to Congress, TRI is reported each fiscal year for the previous calendar year (CY). The trend described in this report is based on the four-year span of CY03 to CY06, which are reported in the FY04 to FY07 columns on Table 3. Efforts to develop processes and product substitutions to lower TRI releases are also showing improvement.

At the end of CY06, 81 Army facilities and ranges reported releases and off-site transfers of 273 TRI chemicals totaling 23.9 million pounds, resulting in an 11 percent increase since CY03 in total pounds released.[13] As a result, the Army did not meet the goal of a 40 percent reduction in releases between CY01 and CY06, as set by EO 13148, Greening the Government Through Leadership in Environmental Management (EO13148 was rescinded and replaced with EO 13423 on January 24, 2007[14]). However, there was a 13 percent reduction in pounds of TRI chemicals released per $1000 of net Army operating costs between CY06 and CY04 (See Table 1). When indexed to operational costs, the total TRI releases per unit of cost decreased. As operational demands decrease these efficiency gains will stay. More information can be found on the web at ***https://www.denix.osd.mil/portal/page/portal/content/environment/ARC/FY2007/37_FY07DEPARC_App_Y_TRI_final.pdf, (page Y-7).***

INSTALLATIONS WITH UP-TO-DATE INRMPS

As amended in 1997, the Sikes Act of 1960 requires DoD to prepare and implement an Integrated Natural Resources Management Plan (INRMP) for each installation with significant natural resources. An INRMP is a comprehensive plan used to manage installation natural resources. The INRMP describes how natural resources will be managed to ensure the sustained use of a natural landscape for military mission needs in compliance with applicable laws and regulations.

[12] FY07 Defense Environmental Programs Annual Report to Congress (Appendix W, pg 3); https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC.

[13] FY07 Defense Environmental Programs Annual Report to Congress (Appendix Y, pg 7, 8); *https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC.*

[14] Executive Order 13423; http://ofee.gov/eo/eo13423_main.asp.

The Army is committed to managing, protecting, and restoring the natural resources on its installations. Army installations are developing and implementing INRMPs in accordance with the military mission and other installations' management plans and processes. In FY07, the Army spent $71.4 million to develop and implement these INRMPs and 98 percent of installations requiring an INRMP completed an updated INRMP More information can be found on the web at ***https://www.denix.osd.mil/portal/page/portal/content/environment/ARC/FY2007/09_FY07DEPARC_App_G_NaturalResources_final.pdf, (Appendix G, pg 3, 6-12).***

NEW MILITARY CONSTRUCTION PROJECTS BUILT TO U.S. GREEN BUILDING COUNCIL LEED® STANDARDS

During FY01, the Army issued a policy requiring all military construction (MILCON) projects to be scored using the Sustainable Project Rating Tool (SPiRiT). In 2006 the Army updated its installation sustainability strategy by beginning the transition from SPiRiT to the U.S. Green Building Council Leadership in Energy and Environmental Design® (LEED®) Building Rating System. LEED® is a third party certification program and the nationally accepted benchmark for the design, construction and operation of high performance green buildings. LEED® promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.

The metric for tracking the requirement to build MILCON projects to LEED® standards was added in FY06, the first year data was reported. In FY07, 78 percent (301) of MILCON projects were built to at least LEED® certification standards. For more information on the Army and LEED® see the Army Corps of Engineers Sustainable Design and Development web site: ***https://eko.usace.army.mil/fa/sdd/.***

Indiana Army National Guard Pfc. Jacob Jana, top, checks the water level in a 400-gallon tank as Specialists Daniel Dubowski dispenses water for a Hope, Ind. resident Wednesday, June 11, 2008. Photo by Staff Sgt. Jeff Lowry. Date: June 12, 2008. Photo courtesy of US Army from: *www.army.mil/-images.*

ARMY FACILITY WATER AND ENERGY USE

We made considerable progress during FY07 in energy management by implementing the Army Energy & Water Campaign Plan for Installations. This is an overarching, comprehensive roadmap to meet energy and environmental objectives that are mandated by the Energy Policy Act of 2005 (EPAct) and EO 13423, as well as to support the Army's Energy Strategy for Installations and Federal Regulations and guidance. It was developed in 2006 and is updated biennially to define Army Energy Program direction and resource requirements. The Army is committed to the reduction of energy waste in existing facilities, increasing energy efficiency in new construction and equipment, reducing dependence on fossil fuels, conserving water resources, and improving energy security.

Army facility water use (measured in billion gallons) decreased by 32 percent between FY04 and FY07 trending in a desired direction. In FY07, the facility energy use intensity (measured in units of Btu per gross square foot) decreased by 8.4 percent respectively compared to FY03. This metric also indicates a desired trend for the Army.

In FY07, the equivalent of 7.5 percent of total facility electric use came from renewable energy sources. The Army continued implementing its energy strategy through the use of utility privatization contracts, the Energy Conservation Investment Program (ECIP), Energy Savings Performance Contracts (ESPC), Utility Energy Services Contracts (UESC), by conducting an Army Energy Forum and by providing Certified Energy Manager (CEM) training for Army energy managers.

In FY07, while increasing troop strength, the Army was still able to improve energy efficiency to a level of 91.9 million Btu per square foot of buildings, a reduction of 8.4 percent from base year FY03 consumption levels. More information can be found on the web at ***http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/main.shtml.***

Community Performance Highlights

The Army's community consists of our Soldiers, Army Civilians, Army Families, the local communities surrounding our installations, and the public. Many of the support systems, including health care, education and family programs designed for the pre-September 11, 2001 peacetime Army, are straining under the accumulated pressure of six years of the Global War on Terror. The Army has initiated many programs in FY07 to sustain the quality of our All-Volunteer Force and the many capabilities it provides to the Nation. We have taken a hard look at how we take care of our most valuable resource—our people—to determine what needs to change in terms of support and services. Our objective is to ensure our Soldiers, our Civilian workforce, and our Families have meaningful programs available to them and that the Army community affords them the quality of life they deserve for the service they render to the Nation. Below we summarize the publically available Community performance metrics and discuss the FY04 to FY07 performance trends (as presented in Table 3).

Deuce, a therapy dog at Walter Reed, and his owner Harvey Naranjo greet Sgt. 1st Class Andrew R. Allman, one of the patients at the occupational therapy gym. Photo by Elizabeth M. Lorge. Photo courtesy of US Army from: ***www.army.mil/-news/2008/06/27/.***

SOLDIER ACCIDENTAL FATALITIES RATE AND ARMY CIVILIAN EMPLOYEE LOST TIME CLAIMS DUE TO INJURIES AND FATALITIES

Prior to FY06, the Secretary of Defense, concerned about increased accident rates across the department, set goals to reduce accident rates 75 percent by the end of FY08. In 2006, the Army responded to this goal by releasing the Army Safety and Occupational Health Strategic Plan.[15] This Plan outlines the Army's commitment to increase operational and workplace safety and health while reducing accidents. The Plan also offers a single integrated framework for strategic planning for Army safety and occupation health programs as well as a basis for action plans to provide safe work environments.

Within that context, between FY04 and FY07 we held the rates (measured in accidental fatalities per thousand service members) of Military accidental fatalities steady[16] and dramatically improved the rates (measured in claims per thousand civilians) of Civilian Lost Time Claims, which decreased by 62 percent since FY04 (see Table 3). Although accidental fatalities for service members remained the same, the mission activities of the Army have increased considerably over this period.

[15] The Army Safety and Occupational Health Strategic Plan is available online at http://www.asaie.army.mil/Public/ESOH/Safety/Direction/ArmySafetyStrategy.pdf.

[16] Army Online Accident, Injury, and Illness Statistics Website at https://crc.army.mil/Stats/detail.asp?iData=3&iCat=56&iChannel=18&nChannel=Stats.

ARMY CASUALTIES RELATED TO OPERATION IRAQI FREEDOM (OIF) AND OPERATION ENDURING FREEDOM (OEF)

Table 2 presents the total Army Casualties related to Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) for Active Army, National Guard, and Reserves from October 2001 to December 2007. We constantly strive to minimize casualties by providing our Soldiers with the best training, equipment, doctrine and leaders when deployed and by ensuring that they receive the best support systems when they return. To learn more about the Army personnel casualty statistics, the public can view online data files for the DoD Personnel and Military Casualty Statistics at ***http://siadapp.dmdc.osd.mil/personnel/MMIDHOME.HTM.***

ARMY SOLDIER RETENTION AND RECRUITING

The Army achieved both its retention and recruiting goals and has increased rates of both retention and recruitment since FY04, by 3 and 18 percent, respectively (See Table 3). To learn more about the Army's initiatives to sustain our Soldiers, Civilians and Families in FY07 and our plans for FY08, visit the FY 2008 Army Posture Statement web site at ***http://www.army.mil/aps/08/information_papers/sustain/Sustain.html.***

PUBLIC INVOLVEMENT & COMMUNITY ENGAGEMENT

The Army engages its community and public stakeholders at every level of its operations, from garrison operations to the Army's Civil Works Mission. Examples of community engagement initiatives include tools for Army personnel such as the Army Public Involvement Toolbox[17] web site, Installations Strategic Planning (ISP) community engagement process, and via projects conducted via the Civil Works Mission of the United States Army Corps of Engineers (USACE).

The Civil Works Mission of the USACE contributes to national sustainability by serving the public well beyond the borders of Army installations. It provides the American public with responsive

Table 2. Army Casualties Related to Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) by Active Army, National Guard, and Reserves from 7 Oct 01 Through 1 Dec 07.

OIF/OEF	Casualty Type	USA	ARNG	USAR
OIF Totals		16,620	4,174	1,308
OIF	Hostile Death	1,818	337	92
OIF	Non- Hostile Death	385	102	38
OIF	WIA	14,417	3,735	1,178
OEF Totals		1,605	277	78
OEF	Hostile Death	186	36	11
OEF	Non- Hostile Death	96	23	12
OEF	WIA	1,323	218	55

USA = Army Active; ARNG = Army National Guard; USAR = Army Reserve; WIA = Wounded in Action.

Source: Military Personnel Statistics, (Accessed: March, 2008) ***http://siadapp.dmdc.osd.mil/personnel/gwot_component.pdf.***

Summary of all DoD Active Duty Personnel Casualty Data by type is available at ***http://siadapp.dmdc.osd.mil/personnel/CASUALTY/Death_Rates1.pdf.***

[17] **Army Public Involvement Toolbox:** http://www.asaie.army.mil/pitoolbox.

development and management of the Nation's water resources; protection, restoration and management of the environment; disaster response and recovery; and engineering and technical services. The following key community performance metrics are shown in Table 3 along with other environmental and mission metrics.

NET COST OF ARMY CORPS OF ENGINEERS CIVIL WORKS

The USACE Civil Works Mission receives federal funding through an annual Energy and Water Development Appropriations Act. Program funding also comes from nonfederal project sponsors who share in project costs according to formulas established by project authorization acts. A third source of funding comes through the Support for Others Program, which is conducted under reimbursable agreements with federal agencies. The USACE Civil Works Mission receives its appropriations and funds as general, revolving, trust, special, and deposit funds. The USACE uses these appropriations and funds to execute its missions and subsequently report on resource usage.

The net cost of operations for the Civil Works Mission[18] (reported here in billions of dollars) measures the balance between the intra-governmental costs and public costs with the intra-governmental earned revenue and the public earned revenue. The net cost of the Civil Works decreased by 20 percent since FY04 due to the Global War on Terror (see Table 3).

ACRES OF HABITAT RESTORED, CREATED, IMPROVED OR PROTECTED[19]

One of the objectives of the Civil Works Mission is to repair past environmental degradation and prevent future environmental losses. One goal under this objective is to restore degraded ecosystems to a more natural condition. The number of acres of habitat protected (restored, created, improved or protected) is an appropriate measure for documenting progress toward restoration of these ecosystems. Since FY05 more than 50,000 acres of habitat have been restored, created, improved or protected. Civil Works protected 4,838 acres in FY07, and although this represents a decrease of 85 percent from FY05, Civil Works surpassed their FY07 goal of 3,734 acres.

NUMBER OF ADDITIONAL PEOPLE PROTECTED FROM FLOODS

Flood Risk Management is another goal of the Civil Works Mission. The objective is to invest in flood and coastal storm damage reduction solutions when the benefits exceed the costs. This is measured by the performance of Civil Works facilities in reducing damage and risk to threatened populations (in thousands of persons) where flooding otherwise would have been experienced. Since FY04 there has been a 545 percent increase in the number of people protected, indicating a strong positive trend.

ACRE-FEET OF WATER SUPPLY MANAGED

The USACE Civil Works strives to provide water supply storage in a cost-efficient and environmentally responsible manner in partnership with nonfederal water management planners, consistent with law and policy. To measure success, the USACE uses acre-feet of water stored (measured in millions) and cost recovery measures. Since FY04, the number of acre-feet water supply managed remained essentially constant (a 1 percent increase).

VISITORS TO CORPS RECREATIONAL AREAS

The Civil Works Mission aims to provide justified outdoor recreation opportunities in an effective and efficient manner at all Corps-operated water resources

[18] FY07 Army Annual Financial Report (Civil Works Fund, (pages 163-184), download at http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.

[19] Expectmore.gov Corps of Engineers Civil Works, Aquatic Ecosystem Restoration http://www.whitehouse.gov/omb/expectmore/detail/10004363.2006.html.

project; to provide continued outdoor recreation opportunities to meet the needs of present and future generations; and to provide a safe and healthful outdoor recreation environment for the Corps' customers. One measure the USACE uses to determine their progress is the total number of visitors to Corps-managed parks, expressed in millions of persons. As shown in Table 3, since FY04, the visits to Corps recreation areas increased by 7 percent.

A detailed review of the FY07 USACE Civil Works Mission performance is provided on pages 37 through 39 and in the FY07 Army Fiscal Report on the web at ***http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.***

Summary of Army Sustainability Performance FY04 to FY07

Table 3 presents the Army's annual performance data from FY04 to FY07, the Army's FY07 goal where applicable, and the percent change from FY04 to FY07. Tables 5 through 8 in this report provide a link to FY07 Army data reported, where applicable, for each of the recommended Global Reporting Initiative (GRI) economic, environmental and social responsibility performance metrics.

A U.S. Soldier assigned to the 82nd Airborne Division provides security during a joint forcible entry exercise (JFEX) on Fort Bragg, N.C., June 17, 2008. JFEX is a joint airdrop designed to enhance service cohesiveness between Army and Air Force personnel by training both services on how to execute large-scale heavy equipment and troop movement. (U.S. Air Force photo by Staff Sgt. Joshua DeMotts/Released) Photo courtesy of US Army from: ***http://www.flickr.com/photos/soldiersmediacenter/2604650254/.***

Table 3. Key Army Sustainability Annual Performance Data and Trends, FY04 to FY07

TBL	Metric Definition (*units*)	FY04	FY05	FY06	FY07	FY07 Goal	FY04-FY07 Change
MISSION	Net Cost of Army Operations (*$ billions*)[1]	135.78	146.43	164.61	168.92	n/a	24%
	Army End Strength (*thousands*) - Active[1]	493.54	492.73	505.40	522.02	518.40	5.8%
	Reserve End Strength (*thousands*) - Reserve and National Guard[1]	547.05	522.18	536.26	542.59	555.00	-1%
	Environmental Funding (*$ millions*)	1456	1467	1454	1493	n/a	2.5%
ENVIRONMENT	Cleanup - Formerly Used Defense Sites (FUDS), Environmental Remediation (*$ millions*)[2]	$678.3	$667.0	$658.1	$665.6	n/a	-2%
	Compliance, Pollution Prevention, Conservation (*$ millions*)[2]	$777.9	$799.6	$795.8	$827.0	n/a	6%
	% Army Facilities with Environmental Management Systems (EMS) in Place[2,3]	3%	38%	100%	100%	n/a	97%
	Installation Sustainability Plans (ISP)[12]	7	12	13	16	n/a	129%
	New Army Environmental Enforcement Actions (ENFs)[2]	89	91	101	94	n/a	6%
	Federal, State and Local Inspections[2]	760	738	760	732	n/a	-4%
	Violation Rate = *New* Enforcement Actions / Inspections[2]	0.12	0.12	0.13	0.13	n/a	8%
	Solid Waste (SW) and Construction and Demolition (C&D) Debris Generated (*million tons*)[2]	2.76	1.95	2.33	2.61	n/a	-5%
	Overall SW and C&D Recycled Rate[2]	57%	50%	59%	67%	n/a	10%
	Hazardous Waste (HW) Generated (*million pounds by Calendar Year(CY)*)[2,6]	33.39	45.71	63.70	45.00	n/a	35%
	HW Generated Indexed to Net Cost of Army Operations (*pounds of hazardous waste per $ thousands*)	0.25	0.31	0.39	0.27	n/a	8%
	Toxic Release Inventory (TRI) Releases (*million pounds by Calendar Year (CY)*)[2, 6]	21.48	18.87	18.76	23.87	11.30	11%
	TRI Releases Indexed to Net Cost of Army Operations (*pounds TRI per $ thousands*)	0.16	0.13	0.11	0.14	n/a	-13%
	Installations with Up-to-date Integrated Natural Resource Management Plans (INRMP)[2]	98%	99%	97%	98%	100%	0%
	% New Military Construction (MILCON) to Leadership in Energy and Environmental Design (LEED®) Standards[4]	Note 7	Note 7	Note 7	78%	n/a	Note[7]
	Army Facility Water Use (*billion gallons*)[4]	66.15	45.93	43.44	45.25	n/a	-32%
	Facility Energy Use Intensity (*Kilo British thermal units/Gross Square Foot*)[4] *	* FY03 = 99.6 *FY04-FY06 not available;* change calculated using FY03 and FY07 only			91.9	94.2	-8.4%*
	Military Accident Fatalities Rate (*per thousand service members*)[5]	0.37	0.44	0.36	0. 37	n/a	0%
COMMUNITY	Army Civilian Lost Time Claims (*per thousand civilians*)[5]	19.9	6.8	7.8	7.7	n/a	-62%
	Retention (*thousands*) - Active, Reserve, National Guard[1]	123.35	119.80	126.61	127.26	116.35	3%
	Recruiting (*thousands*) - Active, Reserve, National Guard[1]	148.09	142.99	175.06	174.06	171.62	18%
	Net Cost of Civil Works Fund (*$ billions*)[1]	8.08	7.68	6.09	6.49	n/a	-20%
	Acres of Habitat Restored, Created, Improved or Protected[1,12]	Note 8	32,573	13,025	4,838	3,734	-85.1%
	Additional People Protected from Flood Damage by FY Projects (*thousands*)[1]	22	24	121	142	161	545%
	Acre-feet Water Supply Managed (*millions*)[1]	9.856	9.761	9.936	Note 10	10	1%
	Visits to Corps Recreational Areas (*millions*)[1]	122	122	126	130	132	7%

Notes:

1) Army FY04-07 Annual Financial Statements.

2) DoD Annual Environmental Reports to Congress FY04 to FY07.

3) During FY04-06, EMS adoption measured as 'in place'. In FY07, EMS adoption measured by 'in conformance' with ISO14001 standards, with 31% of 161 facilities achieving in FY07.

4) DOD FY04-FY07 Annual Energy Management Reports ***http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/main.shtml.***

5) U.S. Army Accident Information, Army Historical Statistical Report, FY98-FY07 ***https://rmis.army.mil/stats/prc_army_stats_history.***

6) Figures reported on a calendar year basis, but shown in the following fiscal year.

7) Requirement to build MILCON projects to U.S. Green Building Council LEED® standards metric added in FY06. FY07 data available at: ***http://army-energy.hqda.pentagon.mil/reporting/progress.asp*** or see Note 4 above.

8) Metric added end of FY04, with FY05 first year data reported.

9) Metric added in FY05.

10) FY07 data not available at time of report.

11) Consolidated from multiple sources, including the August FY07 Sustainability Committee Meeting Minutes and personal communication ***http://www.sustainability.army.mil/resources/libdocs_committee/ ASC%20Final%20Minutes_30%20Aug%2007.pdf.***

12) Expectmore.gov, Corps of Engineers Civil Works, Aquatic Ecosystem Restoration: ***http://www.whitehouse.gov/omb/expectmore/detail/10004363.2006.html n/a = not applicable.***

The Army Strategy for the Environment(ASE): Sustain the Mission, Secure the Future

As we work to restore and meet operational challenges, it is our obligation to ensure that our Soldiers today—and the Soldiers of the future—have the land, water, and air resources they need to train; a healthy environment in which to live; and the support of local communities and the American people.

To fulfill this obligation, the Army released its sustainability strategy—***The Army Strategy for the Environment (ASE): Sustain the Mission, Secure the Future.***[20] This 2004 document set forth a shared Army vision for a sustainable Army—coordinated across all Army functional areas—and established six far-reaching goals as follows:

- Foster an ethic within the Army that takes us beyond environmental compliance to sustainability.
- Strengthen Army operational capability by reducing our environmental footprint through more sustainable practices.
- Meet current and future training, testing, and other mission requirements by sustaining land, air, and water resources.
- Minimize impacts and total ownership costs of Army systems, materiel, facilities, and operations by integrating the principles and practices of sustainability.
- Enhance the well-being of our Soldiers, Civilians, Families, neighbors, and communities through leadership in sustainability.
- Use innovative technology and the principles of sustainability to meet user needs and anticipate future Army challenges.

Through these goals, we look to institutionalize sustainable practices that will provide our operational Army with greater capability and resiliency. Water conservation and fuel and energy efficiency will enable us to deploy faster, travel farther, reduce the logistical support tail, and sustain deployed units as long as required. Alternative energy will provide the security buffer to protect our forces from disruption in petroleum supplies from foreign sources. Achieving zero emissions—heat, light, noise, waste—will reduce the operational signature and logistical support tail. Sustainable practices also directly support our business transformation by eliminating waste, driving innovation, and promoting collaboration across the Army enterprise.

The issuance of this Strategy does not by itself bring about the required process and cultural changes necessary for the Army to implement these sustainable practices. It is only the starting point that commits Army leaders at all levels to certain goals and challenges them to develop innovative methods to achieve these goals. Achieving the vision outlined in this strategy will require a deep and personal commitment from every member of the Army team—every leader, every Soldier, every Civilian, and every Family member. For the Army to be successful on its quest toward sustainability we must work with many partners and stakeholders to ***Sustain the Mission, Secure the Future.*** As such, the Army will publish a Sustainability Action Plan in FY08 that will lay out specific objectives, performance metrics and targets to drive our process toward achieving Army sustainability goals.

SUSTAIN THE MISSION
SECURE THE FUTURE

[20] The Army Strategy for the Environment (ASE): Sustain the Mission, Secure the Future is available on the web at http://www.sustainability.army.mil/overview/overview.cfm.

FOSTER A SUSTAINABILITY ETHIC

FY07 Army Strategy for the Environment (ASE) Highlights and Initiatives

The following sections highlight some of the Army's many accomplishments in support of the six ASE goals. These highlights are not the complete story, but represent significant accomplishments and challenges now and in the future. Where appropriate, links to Army websites are provided for readers to learn more about these Army initiatives.

ASE GOAL

Foster a Sustainability Ethic

Through education, outreach, and setting the example, we inspire each other to take proactive measures and achieve excellence.

INSTALLATION SUSTAINABILITY PLANS

Sustainable installations proactively identify future requirements and challenges across all functional areas and take appropriate action to mitigate or eliminate obstacles before they impede mission readiness. To minimize challenges, we are developing and implementing forward-looking plans to sustain the mission at key power projection platforms and other locations throughout the Army.

The Installation Sustainability Plan (ISP) is a strategic plan that addresses both the physical components of Army installations (facilities, infrastructure, ranges, and ecosystems), and the management processes (strategic planning, community involvement, and contracting), to create a sustainable environment, while maintaining an adaptive ability to support current and future mission requirements. By the end of FY07, 20 major Army installations were either implementing ISPs or were in the ISP planning process (Figure 6).

Figure 6. Status of Installation Sustainability Plans as of 30 Sept 2007

Source: Consolidated from multiple sources as of 30 September 2007, Army Sustainability Committee, http://www.sustainability.army.mil/resources/libdocs_committee/ASC%20Final%20Minutes_30%20Aug%2007.pdf.

FOSTER A SUSTAINABILITY ETHIC

Figure 7. The U.S. Army Sustainability Website

The ISP focuses on the long-term objective of sustainability across all installation operations through life-cycle cost-effective investments implemented over a 25-year period. In doing so, it provides a blueprint to enable the installation to effectively respond to future missions and community aspirations, without exhausting or overburdening resources or diminishing environmental quality. To learn more about the ISP and to download the ISP guide, visit the Army Sustainability web site at ***http://www.sustainability.army.mil/tools/programtools_guide.cfm.***

ARMY SUSTAINABILITY WEB SITE

The Army launched its redesigned public sustainability web site in March 2006. The web site contains an overview of Army Sustainability efforts, news and events, links to policy and guidance, tools, training, awareness materials, links to other web sites, a "contact us" feature for outreach and status information. To view the Army sustainability web site (Figure 7), ***visit http://www.sustainability.army.mil.***

ARMY SUSTAINABILITY VIDEO

The Offices of the Assistant Secretary of the Army for Installations and Environment and Assistant Chief of Staff for Installation Management have produced an Army sustainability training video. The purpose of the video is to educate viewers on the concept of sustainability and how it relates to the Army Strategy for the Environment. The target audience includes Army leaders at all levels and installation staff members across all functional areas. The video includes interviews with Army leaders promoting sustainability and Soldiers and Army Civilians demonstrating sustainable practices at Army installations. The video describes three case studies, detailed below, of the application of sustainability to specific Army operations.

ARMY SUSTAINABILITY CASE STUDY VIDEOS

Ordnance Case Study Video

Weapons systems have an impact on the health of the environment, Soldier, and the community during training, maintenance, and demilitarization. This case study illustrates how a Weapons System Program Manager economically used a team approach to apply all three principles of a reduce-reuse-recycling strategy at the end of the life-cycle of the Tube-launched, Optically-tracked, Wire-guided (TOW) missile system. Examples of sustainability principles being applied to other ordnance systems are also introduced.

Stryker Case Study Video[21]

The Stryker is one of the Army's first premier combat vehicle systems designed with a focus on reducing waste while improving capability—a twenty-first century strategy that will

[21] Stryker Case Study Video is available on the web at http://www.sustainability.army.mil/news/newsStory06-03.cfm.

change the way every Army installation in the world does business. This case study illustrates how several installations, with different missions, needs and communities, incorporated the principles of sustainability into the acquisition planning, design, and operations of the Stryker family of vehicles.

Facilities Case Study Video

Operations in facilities and infrastructure are major functional areas where sustainable practices can have long-term benefits for the mission, environment, and community. This case study illustrates how the application of sustainability principles into everyday decisions and processes can ensure that the Army has the resources it needs to meet mission requirements for decades to come. Sustainability examples include facility design, operation and disposal; soil and water conservation; materials use and waste management; and transportation and energy conservation. To view these videos, visit the Army Sustainability web site at ***http://www.sustainability.army.mil/news/newsStory06-03.cfm.***

2007 WHITE HOUSE CLOSING THE CIRCLE AWARD

On June 12, 2007, Army headquarters and Fort Hood were awarded Closing the Circle (CTC) Awards from the Office of the Federal Environmental Executive. The CTC Awards recognize outstanding achievements of Federal employees and their facilities for efforts that resulted in significant contributions to, or have made a significant positive impact regarding, environmental stewardship. Army Headquarters received a special "Sowing the Seeds of Change" award category, out of three such awards given, which recognizes leadership in setting future vision for sustainability. This award acknowledged the Army's efforts to advance sustainability throughout their operations through the Army Strategy for the Environment, from which this Sustainability Report was born.

The Solid Waste and Recycle Team at Fort Hood received the CTC Award in Waste/Pollution Prevention for their "Every Waste a Reuse Opportunity" program. The Absorbent Reuse Program Team at the Aviation Center Logistic Command at Fort Rucker also received an honorable mention in recycling.

"'Sustainability' has come a long way from its origins as a buzzword… Now it's a wise and respected way of life for the folks who wear camo green around here. Because it's good strategy… It's time for local government, businesses and homeowners to pay better attention to all that, and to adopt the same 21st century management practices that Fort Bragg is pioneering."

—Fayetteville Observer, February 20, 2006

FOSTER A SUSTAINABILITY ETHIC

INAUGURAL SECRETARY OF THE ARMY SUSTAINABILITY AWARDS

In FY07, the Secretary of the Army created a Sustainability Award, which is a new award designed to recognize outstanding sustainability initiatives by Army activities, installations and individuals. This award emphasizes accomplishments and innovations in sustainable operations that have tangible, cost-effective results and potential Army wide applicability.

Fort Bragg won the first awards for both catagories: installations/activities and individual.Read more about these award at *http://aec.army.mil/usaec/newsroom/update/spr08/spr0802.html.*

OTHER SUSTAINABILITY AWARDS

The Army and its installations received several other awards in the past four years and repeatedly recognized its own members for leadership in sustainability in all areas of Mission, Community, and Environment. These awards include:

- 2005: U.S. Fish and Wildlife Service Military Installation Conservation Partnership Award (Fort Carson)
- 2005: Chief of Army Public Affairs Special Award of Excellence (Army Public Involvement Toolbox)
- 2006: American Graphic Design Award (Sustainability web site, *http://www.sustainability.army.mil*.
- 2006: Telly Award for "Sustain the Missions, Secure the Future" video
- 2007: Telly Award (Bronze) for Sustainable Range Program video
- 2007: Aurora Award (Platinum) for "Sustain the Mission, Secure the Future" video
- 2007: GE Global Ecomagination Leadership Award for innovative partnership (U.S. Army Garrison Hawaii and Aqua Engineers)
- 2007: Environmental Excellence Award from the National Association of Environmental Professionals (Army G-3's

The pilot and co-pilot of an OH-58D Kiwoa Warrior helicopter from the 25th Combat Aviation Brigade search for "enemies" in Makua Valley of Oahu Hawaii, during a training exercise, in preparation for an upcoming deployment to Iraq. Photo by Pfc. Durwood Blackmon. Date: April 26, 2006. Photo courtesy of US Army from: *www.army.mil/-images.*

STRENGTHEN ARMY OPERATIONS

ASE GOAL

(Sustainable Range Program)

Strengthen Army Operations

Strengthen Army operational capability by reducing our environmental footprint through more sustainable practices in both operations and garrisons.

Cavalry mortars 3. The crew of a B-53 fires a smoke mission during crew certification. Photo by Jason Kaye. Date: May 30, 2008. Photo courtesy of US Army from: *www.army.mil/-images*.

STRYKER VEHICLE FAMILY

The Stryker family of vehicles is an example of how we are serving our mission by taking the first steps to incorporate sustainability into our planning, design and operations. The Army's Stryker armored combat vehicle moves at speeds of up to 62 miles per hour, can stop 7.62 mm and 14.5 mm armor piercing ammunition, carries a tactical Internet communications system, moves across varied terrain on wheels instead of tracks, and performs tight maneuvers under close combat and urban battle conditions. In addition to its tactical uses, the Stryker was designed with its end disposal in mind, to reduce waste and the use of hazardous materials, an important part of sustainability and the triple bottom line.

The Stryker is the first vehicle to be manufactured with less hazardous alternatives to materials like hexavalent chromium and beryllium—a benefit to the environment and people throughout its life cycle. When it's time for disposal, more material from the Stryker can be sectioned and recycled instead of sent to a landfill.

When in operation, the Stryker vehicle engines incorporate an advanced oil management system that extracts a small amount of used oil from the engine crankcase during operation and blends it with fuel to burn during combustion. As oil is extracted from the crankcase, it is replaced with fresh oil from an on-board tank. The system can extend oil change intervals to as long as 525,000 miles or 4,000 hours, and filter changes up to 100,000 miles or 1,000 hours. This increases the combat vehicle's operational readiness rate, minimizes waste handling and used oil disposal costs, and most importantly, allows our Soldiers to spend less time on vehicle maintenance, and more time on accomplishing the mission.

RAPID EQUIPPING FORCE: POWER SURETY

Soldiers at forward operating bases might soon be turning their trash into energy. In FY07 the Rapid Equipping Force's Power Surety Task Force researched and developed a Tactical Garbage to Energy Refinery (TGER) which will start operational testing in FY08. The TGER can fit inside a shipping container on a standard five-ton Army flatbed trailer. It converts field waste into biofuel gas used

"We must focus on sustainability. We must keep a long-term view on the environment as we test and field new weapons systems. To achieve true sustainability, we must focus on range management and the effective use of environmental management systems…second, we must support the war fighter by integrating environmental concerns into the acquisition process."

—The Honorable Michael W. Wynne Under Secretary of Defense Acquisition, Technology, & Logistics, April 2005

[22] "Power Surety for the Enduring Operations" Presentation at Outlook 2007 Conference, May 2007, *http://www.usifi.com/pdf/Nolan_Outlook2007.ppt.*

to power a 60kW generator and can service units with 600 or more Soldiers.[22]

This innovative technology can conserve 115 gallons of fuel, uses excess thermal energy for field sanitation, showers and laundry, avoids disposal costs, and reduces the amount of fuel trucks a unit requires. Fewer trucks on the road could reduce the possibility of casualties from improvised explosive devises.

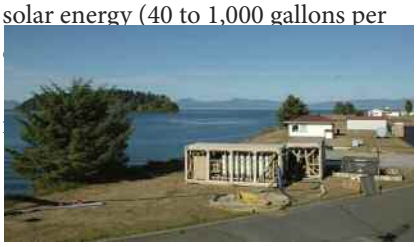
The Rapid Equipping Force (REF), headquartered in Fort Belvoir, assesses Army business practices, desired capabilities, and acquisition techniques to effect institutional Army change, equips operational commanders with re-searched and developed solutions, and inserts future force technology solutions that our engaged and deploying forces require (For more, see their web site at: ***https://www.ref.army.mil/nonflash/default.asp.***

The Power Surety Task Force of the REF fosters research in supplemental alternative and renewable power and efficiency options that are deployable within 18 months and would reduce fuel use for power generation to committed units by 40 Percent. Some of their completed projects include: Eskimo Spray Foam Installation, an external insulator that reduces energy consumption; and Transportable Hybrid Electric Power Stations (THEPS), 5kW Hybrid Power Stations that utilize wind, sunlight, a diesel generator and storage batteries to provide reliable power.[23]

WESTERN HEMISPHERE INFORMATION EXCHANGE PROGRAM (WHIX)

The Western Hemisphere Information Exchange Program (WHIX) was established in 2003 to facilitate the exchange of information about sustainable management practices between the U.S. and other Western Hemisphere militaries. It encompasses research and demonstration projects that promote sustainability in military operations. Through this program, the Army and its neighbors promote cooperation and collaboration on common concerns about infrastructure, environment and energy.[24]

Each WHIX project is evaluated for its technical, operational, economic and environmental feasibility. Research and development projects include: biomass energy for electricity generation (50kW); constructed wetlands for wastewater treatment (40,000 gallons per day); mobile light water purification systems powered by solar energy (40 to 1,000 gallons per



Army Engineers are providing portable water to the drought stricken Mahan Indian Reservation's in Neah Bay using an Expeditionary Unit Water Purifiers. Photo by Mark Miller. Date: Sept. 13, 2006. Courtesy of US Army from: *www.army.mil/-images.*

SELF-GENERATED RENEWABLE ENERGY ON ARMY GARRISONS

As technologies have become more cost effective, the Army has used self-generating technologies such as solar, wind, geothermal, and biomass, and continues to make significant progress in promoting the use of these and other renewable technologies at our installations. The Army has integrated photovoltaic power systems, solar water heating systems, and transpired solar collectors (solar walls) into facilities and in FY07 the Army operated 30 active renewable energy projects. This self-generated power was used to offset demand for conventionally generated power and for isolated loads such as range targets, airfield landing strip lighting, and remote water pumping stations.

The Army was also successful in

[23] "Power Surety for the Enduring Operations" Presentation at Outlook 2007 Conference, May 2007, *http://www.usifi.com/pdf/Nolan_Outlook2007.ppt*.
[24] Western Hemisphere Information Exchange Website; *http://www.asaie.army.mil/Public/ESOH/1iea.html.*
[25] WHIX Executive Summary; *http://www.asaie.army.mil/Public/IE/doc/WHIX_Executive_Summary.pdf.*
[26] FY07 DoD Annual Energy Management Report, pg 27; *http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/fy07/DoD-Narrative-Final.pdf.*
[27] FY07 and FY06 DoD Annual Energy Management Report, pg 27-28(07) and pg 23,24 (06); *http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/fy07/DoD-Narrative-Final.pdf.*

funding the following self-generating renewable energy projects[26] implemented and operating on Army Installations:[27]

- White Sands Missile Range, NM, installed photovoltaic street and parking lot lighting with a capacity of 3.3 kilowatts (kW) in FY07
- Fort Knox, KY, installed photovoltaics with a capacity of 2.0 kW in FY07
- Fort Huachuca, AZ, generated 487 million Btu of energy from photovoltaic, solar, and wind generation in FY06 and continued in FY07.
- Arizona National Guard, implemented 8 separate photovoltaic and wind projects with over 60 kW of total capacity
- Rock Island Arsenal, IL, generated approximately 70.3 billion Btu of electricity from its hydroelectric plant in FY06 and continued in FY07.
- Red River Army Depot, TX, utilized 49.0 billion Btu of renewable energy through burning wood scrap in FY06 and continued in FY07.
- Fort Knox, KY, and Hawthorne Army Depot, CA, converted barracks to use geo-thermal energy at Fort Knox resulted in savings of

The largest solar power site in the Army, constructed on a closed landfill, will soon supply power to Fort Carson, Colo.

The two-megawatt, ground-mounted photovoltaic array, covering 12 acres, should begin producing power this winter, according to Fort Carson officials.

The system will generate 3,200 megawatt-hours of power annually, according to the Department of Energy Western Area Power Administration (WAPA), one of seven public and private entities responsible for its creation.

The expected power supply equates to approximately 2.3 percent of Fort Carson's energy consumption, or enough to power the equivalent of 540 Fort Carson homes per year.

Photo courtesy of US Army from: *http://army-energy.hqda.pentagon.mil/photo_page.asp*

Colorado Governor Bill Ritter Jr. and Maj. Gen. Mark A. Graham cut the ribbon on the Army's largest solar array, a 2-megawatt system at Fort Carson that should produce enough power for 540 homes. Fort Carson won the Governor's Renewable Energy Award for 2007 for its efforts in the solar array project. Photo by Staff Sgt. Jim Greenhill. Photo courtesy of US Army: *www.army.com/news/item/3481*.

MEET TEST, TRAINING, AND MISSION REQUIREMENTS

ASE GOAL

Meet Test, Training, and Mission Requirements

Meet current and future training, testing, and other mission requirements by sustaining land, air, and water resources.

"Energy independence is a national security issue. It's the right business for us to be in… Our job is to focus on that battalion out there and give those commanders the technological innovations they need to deal with today's mission.

—Dan Nolan, Power Surety, REF, April 15, 2007 New York Times "The Power of Green"

The Army has a non-negotiable contract with the American public to fight and win the Nation's wars and to defend its borders. To meet its federally mandated training responsibilities and to remain ready for a broad range of simultaneous missions in a complex operational environment, the Army must train as it fights. At the core of this training mission is the critical need to sustain the capability of Army range and land assets to meet training requirements now and into the future.

Army ranges consist of live-fire training facilities that include:

- Small arms ranges dedicated to individual soldier training;
- Multi-purpose combined arms live-fire training facilities that support the Army's complex live-fire training;
- Training and maneuver areas, drop zones, and river crossing sites;
- Specialized training facilities such as those for Military Operations on Urban Terrain (MOUT); and
- Impact areas into which munitions are fired.

Army ranges also include the testing facilities where new weapons systems are developed. Together, these facilities constitute the range "complex" present on many (but not all) Army installations.

The Army has adopted an integrated, sustainability-based approach for improving the way in which it designs, manages, and uses these ranges and training lands to ensure their long-term availability, capability, and accessibility.

ARMY SUSTAINABLE RANGE PROGRAM

The foundation of Army operational readiness is highly trained Soldiers. Continued access to our ranges and training lands is critical if we are to maintain a highly trained and combat ready force. To ensure the long-term capability, availability, and accessibility of these key assets, the Army has established the Sustainable Range Program, or SRP.

The SRP provides a holistic approach to the way the Army designs, manages, and uses its ranges. The ultimate objective of the SRP is to ensure that Army ranges remain available for training and testing, while protecting human health and the environment. The SRP is defined by its two core programs: the Range and Training Land Program and the Integrated Training Area Management Program.

These core programs focus on the doctrinal capability of the Army's ranges and training land. To ensure the future accessibility of Army ranges and training land, the SRP core programs are integrated with the facilities management, environmental

management, munitions management, and safety program functions supporting the doctrinal capability.

To learn more about the SRP, visit *http://www.sustainability.army.mil/tools/programtools_srp.cfm*

ARMY COMPATIBLE USE BUFFER (ACUB) PROGRAM

Population growth, urban development, endangered species migration, and other encroachment factors can affect the Army's ability to fully utilize its installation training assets. The Army Compatible Use Buffer (ACUB) Program supports the Army's mission to fight and win the Nation's wars and ensure we fulfill the Army's responsibility to comply with all applicable environmental statutes and regulations.

ACUBs establish buffer areas around Army installations to limit the effects of encroachment and maximize the amount of land inside the installation that can be used to support the installation's operational readiness and training mission. By working in partnership with conservation organizations, ACUBs also help the Army coordinate habitat conservation planning and habitat recovery. They support local and regional planning and sustainability efforts by emphasizing partnerships with state and local governments and private conservation organizations who then work toward common goals and objectives while leveraging public and private funds.

In FY07, the Army approved 19 ACUB proposals at installations with active conservation buffer programs in place (Figure 8). These ACUBs currently protect more than 73,500 acres of land within the United States. There were 15 more installation proposals pending.

"In no other profession are the penalties for employing untrained personnel so appalling or irrevocable as in the military."

—General Douglas MacArthur, 1940

Figure 8. FY07 ACUB Status

Source: ACUB website: *http://aec.army.mil/usaec/acub/l.*

ASE GOAL

Minimize Impacts and Total Ownership Costs

The Army will reduce impacts on the environment and the true cost of doing business by integrating sustainable practices into our systems, materiel, facilities, and operations.

ARMY ENERGY CONSERVATION

To meet Energy Policy Act (EPAct) 2005 requirements and the goals of EO 13423, as well as to demonstrate the Army's continuing commitment to being a good steward of our Nation's limited natural resources, the Army has implemented a comprehensive energy conservation policy. The policy requires installations and facilities to take measures to reduce energy consumption from computer use, electrical use, heating and cooling, vehicles, and future product procurements.

All future purchases of electronics and appliances (including heating, ventilation, and air conditioning systems) will be ENERGY STAR® compliant. The Army policy also sets specific temperatures for offices, warehouses, and living spaces, and requires supervisor approval for the use of personal heating/cooling devices. Additionally, all fuel-consuming equipment will be turned off when not needed to maintain Army readiness requirements.

LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN

In April 2007, the Deputy Assistant Secretary of the Army for Installations and Environment released an update to the Army's Sustainable Design and Development Policy. It was reaffirmed that all new building military construction (MILCON) must adhere to the standards for a "Silver" rating, as outlined by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) Building Rating System effective with the FY08 MILCON Program.[28] The Memorandum also anticipated the future adoption of LEED® for residential housing and existing buildings. LEED® provides the Army with a complete framework for assessing building performance, self-certifying buildings, and meeting sustainability goals. Based on well-founded scientific standards, LEED® emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. LEED® also recognizes achievements and promotes expertise in green building through a comprehensive system offering project certification,[29] professional accreditation, training, and practical resources. Of the 384 new building (or renovation) design/construction projects in FY07, 301 (78%) projects have been reported by installations as eligible for certification under the LEED® rating system. For more information on the Army and LEED® see the Army Corps of Engineers Sustainable Design and Development web site at: ***https://eko.usace.army.mil/fa/sdd/***

Workers remove a panel from a building at Fort Lewis, Wash., during modular deconstruction. Photo by Rebekah Barker. Date: Feb. 05, 2007. Photo courtesy of US Army from: http://www.army.mil/images/2007/02/05/2394/.

ARMY DECONSTRUCTION PROGRAM

In July 2006, the Office of the Assistant Chief of Staff for Installation Management issued a policy requiring that all military construction, renovation, and demolition projects include contract requirements for a 50 percent minimum diversion of

[28] Apr 2007 Update to Army Sustainable Design and Development Policy; *http://www.acsim.army.mil/fd/docs/SDD_policy.pdf.*

[29] DoD Annual Energy Management Report, pg 54; *http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/fy07/DoD-Narrative-Final.pdf.*

construction and demolition waste by weight from landfill disposal.[30]

Ongoing research at the U.S. Army Engineer Research and Development Center Construction Engineering Research Laboratory seeks to improve the efficiency of and demonstrate the economics of deconstructing old facilities as a sustainable alternative to demolition and landfill. In recognition of their efforts, Army researchers recently received an award from the Used Building Materials Association and the U.S. Department of Agriculture's Forest Products Laboratory, citing them for advancing the knowledge and practice of building deconstruction and reuse throughout the Nation.

PURCHASED RENEWABLE ENERGY

During FY07, the Army purchased 93,000 MWh of electricity from renewable energy. The Army did not achieve the renewable requirement that 3 percent of total electricity used be derived from renewable energy sources, as mandated by the Energy Policy Act of 2005, only reaching 2.1 percent of total electric use from renewable sources. The Army did, however, meet the requirement established in EO 13423 that at least half of the renewable electricity used come from sources established since 1 January 1999.[31] Additionally, the use of thermal energy produced and purchased by the Army, not included under EPAct 2005, sums to 7.5 percent total renewable energy compared to electrical energy consumed in FY07.[32]

SOLAR ENERGY

The Army has approximately 3,800 "solar roofs" in use at its installations. The Department of Energy's Sandia National Laboratories provides the Army with technical expertise for the maintenance and repair of some of their photovoltaic systems to stay at optimal operation.[33] Active solar heating applications have been expanded to include maintenance facility solar walls, swimming pool heating, and hot water heating in Army Family housing. Table 4 lists key photovoltaic power system projects active in FY07.

Table 4. Army Photovoltaic Power System Projects

Installation	Application	Size (kW)
Fort Bragg, NC	Special operations power supply (20-kW panels)	200
Fort Carson, CO	Water pumping, off-grid lighting, telecomm	30
Fort Dix, NJ	Grid-connected, off-grid lighting	70
Fort Greely, AK	Training range field instrumentation	10
Fort Huachuca, AZ	Grid-connected, off-grid lighting	55
Fort Irwin, CA	Remote off-grid facility, stand-alone lighting	20
Fort Knox, KY	Anderson pool	2
Fort Polk, LA	Training range field instrumentation	10
Pohakuloa Training Area, HI	Range targets, control towers, airstrip lighting	50
White Sands Missile Range, NM	Grid-connected, weather data equip, telecomm	60
White Sands Missile Range, NM	Street and parking lot lighting	3
Yakima Firing Range, WA	Water pumping, off-grid lighting, telecomm	18
Yuma Proving Ground, AZ	Grid-connected, off-grid lighting, remote off-grid facility	900
Yuma Proving Ground, AZ	Off-grid lighting, remote off-grid facility	225
Total		1653

Source: The DoD Annual Energy Management Report, pg 23-24, FY06, pg 27-28 FY07; *http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/main.shtml.*

[30] Memorandum for Sustainable Management of Waste in Military Construction, Renovation and Demolition Activities; *http://www.hqda.army.mil/acsimweb/fd/docs/Signed_C&D_memo.pdf.*

[31] FY07 DoD Annual Energy Management Report, pg 27; *http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/fy07/DoD-Narrative-Final.pdf.*

[32] FY07 DoD Annual Energy Management Report, pg 27 and pg 32; *http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/fy07/DoD-Narrative-Final.pdf.*

[33] FY06 DoD Annual Energy Management Report, pg 23-24; *http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/fy07/DoD-Narrative-Final.pdf.*

ASE GOAL

Enhance Well-Being

Enhance the well-being of our Soldiers, civilians, families, neighbors, and communities through leadership in sustainability.

The Army strives to enhance the well-being of its Soldiers, Civilians, Families, neighbors, and communities through leadership in sustainability. It does this by sustaining the natural resources entrusted to its care, both at home and abroad, and by taking an active role as a member of the local communities that co-exist with and support our installations. The Army fosters open relationships to increase understanding by all stakeholders and communicates its readiness requirements and supporting initiatives, while at the same time listening to its neighbors' needs and concerns to build "win-win" situations together.

PROGRAMS TO SUSTAIN OUR SOLDIERS, CIVILIANS, AND FAMILIES

The Army has initiated many programs in FY07 to maintain the quality of our All-Volunteer Force and the many capabilities it provides to the Nation. We have taken a hard look at how we take care of our most valuable resource—our people—to determine what needs to change in terms of support and services. Our objective is to ensure our Soldiers, our Civilian workforce, and our Families have meaningful programs available to them and that the Army community affords them the quality of life they deserve for the service that they render to the Nation.

These holistic programs begin with recruiting high-quality Soldiers and Civilians, and then retaining them and their Families by providing a lifestyle that eases the challenges of military life, acknowledges the special sacrifices involved with service to the Nation, and provides support and services to all members of the Army Family. We must ensure our wounded, ill, and injured Warriors in Transition receive the care and support they need to reintegrate effectively into the Army or civilian life and that we, as an institution, never forget our moral obligation to assist every spouse and Family who suffers the loss of their Soldier or Civilian in past, present, or future conflicts.

We ended the FY07 recruiting year successfully with more than 174,000 men and women becoming Army Strong by joining units in our active component, Army National Guard, and Army Reserve. Our active component and Army Reserve exceeded their accession objectives by achieving 100.5 and 100.6 percent of their accession missions respectively. Our Army National Guard, while just short of its accession mission, still exceeded its end-strength objective by over 2,700 Soldiers through an aggressive and successful retention program.

During FY07, we continued a five-year record of achieving Army-wide goals for retaining Soldiers. Each component exceeded its retention goals, contributing to an aggregate rate across the Army of 109 percent (127,256 reenlistments over the goal of 116,349). We continue to reenlist two out of every three eligible Soldiers and one out of every two first-term Soldiers.

To read about these trends and to learn more about the Army's initiatives to sustain our Soldiers, Civilians, and Families in FY07 and our plans for FY08, visit the FY08 Army Posture Statement web site at ***http://www.army.mil/aps/08/information_papers/sustain/Sustain.html.***

ENHANCE WELL BEING

ARMY INTEGRATED FAMILY SUPPORT NETWORK

In FY07, the Army launched the Army Integrated Family Support Network (AIFSN). The AIFSN will link all Soldiers, Families and employers to the family services/programs that they need, to include pre-deployment support, training for Family Readiness Groups, TRICARE information and referral, Wounded Warrior programs, child and youth resource referral, relocation support, and transition support. The network links military and civilian agencies and leverages those services in nearby communities to ensure Army services are available to Families closest to where they live. All Army Families will have information and resources at their fingertips. For more information, visit *http://www.armymwr.com.*

ARMY SUSTAINABLE COMMUNITIES

Additionally, the Army has developed and implemented a landmark policy to create Sustainable Army Communities that will improve the mission capabilities and quality of life for a worldwide network of over 180 Army installations that serve a population of over one million Soldiers, Civilians, and Family members. The seminal Army Sustainable Communities Policy directs that the principles of Sustainable Design and Development be incorporated into all actions and decisions affecting Army installations, environmental planning, community operations, and infrastructure projects. The Sustainable Army Communities initiative will ensure that there is a systematic consideration of current and future impacts of an activity, product or life cycle decision on the environment, energy uses, natural resources, the economy and quality of life on Army installations.

The goal of the Army Sustainable Communities Policy is to integrate sustainable design and development concepts into installation planning and throughout the project planning, programming, design, construction, operation, and maintenance process. The Army has a leadership and stewardship role in constructing and operating sustainable, environmentally responsible, cost efficient Army Communities.

For more information visit the Army Community and Family Support Center web site at *http://www.armymwr.com/portal/about/.*

ARMY PUBLIC INVOLVEMENT TOOLBOX

The Army has launched a new web site to help strengthen partnerships between the Army and the communities around installations and ranges. The Army Public Involvement Toolbox was developed by a consortium of Army organizations to provide Army personnel with tools and methods necessary for creating and harboring an open relationship between Soldiers, Civilians, Families, neighbors, and communities. The web site places emphasis on the full range of activities needed to engage stake-holders with the "4Cs" of public involvement: com-munication, coordination, consultation, and collabora-tion. The Army Public Involvement Toolbox received the 2005 Army Outreach Special Award of Excellence, recognizing these improvements in partnering and communication, both within the Army and externally to the public.

To use the Army Public Involvement Toolbox, visit: *http://www.asaie.army.mil/pitoolbox.*

ARMY CIVIL WORKS PROGRAMS

The Army also carries out multiple programs designed to contribute to the national welfare and serve the public. The Civil Works Mission of USACE provides the Nation and the Army with quality, responsive management of the following National programs: Navigation, Flood Risk Management, Ecosystem Restoration, Environmental Stewardship and Remedial Actions, Wetlands and Waterways Regulatory, Disaster Response and Recovery, Water Supply Storage, Hydroelectric Power Operations, and Public Recreation Land Management. In addition to its vital role at home, the Civil Works program supports U.S. efforts toward global security by providing interagency and multinational partnerships with critical support after natural disasters. It also assists Combatant Commands in promoting regional stability by providing technical expertise in water and infrastructure in critical areas across the globe.

The Corps strives to conduct these programs in an environmentally sustainable and economic and technically sound manner through partnerships with other governmental agencies and nongovernmental organizations. Some of the FY07 program highlights are presented below. For a detailed discussion of the Army's Civil Works programs performance for FY07, read the Fiscal Year 2007 United States Army Annual Financial Statement: Commitment to Current and Future Readiness, available on the web at ***http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.***

Navigation[34]

The Navigation Program is responsible for providing safe, reliable, efficient and environmentally sustainable waterborne transportation systems for the movement of commercial goods and national security. The navigation program is vital to the Nation's economic prosperity: 95 percent of America's international trade moves through its ports. Our Nation's Marine Transportation System (MTS) and all of its infrastructure is maintained by the Corps and consists of approximately 12,000 miles of inland and intercostals waterways; over 900 coastal, Great Lakes and inland harbors; and channel projects.

Former Secretary of the Army Dr. Francis J. Harvey is briefed by U.S. Army Corps of Engineers officials at the 17th Street Outfall Canal and Pumping Station in New Orleans Oct. 2, 2006. Harvey toured flood-ravaged New Orleans and USACE's efforts to repair the damaged facilities. Photo by: Betsy Weiner. Date: October 5, 2006. Courtesy of US Army from: ***http://www4.army.mil/OCPA/uploads/large/2006/OCPA-2006-10-05-131652.jpg.***

Flood Risk Management[35]

The Flood Risk Management Program, formerly known as the Flood and Coastal Storm Damage Program, is aimed at saving lives and reducing property damage in the event of floods and coastal storms. The Civil Works Mission has constructed 8,500 miles of levees and dikes, 383 reservoirs and more than 90 storm damage reduction projects along 240 miles of the Nation's 2,700 miles of shoreline. With the exception of the reservoirs, most of the infrastructure constructed under this program is owned and operated by the sponsoring cities, towns and agricultural levee districts.

During FY07, the Corps planned to complete eight flood risk management projects. Five of the eight projects achieved 100 percent completion; one project realized a 100-year level of protection and will complete a 250-year level of protection in FY08; and two projects only realized partial benefits in FY07. The aggregate results of FY07 projects resulted in an additional 142,000

[34] **FY07 Army Annual Financial Statement, pg 165;** ***http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.***

[35] **FY07 Army Annual Financial Statement, pg 165;** ***http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.***

.

people having a reduced risk of flood damage (See Table 3, pg. 25).

Ecosystem Restoration, Environmental Stewardship and Remedial Actions[36]

The Corps has three distinct programs that are focused on the environment: aquatic ecosystem restoration; stewardship of Corps lands; and the Formerly Utilized Sites Remedial Action Program (FUSRAP). The Army's mission for aquatic ecosystem restoration is to restore aquatic habitat to a more natural condition in ecosystems whose structures, functions and dynamic processes have become degraded. In response to growing national awareness of the importance of the natural environment, these programs include: monitoring water quality at dam sites; managing the natural resources on 11.5 million acres of land and water at 456 multipurpose Corps project sites; restoring degraded aquatic habitats to more natural conditions; and cleanup of formerly utilized Department of Energy sites.

During FY07, the Corps completed 22 ecosystem restoration projects that restored 4,838 acres including 2,987 nationally significant acres. Most of that acreage was due to the completion of the Lower Obion River and Vicinity Project, Tennessee.

Emergency Management [37, 38]

Throughout Corps history, the United States has relied on the Civil Works Mission for help in times of national disaster. The USACE supports the Department of Homeland Security by providing emergency support in areas of public works and engineering for the National Response Plan. In FY07, the Corps maintained 41 national planning and response teams at a 72 percent fully manned, trained and equipped readiness rate. The Corps conducted 97 percent of the scheduled project inspections of 420 nonfederal flood damage reduction projects. Of the total projects inspected during FY07, 90 percent received project condition ratings of minimally acceptable or better. Major floods in the northwest

Mohawk Dam was authorized by the Flood Control Act of 1938 and was built along with 13 other dams to control flooding within the Muskingum River watershed. Work was done by the Civilian Conservation Corps, WPA, during the great depression. From: www.lrh.usace.army.mil/_kd/go.cfm?destination=Page&Pge_ID=1227.

and central United States resulted in damage to 128 flood damage reduction projects. As of this report, repairs to 34 projects (27 percent) have been completed, resulting in a 27 percent performance rating for completing project repairs prior to the next flood season.

Hydropower Operations[39]

The Corps' multi-purpose authorities provide hydroelectric power as an additional benefit of projects built for navigation and flood control. The Corps is the largest owner/operator of hydroelectric power plants in the United States and one of the largest in the world. The Corps operates 345 generating units at 75 multipurpose reservoirs, mostly in the Pacific Northwest, accounting for about 24 percent of America's hydroelectric power and about three percent of the country's total electric-generating capacity. Its hydroelectric plants produce nearly 100 billion kilowatt-hours each year, sufficient to serve about 10 million households—equal to ten cities the size of Seattle, Washington. Hydropower is a renewable source of energy and one of the least environmentally disruptive sources of electric power, producing none of the airborne emissions that contribute to acid rain or the greenhouse effect.

[36] FY07 Army Annual Financial Statement, pg 165, 166; *http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.*

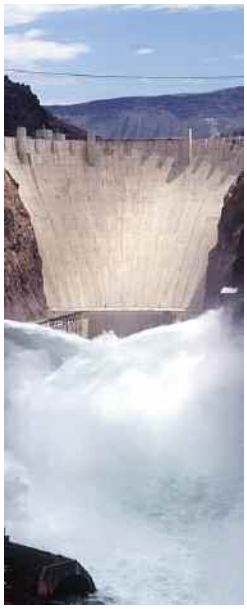
[37] FY07 Army Annual Financial Statement, pg 166; *http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.*

[38] Expectmore.gov, Corps of Engineers Civil Works, Aquatic Ecosystem Restoration; *http://www.whitehouse.gov/omb/expectmore/detail/10004363.2006.html.*

[39] FY07 Army Annual Financial Statement, pg 167; *http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.*

ENHANCE WELL BEING

Working alongside a temporary batter board and sandbag floodwall, Terry Jorgensen (center), St. Paul District; Joe Dziuk (left), Rock Island District; and Glen Hotchkiss (background), Rock Island District; survey rising waters at the South River Drainage District just north of Hannibal, Mo. during the hot afternoon hours of June 18. More than 334 Corps personnel are currently supporting flood fighting efforts in Indiana, Missouri, Wisconsin, Iowa, Illinois and Kansas. The Corps is currently supporting FEMA with debris removal, drinking water, temporary housing and emergency power teams as well as advising and assisting communities with professional engineering expertise.
Photo by: Mark Kane, Corporate Communications, Rock Island District, U.S. Army Corps of Engineers
Date: July 01, 2008
Photo courtesy of US Army from: *www.army.mil/-images/2008/07/01/18415/.*



Hoover Dam on the Colorado River, is a feature of the Boulder Canyon Project (Managed by the Reclamation Project in partnership with USACE). Located on the Arizona-Nevada state line, at 726 feet it is the highest concrete dam in the United States, a National Historic Landmark, and one of America's Seven Modern Civil Engineering Wonders. Photo from: *http://www.usbr.gov/lc/hoover-dam/gallery/damviews.html.*

Water Supply Storage[40]

Conscientious management of the Nation's water supply is critical to limiting water shortages and lessening the impact of droughts. The Corps has an important role in ensuring that homes, businesses and farms nationwide have enough water to meet their needs. At the time of this report, the FY07 volume of water (acre-feet) under the Corps management was not available. At the end of FY06, the Corps maintained reservoirs with 9.936 million acre-feet of water supply under storage with 95 percent of that managed under cost reimbursement contracts with local entities (See Table 3, pg. 25).

Recreation[41, 42]

The U.S. Army Corps of Engineers is the Nation's largest federal provider of outdoor recreation, and the leading provider of water-based recreation. Our agency hosts over 372 million visitors a year at 4,488 recreation areas in 45 states. Our lakes and parks include: over 88,000 campsites, 4,600 miles of trails, and 33 percent of all freshwater lake fishing in the United States. More than 500 private concessionaires with $1 billion in assets, provide support services and facilities, such as marinas, bait shops and grocery stores, at Corps lakes. Non-Federal partners manage 42% of the recreation areas. More than 70 percent of our lakes are located within 50 miles of a large U.S. city. Visitors to our lakes spend an estimated $18 billion a year on trip-related expenses such as gas, food and lodging in local communities surrounding Corps lakes. 350,000 jobs are directly or indirectly supported by this spending.

[40] FY07 Army Annual Financial Statement, pg 167; *http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.*

[41] FY07 Army Annual Financial Statement, pg 168; *http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf.*

[42] Expectmore.gov, Corps of Engineers Civil Works, Recreation: *http://www.whitehouse.gov/omb/expectmore/summary/10002002.2004.html.*

ASE GOAL

Drive Innovation

Use innovative technology and the principles of sustainability to meet user needs and anticipate future Army challenges.

ARMY ESTABLISHED CENTER FOR THE ADVANCEMENT OF SUSTAINABILITY INNOVATIONS (CASI)[43]

In FY07, the Army Corps of Engineers Engineer Research and Development Center (ERDC) is established the Center for the Advancement of Sustainability Innovations (CASI), in Champaign, IL. This Center links expertise in ERDC with numerous organizations, to include the Center for Sustainable Design at the University of Illinois, the National Defense Center for Environmental Excellence, the National Renewable Energy Laboratory, the Corps of Engineers Huntsville Installation Center of Expertise, and many others. It provides:

- Expertise in Sustainable Planning and Design
- Sustainable Strategy Implementation
- Sustainable Knowledge Collaboration Environment
- Army and Partner Engagement.

To ensure the Center targets capabilities that most effectively serve Army and Defense users, a stakeholder "board" composed of Army, other services, and Defense personnel, will guide Center plans, review Center activities and progress, help secure resources, and help target services to key objectives. The Center Director, and the Center partnership forum Chair will regularly report to this board.

A demonstrator version of the NLOS cannon fires its 155mm projectile at Yuma Proving Ground, Ariz. Date: April 22, 2005. Photo courtesy of US Army from: *http://www4.army.mil/armyimages/armyimage.php?photo=5783*.

ARMY HYBRID-ELECTRIC PROPULSION FOR MANNED GROUND VEHICLE SYSTEM

The Army announced its first hybrid-electric propulsion system for a new fleet of manned ground vehicles (MGVs) in August of FY07. The system, the first hybrid system for a combat vehicle, is expected to propel all eight variants of the vehicle. The Army is using hybrid-electric power because brigade combat teams using these vehicles will have much greater electrical power requirements than the current-force heavy brigade combat teams due to the Army's principal modernization program, the Future Combat System (FCS).

FCS consists of a family of manned and unmanned air and ground systems and sensors, all connected by a common network. It is designed specifically to improve Soldier situational awareness, survivability, and battlefield effectiveness, while putting new capabilities into Soldier's hands as soon as the technology is ready. For more information about the FCS program, visit *http://www.army.mil/fcs/*.

Hybrid-electric vehicles provide enough electrical power through their rechargeable energy storage system. An added benefit is improved fuel economy and less reliance on oil, natural gas or other fossil fuels.

The Army is developing and building eight new MGVs. A common chassis reduces design,production and sustainment costs. The first hybrid-electric MGV, the Non-Line-of-Sight Cannon, will begin production in late 2008.

[43] CASI web site: *https://casi.erdc.usace.army.mil/*.

Soldiers in the Army Evaluation Task Force will begin testing the first generation of mature FCS technologies this year at Fort Bliss. Once the task force has completed its evaluation, these technologies will become available for fielding to deployed forces. Precursor FCS technologies, including the PacBot Tactical Robot and Micro (Unmanned) Air Vehicle, already are being used by Solders in Iraq and Afghanistan.

FUEL CELLS

The Army is a major consumer of energy—from supporting the world's largest fleet of tactical and non-tactical vehicles, to supporting a vast network of installations, to consuming mountains of batteries in military operations. Although the Army is aggressively exploring a variety of new technologies to reduce our dependence on fossil fuels, fuel cells have captured the public's imagination above all others, because of their promise of environmentally friendly, quiet, and electrically precise power.

Fuel Cells as a Propulsion Source[44]

The Army's National Automotive Center in Detroit, MI, has developed a one-of-a-kind prototype modified Chevrolet Silverado where the conventional engine drive train is replaced by electric axle motors and a compressed hydrogen-fueled fuel cell. The 188 kW fuel cell-motor combination offers roughly the same power as the standard GM 5.3 liter V-8 engine, but because hydrogen is less energy dense, the range of this vehicle is less than half that of the gasoline. Also, before such vehicles are practical, the Department of Energy (DOE) must resolve critical questions on how to economically and effectively produce, store, and distribute hydrogen. Alternatively, the Army continues to make significant strides in probing better ways to reform existing logistics fuels on-board to reduce the massive infrastructure changes that will be required with a purely hydrogen economy.

Fuel Cells as a Soldier Future Power Source[45]

As the Army becomes more digitized and network centric, the demand for new, lightweight, power dense technologies is growing. The Army's Communications-Electronics Research, Development, and Engineering Center at Fort Belvoir, VA, is testing two promising fuel cell technologies—Direct Methanol Fuel Cells and Reformed Methanol Fuel Cells (RMFC)—to fill key power and energy gaps for dismounted soldier applica-tions. A new lightweight 25W RMFC that provides 500+ watt-hours over a 72-hour mission has been developed, and will soon be evaluated against stringent Military Standard specifications and demonstrated in user testing in the "On-The-Move-Demo" at Fort Dix, NJ, and during "Land Warrior" testing at Fort Lewis, WA. While the Army innovations in these fuel cell programs is impressive, it is also clear that many issues must yet be resolved—including the reformation of logistics fuels for vehicle and distributed power applications, ability to survive environmental extremes, and durability and reliability. The Army's technical community clearly understands the current state-of-the-art in fuel cells, and continues to develop innovative solutions in those areas critical to tactical operations, while partnering with DOE to develop solutions appropriate to non-tactical environments.

[44] *RDECOM Magazine,* "-300 miles in three days Army showcases hydrogen powered vehicle in California Road Rally" (2005) *http://www.rdecom.army.mil/rdemagazine/200510/itl_roadrally.html.*

[45] *RDECOM Magazine,* "Soldier Power Fuel Cell Development contract awarded" (2006) *http://www.rdecom.army.mil/rdemagazine/200606-07/itf_CERDEC.html.*

We Still Have Work to Do

The Army has made considerable progress since it issued the Army Strategy for the Environment in 2004. As evidenced by the initiatives highlighted in this update, we have succeeded in setting into motion some of the actions needed to transition the Army from a compliance-based to a sustainability-based, mission-focused orientation. Yet there is still much progress to be made.

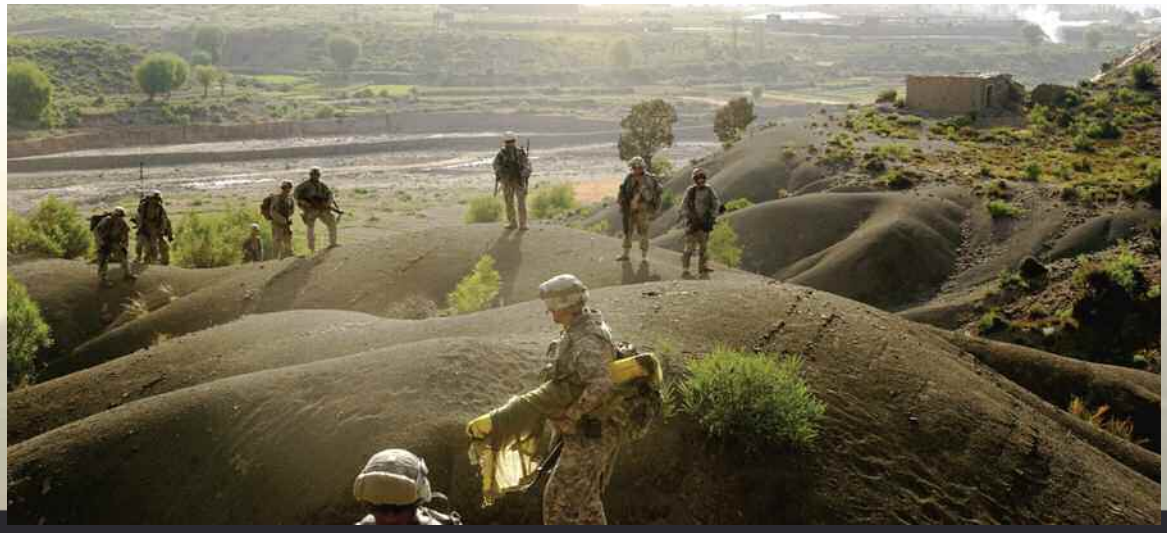
We must continue to meet today's needs at home and abroad, and at the same time anticipate and plan to meet future challenges that will continue to deplete the already limited resources upon which we all depend. Building an enduring Army supported by sustainable operations, installations, systems, and communities is a continuous process—one that requires the active participation of all Army units and organizations, military and civilian personnel and their families, suppliers, support contractors, communities, and our other partners around the world.

As we pursue our sustainability goals, we will build upon our national and core Army values that inspire us to act with integrity and to do what is right. We will:

- Continue to foster the sustainability ethic in all of our people and reflect that ethic in everything we do.
- Integrate sustainability principles across all functional areas and at all organizational levels.
- Build enduring partnerships from the local to the global levels, leverage the vast pool of knowledge and experience they present, and apply it to increase the effectiveness and efficiency of our day-to-day operations and activities.
- Continue to hone our capability to develop and field new technologies that in-crease efficiency and reduce cost, while protecting human health, the environment, and the resources that have been entrusted to our care.

All of this we will do in support of the "triple bottom line plus" of mission, environment, community, plus resulting economic benefits. Our commitment to succeed in this effort will not waiver—our readiness and the security of our Nation are at stake. The Army team will continue to do all we can to Sustain the Mission, Secure the Future!

— Addison D. Davis, IV
Deputy Assistant Secretary of the Army
Environment, Safety and Occupational Health



U.S. Soldiers assigned to a survey team from Task Force Castle prepare to move out on a mission in Afghanistan. The Soldiers will survey a proposed site for a new observation post. Photo by 1st Lt. Tomas Rofkahr, U.S. Army. (Released). Date: July 11, 2008. Photo courtesy of US Army from: *http://www.flickr.com/photos/soldiersmediacenter/2673650617/*

ANNEX

ARMY FY07 SUSTAINABILTY PERFORMANCE INFORMATION WITH INDEX TO GLOBAL REPORTING INITIATIVE (GRI) METRICS

For the past 30 years, environmental management in the Army had been primarily compliance-based, with the ultimate goal of any environmental program being to reduce releases of pollutants and avoid costly violations. Over the past decades, we learned that simply complying with environmental regulations will not ensure that we will be able to sustain our mission. Many of the sustainable practices the Army seeks to institutionalize are modeled from practices adopted by a growing number of corporations achieving competitive advantage by taking a thorough look at how their processes impact not only their financial status, but environmental and social well-being—the "triple bottom line."

The following sections of this report contain references to the Army information related to each of the report elements and the economic, environmental, and social responsibility performance metrics recommended by the Global Reporting Initiative's (GRI's) Sustainability Reporting Guidelines (Version 3.0) (G3), and the GRI's Sector Supplement for Public Agencies (Pilot Version 1.0).

Table 5 contains the index for GRI recommended content for an organization sustainability report and Tables 6, 7, and 8 contain the recommended GRI performance metrics for economic, environmental and social responsibility performance, respectively. For each GRI recommended report content element, the table provides a reference (page number or web link) to the source of the Army data.

(Left) Sgt. Victor Faggiano, a native of Manchester, N.H., patrols through a field of trash using a medal detector to search for possible enemy caches in northern Ghazaliyah. Faggiano serves with 1st Platoon, Company C, 1st Squadron, 75th Cavalry Regiment, 2nd Brigade Combat Team, 101st Airborne Division (Air Assault), Multi-National Division—Baghdad. Photo by Sgt. James Hunter, 2nd BCT PAO, 101st Abn. Div., MND-B. Date: July 10, 2008. Photo cuourtesy of US Army from: *http://www.flickr.com/photos/soldiersmediacenter/2696002236/sizes/l/.*

Table 5. Global Reporting Initiative (GRI) Content Index to Army FY07 Information

GRI Indicator	Description of GRI Recommended Report Content	Reference to Army FY07 Information
1	**Vision and Strategy**	
1.1	Statement from the most senior decision maker of the organization	Front of this report, "Message from the Secretary of the Army and the Army Chief of Staff"
1.2	Description of key impacts, risks, and opportunities.	FY08 Army Posture Statement at http://www.army.mil/aps/08/critical_challenges/critical_challenges.html
2	**Organization Profile**	
2.1	Name of reporting organization.	Army web site at http://www.army.mil
2.2	Organization mission, functions, and responsibilities	Pages 4-5, Army web site at http://www.army.mil/institution/organization/
2.3	Operational structure of the organization.	Page 5, Army web site at http://www.army.mil/institution/organization/
2.4	Location of organization's headquarters.	Defense web site at http://pentagon.afis.osd.mil/
2.5	Number of countries where the organization operates	Army web site (See Command Map) at http://www.army.mil/institution/organization/
2.6	Nature of ownership and legal form.	Not applicable.
2.7	Markets served	Pages 5-6, Army web site http://www.army.mil/institution/organization/
2.8	Scale of the reporting organization, including:	Pages 4-5, Army web site at http://www.army.mil/institution/organization/ FY07 Army Annual Financial Report: http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf FY08 Posture Statement, Strategic Context: http://www.army.mil/aps/08/strategic_context/strategic_context.html
2.9	List of stakeholders	FY08 Army Posture Statement at http://www.army.mil/aps/08
2.10	Awards received in the previous reporting period.	Pages 25-26 of this Report FY08 Army Posture Statement at http://www.army.mil/aps/08/accomplishments/accomplishments.html
3	**Report Profile**	
3.1	Reporting period for information provided.	Page 2
3.2	Date of most recent previous report (if any).	Page 2
3.3	Reporting cycle (annual, biennial, etc.)	Pages 1-2, Annual
3.4	Contact point for report	Back cover of report
	Report Scope and Boundary	
3.5	Process for defining report content	Page 2
3.6	Boundary of the report	Page 2
3.7	State any specific limitations on the scope or boundary of the report.	Page 2, this first report is limited in scope, but provides links to publicly available information about Army sustainability initiatives
3.8	Basis for reporting.	Page 2, the basis of reporting for each source report is described within their text, see below examples; FY07 Army Annual Financial Report, pg 45-47: http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf FY07 DoD Energy Management Report, page 1: http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/fy07/DoD-Narrative-Final.pdf FY07 Defense Environmental Programs Report to Congress, pg 1: https://www.denix.osd.mil/portal/page/portal/content/environment/ARC/FY2007/02_FY07DEPARC_Upfront_final.pdf
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.	Pages 8-20 Army FY07 Performance Highlights toward Triple Bottom Line—Plus; Measurement techniques not described in this report, are in the source document
3.10	Explanation of the effect of any re-statements of information provided in earlier reports	Not applicable–first report

Table 5. Global Reporting Initiative (GRI) Content Index to Army FY07 Information

GRI Indicator	Description of GRI Recommended Report Content	Reference to Army FY07 Information
3.11	Significant changes from previous reporting periods	Not applicable–first report
3.12	Table identifying the location of the Standard Disclosures in the report.	Annex, Tables 7-9
3.13	Policy and current practice with regard to seeking external assurance for the report.	Page 2
4	**Governance Commitments and Engagement**	
4.1	Governance structure of the organization	Leadership section Army web site at http://www.army.mil/institution/leaders
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	Civilian and military leadership roles prescribed in the U.S. Code (USC) Title 10–Armed Forces at http://uscode.house.gov/download/title_10.shtml Specifically, Chapter 303–Department of the Army–http://uscode.house.gov/download/pls/10C303.txt
4.3	The number of members of the highest governance body that are independent and/or non-executive members.	Leadership section of the Army web site at http://www.army.mil/institution/leaders/ 10 United States Code (USC) Title 10 - Armed Forces, Chapter 303–Department of the Army, at http://uscode.house.gov/download/pls/10C303.txt
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	Page 2 and FY08 Army Posture Statement at http://www.army.mil/aps/08/APS2008.pdf
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives and the organization's performance.	Office of Personnel Management policy on New Performance-Based Pay System for the Senior Executive Service http://www.opm.gov/oca/compmemo/2003/2003-19.asp
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	10 United States Code (USC) TITLE 10 - ARMED FORCES, Chapters 137 and 139 http://uscode.house.gov/download/title_10.shtml
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	10 United States Code (USC) Title 10 - Armed Forces, Chapter 33, at http://uscode.house.gov/download/pls/10C33.txt
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	Army Strategy for the Environment (ASE), pg 5-6 at http://www.asaie.army.mil/Public/ESOH/doc/ArmyEnvStrategy.pdf
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance.	Army Strategy for the Environment (ASE), pg 6, 11, at http://www.asaie.army.mil/Public/ESOH/doc/ArmyEnvStrategy.pdf
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	Army Strategy for the Environment (ASE), pg 8-11 at http://www.asaie.army.mil/Public/ESOH/doc/ArmyEnvStrategy.pdf
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	Army Strategy for the Environment (ASE), pg 8-11 at http://www.asaie.army.mil/Public/ESOH/doc/ArmyEnvStrategy.pdf
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	Army Strategy for the Environment (ASE) at http://www.asaie.army.mil/Public/ESOH/doc/ArmyEnvStrategy.pdf Page 2 of this report, GRI The Army also subscribes to the U.S. Green Building Council's LEED® standards for new construction; http://www.usgbc.org
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization.	Not reported in one Army location.
4.14	List of stakeholder groups engaged by the organization. Basis for identification and selection of stakeholders with whom to engage.	FY08 Army Posture Statement at http://www.army.mil/aps/08/APS2008.pdf Army Public Involvement Tool Box at http://www.asaie.army.mil/Public/IE/Toolbox/default.html
4.15	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	Army Public Involvement Tool Box at http://www.asaie.army.mil/Public/IE/Toolbox/default.html Army Leader's Guide to Environmental Public Involvement: http://www.asaie.army.mil/Public/IE/Toolbox/documents/final_leaders_guide_to_public_involvement.pdf

Table 5. Global Reporting Initiative (GRI) Content Index to Army FY07 Information		
GRI Indicator	Description of GRI Recommended Report Content	Reference to Army FY07 Information
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	Army Public Involvement Tool Box at http://www.asaie.army.mil/Public/IE/Toolbox/default.html Army Leader's Guide to Environmental Public Involvement: http://www.asaie.army.mil/Public/IE/Toolbox/documents/final_leaders_guide_to_public_involvement.pdf
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	Army Public Involvement Tool Box at http://www.asaie.army.mil/Public/IE/Toolbox/default.html
	Public Policies and Performance Integration Measures	
PA1	Describe the relationship to other governments or public authorities and the position of the agency within its immediate governmental structures.	Army and Defense web sites at http://www.army.mil/institution/organization http://www.defenselink.mil/odam/omp/pubs/GuideBook/Pdf/DoD.PDF
PA2	Define sustainable development used by the public agency and identify any statements or principles adopted to guide sustainable development policies.	Sustainable Design and Development Policy Update–Life-Cycle Costs at http://www.hqda.army.mil/acsimweb/fd/docs/SDD_policy.pdf Army Strategy for the Environment (ASE), pg 5-6 at http://www.asaie.army.mil/Public/ESOH/doc/ArmyEnvStrategy.pdf
PA3	Identify the aspects for which the organization has established sustainable development policies.	Army Strategy for the Environment (ASE), pg 8-11 at http://www.asaie.army.mil/Public/ESOH/doc/ArmyEnvStrategy.pdf
PA4	Identify the specific goals of the organization for each aspect listed in PA3.	Army Strategy for the Environment(ASE), pg 8-11 at http://www.asaie.army.mil/Public/ESOH/doc/ArmyEnvStrategy.pdf
PA5	Describe the process by which the aspects and goals in PA3 and PA4 were set.	Army Strategy for the Environment (ASE), pg 2, 6 at http://www.asaie.army.mil/Public/ESOH/doc/ArmyEnvStrategy.pdf
PA6	For each goal, provide the following: implementation measures; results of relevant assessments of the effectiveness of measures before they are implemented; targets and key indicators used to monitor progress, with a focus on outcomes; description of progress relative to goals and targets in the reporting periods, including results of key indicators; actions to ensure continuous improvement toward reaching the public agency's goals and targets; post-implementation assessment and targets for the next time period; and public policies and implementation measures.	Army Strategy for the Environment (ASE) at http://www.asaie.army.mil/Public/ESOH/doc/ArmyEnvStrategy.pdf Army Strategic Implementation Plan to be released in FY08
PA7	Describe the role of, and engagement with, stakeholders relative to the items disclosed in PA6.	Army Strategy for the Environment (ASE), pg 8-11 at http://www.asaie.army.mil/Public/ESOH/doc/ArmyEnvStrategy.pdf

An Iraqi boy approaches Cpl. James Buckley, a Beaumont, Calif., native, during a patrol through the fish market in northern Baghdad, August 5, 2008. Buckley is a member of the Command Security Detachment, 3rd Brigade Combat Team, 4th Infantry Division, Multi-National Division-Baghdad. Date: August 5, 2008. Photo courtesy of US Army from: *http://www.flickr.com/photos/soldiersmediacenter/2741595624/*.

SUMMARY OF ARMY FY07 PERFORMANCE AGAINST GRI RECOMMENDED ECONOMIC PERFORMANCE INDICATORS

The following table (Table 6) presents the Army's FY07 publically reported information for each of the recommended GRI G3 Economic Performance Metrics. The table lists the Army's reporting status for FY07 (full data (F), partial data (P), data not reported (NR), and metric not applicable (NA)) and provides a link to the Army source of the data. It also provides trends information for key performance metrics relative the Army's FY07 economic performance. Detailed definitions of the GRI Economic Performance Indica-tors can be downloaded at ***http://www.globalreporting.org/NR/rdonlyres/A4C5FA04-3BD3-4A02-B083-6B3B00DEAF61/0/G3_IP_Economic.pdf.***

Table 6. Summary of Army FY07 Performance Against GRI Recommended Economic Performance Indicators

GRI V3 or Pub. Agency Supp. VI Indicator	Description of GRI Recommended Report Content	Army 07 Report Status	Link to FY07 Army Source Data
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	F	Table 3 of this report presents Net Cost of Army Operations from FY04 to FY05 as reported in the Army Annual Financial Reports. FY07 Army Annual Financial Report, see Consolidated Financial Statements http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf DoD Financial Summary Tables FY08 http://www.defenselink.mil/comptroller/defbudget/fy2008/fy2008_summary_tables_whole.pdf
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	NR	Not reported as part of annual financial or performance reports.
EC3	Coverage of the organization's defined benefit plan obligations	F	FY07 Army Annual Financial Report (Note 17) http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf Army Benefits Web site http://www.armyg1.army.mil/rso/abt.asp FY06 DoD Performance and Accountability Report, pg 33-34 http://www.defenselink.mil/comptroller/par/fy2006/Entire_Document_(7.8_MB).pdf
EC4	Significant financial assistance received from government	F	FY07 Army Annual Financial Report (Note 3) http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf
EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation	P	FY06 DoD Performance and Accountability Report, pg 45 http://www.defenselink.mil/comptroller/par/fy2006/Entire_Document_(7.8_MB).pdf
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	NR	Not reported
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation	NR	Not reported
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	F	Table 3 of this report presents the Net Cost of Civil Works as reported in the Army Annual Financial Reports. FY07 Army Annual Financial Report (Civil Works Fund, pages 163-184) http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf

Soldiers guards the key route to Mecca in southwestern Iraq near the border. Photo by Staff Sgt. Tyrone Marshall. Photo courtesy of US Army from: *www.army.mil http://www.flickr.com/photos/soldiersmediacenter/437646070/sizes/l/in/dateposted/*

Table 6. Summary of Army FY07 Performance Against GRI Recommended Economic Performance Indicators

GRI V3 or Pub. Agency Supp. V1 Indicator	Description of GRI Recommended Report Content	Army 07 Report Status	Link to FY07 Army Source Data
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	F	The Army conducts a variety of studies to understand and describe the indirect economic impacts as part of its Base Realignment and Closure initiatives. To learn more about BRAC impacts and studies, visit the Army's Base Realignment and Closure Division web site at http://www.hqda.army.mil/ACSIM/brac/braco.htm
PA8	Gross expenditures broken down by type of payment	F	FY07 Army Annual Financial Report, see Consolidated Financial Statements http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf
PA9	Gross expenditures broken down by financial classification	F	FY07 Army Annual Financial Report, see Consolidated Financial Statements http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf
PA10	Capital expenditures broken down by financial classification	F	FY07 Army Annual Financial Report, see Consolidated Financial Statements http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf
PA11	Procurement policy of the public agency related to sustainable development	F	The Army follows the policy prescribed in EO13423 and the DoD Green Procurement Strategy. Executive Order 13423 http://ofee.gov/eo/eo13423_main.asp DoD Green Procurement Strategy https://www.denix.osd.mil/portal/page/portal/denix/environment/green_procurement
PA12	Describe Economic, environmental, and social criteria that apply to expenditures and financial commitments Describe linkages between the public agency's procurement practices and its public policy priorities.	F	The Army follows the policy prescribed in EO13423 and the DoD Green Procurement Strategy. Executive Order 13423 at http://ofee.gov/eo/eo13423_main.asp DoD Green Procurement Strategy at https://www.denix.osd.mil/portal/page/portal/denix/environment/green_procurement
PA13	The Army follows the policy prescribed in EO13423 and the DoD Green Procurement Strategy.	F	DoD Green Procurement Strategy https://www.denix.osd.mil/portal/page/portal/denix/environment/green_procurement Not reported
PA14	Percentage of the total value of goods purchased that were registered with voluntary environmental or social labels and/or certification programs, broken down by type	NR	FY07 Army Annual Financial Report, pg 9-15 http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf
PA15	Administrative Efficiency: Describe the results of assessments of the efficiency and effectiveness of services provided by the public agency, including the actions taken to achieve improvements in service delivery	F	DoD Performance and Accountability Statement for FY07 http://www.defenselink.mil/comptroller/par/index.html

SUMMARY OF ARMY FY07 PERFORMANCE AGAINST GRI RECOMMENDED ENVIROMNMENTAL PERFORMANCE INDICATORS

Table 7 presents a link to the Army's publically reported FY07 information for each of the GRI G3 recommended Environmental Performance Metrics.

The table lists the Army's reporting status for FY07 (full data (F), partial data (P), data not reported (NR), and met-ric not applicable (NA)) and provides a link to the Army source of the data. Detailed definitions of the GRI Environmental Performance Indicators can be downloaded at ***http://www.globalreporting.org/NR/rdonlyres/F9BECDB8-95BE-4636-9F63-F8D9121900D4/0/G3_IP_Environment.pdf.***

U.S. Army Sgt. Kenneth Strong, left, and his fellow Soldiers exit a UH-60 Black Hawk helicopter during an aerial traffic control point mission near Tall Afar, Iraq, July 2, 2006. The Soldiers are assigned to the 4th Battalion, 23rd Infantry Regiment, 172nd Stryker Brigade Combat Team. Photo by Staff Sgt. Jacob N. Bailey, U.S. Air Force. (Released). Photo courtesy of US Army from: ***http://www.flickr.com/photos/soldiersmediacenter/97631326/in/dateposted/***

Table 7. Summary of Army FY07 Performance Against GRI Recommended Environmental Performance Indicators

GRI V3 or Pub. Agency Supp. V1 Indicator	Description of GRI Recommended Metric	Army 07 Report Status	Link to FY07 Army Source Data
EN1	Materials used by weight or volume	NR	Not reported
EN2	Percentage of materials used that are recycled input materials	NR	Not reported
EN3	Direct energy consumption by primary energy source	P	Not publicly available down to the Army facility level, but fully reported on aggregate in the DoD Energy Management Report. http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/main.shtml
EN4	Indirect energy consumption by primary source	P	Not publicly available down to the Army facility level, but fully reported on aggregate in the DoD Energy Management Report. http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/main.shtml
EN5	Energy saved due to conservation and efficiency improvement	P	Army publicly reports on Energy used per gross square ft. The DoD Energy Management Report has summary information for all services, FY07 pg 22. http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/main.shtml
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives (Army publicly reports on Energy-use saved per gross square feet)	P	Army reports a summary of its initiatives to reduce direct and indirect energy consumption annually as part of the DoD Energy Management Report, FY07 pg 22, 43-63, http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/main.shtml
EN7	Initiatives to reduce indirect energy consumption and reductions achieved Army publicly reports on Energy-use saved per gross square feet)	P	Army reports a summary of its initiatives to reduce direct and indirect energy consumption annually as part of the DoD Energy Management Report, FY07 pg 22, 43-63, http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/main.shtml
EN8	Total water withdrawal by source	P	Army reports annual water usage from facilities subject to Executive Order 13423. This information is reported in aggregate in the DoD Energy Management Report, FY07 pg 33, http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/main.shtml
EN9	Water sources significantly affected by withdrawal of water	NR	Not reported
EN10	Percentage and total volume of water recycled and reused	NR	Water recycling is reported by installations in the Army Energy and Water Reporting System but is not tracked by DOD or included in the Annual Energy Report.
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high bio-diversity value outside protected areas	F	Each Army installation maintains this information in an Installation Natural Resource Management Plan. Information from the INRMPs is summarized in the DoD Environmental Report to Congress. FY07 Defense Environmental Programs Annual Report to Congress (appendix G), pg. 3, 6-12 https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC/FY2007
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	F	Each Army installation maintains this information in an Installation Natural Resource Management Plan. Information from the INRMPs is summarized in the DoD Environmental Report to Congress. FY07 Defense Environmental Programs Annual Report to Congress (appendix G), pg. 6-12 https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC/FY2007
EN13	Habitats protected or restored.	F	Each Army installation maintains this information in an Installation Natural Resource Management Plan. Information from the INRMPs are summarized in the DoD Environmental Report to Congress. FY07 Defense Environmental Programs Annual Report to Congress (appendix G), pg 6-12 https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC/FY2007

Table 7. Summary of Army FY07 Performance Against GRI Recommended Environmental Performance Indicators			
GRI V3 or Pub. Agency Supp. V1 Indicator	Description of GRI Recommended Metric	Army 07 Report Status	Link to FY07 Army Source Data
			https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC/FY2007 In addition, the Army Civil Works Mission reports on Habitat restored in the Army Annual Fiscal Reports. FY07 Army Annual Financial Report (Civil Works Fund, pg. 163-185) http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	F	Each Army installation maintains this information in an Installation Natural Resource Management Plan. Information from the INRMPs is summarized in the DoD Environmental Report to Congress. FY07 Defense Environmental Programs Annual Report to Congress (appendix G) https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC/FY2007 In addition, the Army Civil Works Mission reports on Habitat management in the Army Annual Fiscal Reports. FY07 Army Annual Financial Report (Civil Works Fund, pg 163-185) http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	F	Installation Natural Resource Management Plans FY07 Defense Environmental Programs Annual Report to Congress (appendix G), pg 6-12 https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC/FY2007
EN16	Total direct and indirect green-house gas emissions by weight	P	The Army reports estimated GHG Emissions (MTCO2 eq) from the direct and indirect energy data subject to the goals in EO13423. The aggregate DoD GHG Emissions are available in the FY07 Energy Management Data Report: http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/fy07/energymgmt07.shtml
EN17	Other relevant indirect green-house gas emissions by weight	NR	Not reported
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	NR	The DoD's FY07 Energy Management Report, contains a summary of Army initiatives undertaken in FY07 to reduce energy consumption and renewable energy initiatives, which have a GHG reduction implication: http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/main.shtml
EN19	Emissions of ozone-depleting substances by weight Army submission to the DoD Annual Environmental Report to Congress outlines programs and policies in place, but does not provide emissions by weight.	P	FY07 Defense Environmental Programs Annual Report to Congress (appendix Z), pg 1-2 https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC/FY2007
EN20	NOx, SOx, and other significant air emissions by type and weight	F	FY07 Defense Environmental Programs Annual Report to Congress (appendix T), pg 2 https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC/FY2007
EN21	Total water discharge by quality and destination	NR	The Army does not provide a consolidated annual report of this information. However, every Army installation in the U.S. reports water quantity and quality for all point source discharges via the National Pollutant Discharge Elimination System. Detailed permit conditions and discharge monitoring report information are available for every Army NPDES permit via the Environmental Protection Agency's Enforcement & Compliance History Online (ECHO) web site at http://www.epa-echo.gov/echo/compliance_report_water_icp.html (Select "Army" under federal agencies)
EN22	Total weight of waste by type and disposal method	F	Army reports annual amounts of hazardous waste, solid waste and toxic releases as part of the DoD Annual Environmental Report to Congress.

Table 7. Summary of Army FY07 Performance Against GRI Recommended Environmental Performance Indicators

GRI V3 or Pub. Agency Supp. V1 Indicator	Description of GRI Recommended Metric	Army 07 Report Status	Link to FY07 Army Source Data
			FY07 DoD Environmental Report to Congress (appendices Y, pg.7-8 and W, pg. 3) https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC/FY2007
EN23	Total number and volume of significant spills	NR	Not reported
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	NR	Army reports annual amounts of hazardous waste treated on-site, shipped off-site and shipped overseas to the DoD for the Defense Environmental Programs Annual Report to Congress. This data was used to calculate total hazardous waste diversion and reduction, but is not reported publicly in this document: https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC/FY2007
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff	NR	Not reported
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	F	Each Army Installation maintains an Environmental Management System that identifies aspects and impacts of site operations. The Army reports the status of these EMSs as part of the DoD Annual Environmental Report to Congress. FY07 DoD Energy Management Report, Army; http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/main.shtml FY07 DoD Environmental Report to Congress (appendices A, pg. 4 and X) https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC/FY2007
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	NA	Not applicable to Army.
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	F	Army reports the status of these fines as part of the DoD Annual Environmental Report to Congress. FY07 DoD Environmental Report to Congress (appendix V), pg. 2 https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC/FY2007
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce	NR	Not reported
EN30	Total environmental protection expenditures and investments by type.	F	The Army reports environmental funding by program information as part of the DoD Annual Environmental Report to Congress. The Army details its environmental funding as part of its Civil Works Mission in its Annual Financial Report. FY07 DoD Environmental Report to Congress (appendix B), pg. 4 https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC/FY2007 FY07 Army Annual Financial Report (Civil Works Fund, pg 164) http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf

SUMMARY OF ARMY FY07 PERFORMANCE AGAINST GRI RECOMMENDED SOCIAL RESPONSIBILITY PERFORMANCE INDICATORS

Table 8 presents a link to the Army's publically reported FY07 Community Performance for each of the GRI G3 Social Responsibility Performance Metrics. The table lists the Army's reporting status for FY07 (full, partial, not reported, or not applicable) and provides a link to the Army source of the data. Detailed definitions of the GRI Social Responsibility Performance Indicators can be downloaded at ***http://www.globalreporting.org/ReportingFramework/G3Guidelines.***

Three U.S. Army Soldiers from Bravo Company, 2nd Battalion, 23rd Infantry Regiment, 4th Brigade Combat Team, 2nd Infantry Division patrol a dirt road in Muqdadiyah, Iraq. U.S. Army photo by Spc. Shawn M. Cassatt. Date: January 28, 2008. Photo courtesy of US Army from: *http://www.army.mil.*

Table 8. Summary of Army FY07 Performance Against GRI Recommended Social Responsibility Performance Indicators

GRI V3 or Pub. Agency Supp. V1 Indicator	Description of GRI Recommended Metric	Army 07 Report Status	Link to FY07 Army Source Data
	Labor and Decent Work Practices		
LA1	Total workforce by employment type, employment contract, and region	F	The Army reports this through a variety of publically available web sites to include of the OSD's Statistical Information Analysis Division's online database of military and civilian workforce attributes by year, grade, rank, employment type and country. DoD online database of military and civilian workforce by country, by grade, by rank, by employment type http://siadapp.dmdc.osd.mil/personnel/MILITARY/Miltop.htm Army Military Personnel Statistics by Month/Region/Grade http://siadapp.dmdc.osd.mil/personnel/L03/fy06/06top.htm: Active Duty Military Strength Report for 2007 http://siadapp.dmdc.osd.mil/personnel/MILITARY/ms1.pdf Online Database for FY07 Army Federal Civilian Employment http://siadapp.dmdc.osd.mil/personnel/CIVILIAN/fy2007/september2007/september2007.htm
LA2	Total number and rate of employee turnover by age group, gender, and region	F	The Army summarizes this information in end strength reports as part of its Annual Financial Reports (See Table 3 of this report) The Army reports demographic information annually. FY06 Army Demographics Profile: http://www.armyg1.army.mil/hr/docs/demographics/FY06%20Tri-Fold%20without%20the%20Education%20Chart.pdf
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations	F	Army Pay and Benefits Summary Description http://www.army.mil/WellBeing/pay.html
LA4	Percentage of employees covered by collective bargaining agreements.	NR	Not reported
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements	F	Army BRAC FAQs http://www.hqda.army.mil/acsim/brac/faq.htm
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	NR	Not reported
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities by region	F	Army Online Accident, Injury, and Illness Statistics Web site https://crc.army.mil/Stats/detail.asp?iData=3&iCat=56&iChannel=18&nChannel=Stats DoD Online Personnel and Military Casualty Statistics http://siadapp.dmdc.osd.mil/personnel/MMIDHOME.HTM
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	F	U.S. Army Wounded Warrior Program https://www.aw2.army.mil/ U.S. Army Center for Health Promotion and Preventive Medicine http://chppm-www.apgea.army.mil/ Army Wellbeing Services http://www.armyfamiliesonline.org
LA9	Health and safety topics covered in formal agreements with trade unions	NR	Not reported
LA10	Average hours of training per year per employee by employee category	P	FY07 Army Financial Report (Tables 3-5) http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	F	FY07 Army Financial Report (Page 17) http://www.asafm.army.mil/fo/fod/cfo/afr/currentyr/fy07afr.pdf 2007 Army Posture Statement Addendum B (Train and Equip Soldiers to Serve as Warriors and Grow Adaptive Leaders) http://www.army.mil/aps/07/addendum/b.html

Table 8. Summary of Army FY07 Performance Against GRI Recommended Social Responisibility Performance Indicators

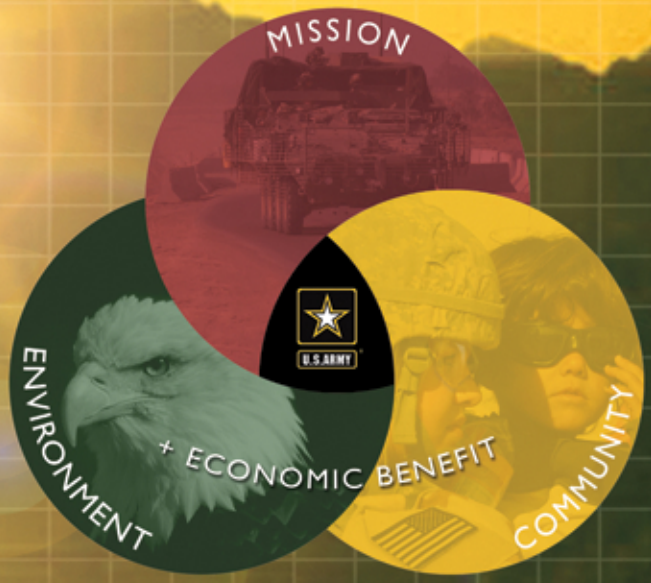
GRI V3 or Pub. Agency Supp. V1 Indicator	Description of GRI Recommended Metric	Army 07 Report Status	Link to FY07 Army Source Data
LA12	Percentage of employees receiving regular performance and career development reviews	F	National Security Personnel System—Performance management http://www.cpol.army.mil/library/general/nsps/pm-overview.html
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity	P	FY06 Army Profile http://www.armyg1.army.mil/hr/demographics.asp
LA14	Ratio of basic salary of men to women by employee category	F	Military pay rates: http://www.dfas.mil/militarypay/militarypaytables.html Army civilian pay http://www.opm.gov/oca/08tables/
	Human Rights Performance		
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	NR	Not reported
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	NR	Not reported
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	NR	Not reported
HR4	Total number of incidents of discrimination and actions taken	F	The Army Equal Opportunity Reporting System (EORS) database collects, records, and maintains racial, ethnic group, and gender data and statistics needed to support the Army EO Program, to nclude AAP reporting requirements. In Accordance with (IAW) AR 600-20, ch 6-16. 2007 Equal Employment Opportunity Data Posted Pursuant to the No Fear Act of 2002 Title III http://eeoa.army.pentagon.mil/web/prog_comp/complaints/statistics.cfm# Army EORs Web site http://www.armyg1.army.mil/eo/database.asp
HR5	Operations identified in which the right to exercise freedom of association or collective bargaining may be at significant risk, and actions taken to support these rights.	NR	Not reported
HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	NR	Not reported
HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures taken to contribute to the elimination of forced or compulsory labor.	NR	Not reported
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations	NR	Not reported
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	NR	Not reported
	Society		
SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	P	Office of Economic Adjustment http://www.oea.gov/OEAWeb.nsf/Home?OpenForm Base Realignment and Closure 2005 Army http://www.defenselink.mil/brac http://www.hqda.army.mil/acsim/brac/index.htm
SO2	Percentage and total number of business units analyzed for risks related to corruption.	NR	Not reported

Table 8. Summary of Army FY07 Performance Against GRI Recommended Social Responisibility Performance Indicators

GRI V3 or Pub. Agency Supp. V1 Indicator	Description of GRI Recommended Metric	Army 07 Report Status	Link to FY07 Army Source Data
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	P	Secretary of the Army Policy requiring all Army Military and Civilian Personnel to attend ethics training annually. http://www.hqda.army.mil/ogc/MONTHLY%20ET%20MAIN.htm
SO4	Actions taken in response to incidents of corruption.	NR	Not reported
SO5	Public policy positions and participation in public policy development and lobbying.	F	AR1-20 Legislative Liaison http://www.army.mil/usapa/epubs/pdf/r1_20.pdf AR360-1 Army Public Affairs Regulation http://www.army.mil/usapa/epubs/pdf/r360_1.pdf
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	NA	Not applicable
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	NA	Not applicable
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	F	FY07 Defense Environmental Programs Annual Report to Congress, (Appendix V), pg. 2 https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC/FY2007
	Product Responsibility		
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	F	The Army's Acquisition Policy AR70-1 (Section 1-4(n-o) identifies the health, safety and pollution prevention requirements. PAM 70-3 Section VI also describes the Environmental, Safety and Occupational Health aspects of system acquisition. Army Acquisition Policy AR70-1 http://www.army.mil/usapa/epubs/pdf/r70_1.pdf PAM70-3 Army Acquisition Procedure (Section VI) http://www.army.mil/usapa/epubs/pdf/p70_3.pdf
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	NA	Not applicable
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	NA	Not applicable
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	NA	Not applicable
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	NA	Not applicable
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	NA	Not applicable
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	NA	Not applicable
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	NA	Not applicable
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	NA	Not applicable

printed on recycled paperstock

SUSTAIN THE MISSION
SECURE THE FUTURE



OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY
FOR INSTALLATIONS AND ENVIRONMENT
110 Army Pentagon, Room 3E464
Washington, DC 20310-0110

703-692-9800 (phone)
703-692-9808 (fax)
https://www.asaie.army.mil