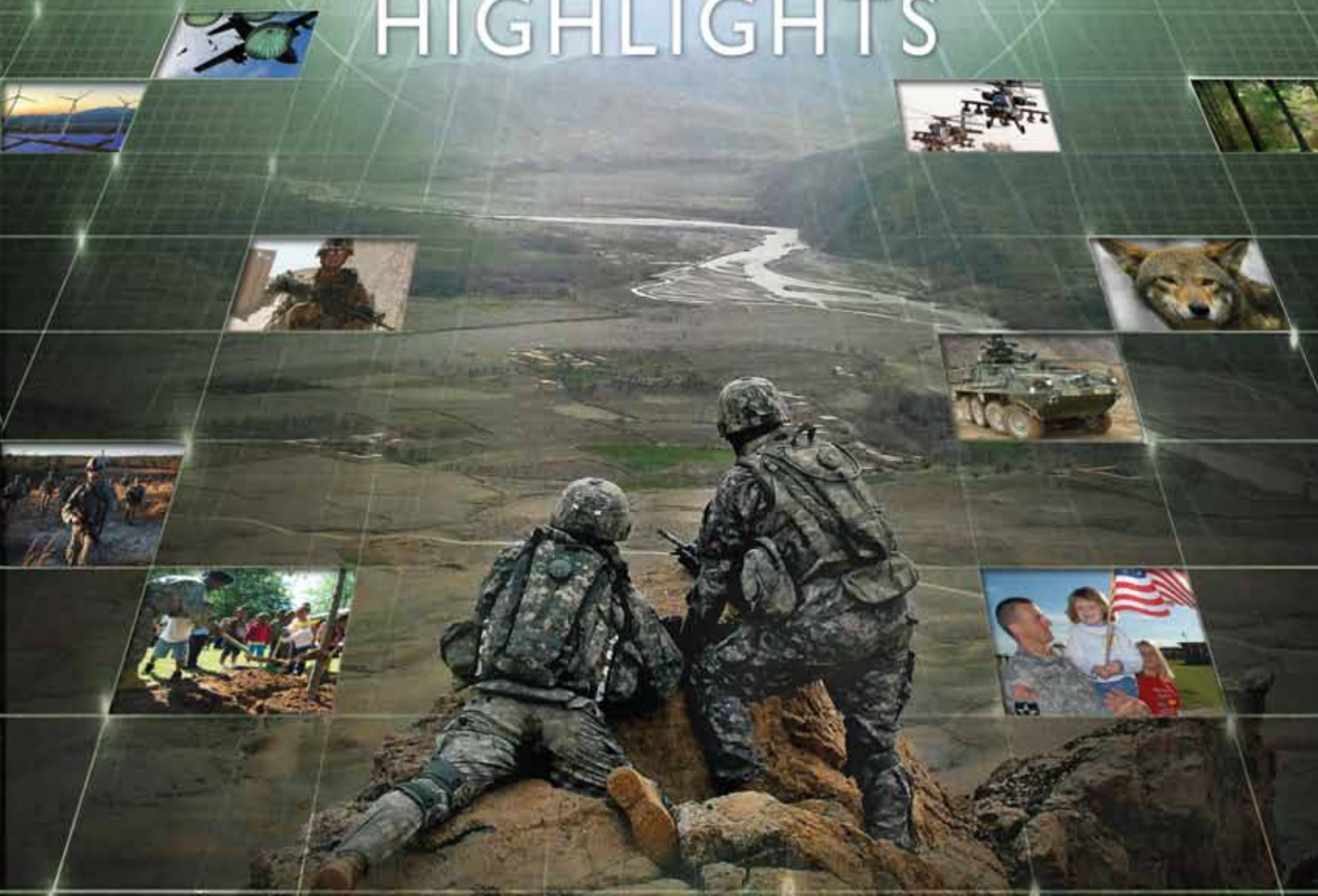




U.S. ARMY

SUSTAINABILITY REPORT 2009

HIGHLIGHTS



SUSTAIN THE MISSION
SECURE THE FUTURE

2008 Award Highlights

In 2008, many Army installations were recognized for their environmental, energy, and water achievements. Below are a few:

- 2008 White House Closing the Circle Award: Sustainable Design/Green Buildings: Fort Bragg, North Carolina
- 2008 Secretary of Defense Environmental Awards
 - Natural Resources: Camp San Luis Obispo, California Army National Guard
 - Cultural Resources: Redstone Arsenal, Alabama
 - Environmental Quality: U.S. Army Garrison, Daegu, Korea
 - Pollution Prevention: Aviation Classification Repair Activity Depot, Army National Guard, Connecticut
 - Environmental Excellence in Weapon System Acquisition: Aberdeen Proving Ground, Maryland
- 2008 Federal Electronics Reuse and Recycling Campaign Awards: Fort Bragg, North Carolina
- 2008 Secretary of the Army Sustainability Award: Fort Bragg, North Carolina
- 2008 Secretary of the Army Environmental Awards
 - Natural Resources: Camp Ripley, Minnesota Army National Guard
 - Cultural Resources: Camp Navajo, Arizona National Guard, Fort Drum, New York
 - Environmental Quality: U.S. Army Garrison Bamberg, Germany
 - Pollution Prevention: Michigan Army National Guard, North Carolina Army National Guard
 - Environmental Restoration: Fort Bragg, North Carolina



The United States Army is currently in the midst of its eighth year of protracted conflict. Having deployed over one million men and women in support of this Nation's longest ever war fought with an All-Volunteer Force, the Army is stressed. With an eye toward rebalancing the Force, sustainability has proven an effective tool for meeting operational requirements, while sustaining facilities and ranges, improving quality of life and reducing the burden on the natural and manmade systems on which we depend.

Army leadership has also come to understand the potential for sustainability to strengthen national security. What had previously yielded benefits through environmental initiatives is emerging as an important tool for countering the destabilizing effects of emerging challenges from competition over limited and diminishing resources, as well as population movements, pandemics and other climate change-related events.

The Army's long and proud history of excellence stems from a culture that honors the past accomplishments while striving for continuous improvement. Our commitment to sustainability is no different. The Army's last report demonstrated government-wide leadership as the first within the federal government to use the widely accepted Global Reporting Initiative (GRI) guidelines. The report presented a benchmark of the Army's accomplishments toward the goal of greening the force. This second report builds off of the last by documenting progress further down the path toward Army Sustainability, with comparisons drawn to past data in order to highlight successes and future challenges.

While we have many accomplishments to be proud of, the potential remains for significant innovation and forward progress. From the enlisted Soldier through the highest Army leadership, efforts are underway to further inculcate sustainability as an organizing principle throughout the entire Army enterprise. These efforts will continue to evolve and take shape as the Army broadens the benefits of a more sustainable enterprise. Army Green is Army Strong!

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

Joseph W. Westphal
Under Secretary of the Army

Terms to Know

USGBC	US Green Building Council	GRI G3	Global Reporting Initiative Current Sustainability Reporting Guidelines
SW	Solid Waste	TBL	Triple Bottom Line
LEED	Leadership in Energy and Environmental Design	C&D	Construction and Demolition
ANSI	American National Standards Institute	HW	Hazardous Waste
ASHRAE	American Society of Heating, Refrigerating, and Air Conditioning Engineers	INRMP	Integrated Natural Resource Management Plan
IEASNA	Illumination Engineering Association of North America	Btu	British Thermal Unit
ASE	Army Strategy for the Environment	GSF	Gross Square Feet
FY	Fiscal Year	TRI	Toxic Release Inventory
CY	Calendar Year	DoD	Department of Defense



OFFICE OF THE ASSISTANT
SECRETARY OF THE ARMY
FOR INSTALLATIONS
AND ENVIRONMENT

110 Army Pentagon
Room 3E464
Washington, DC 20310-0110
703-692-9800

www.asaie.army.mil

Moving Forward

The Army offers its second annual sustainability report to both inform and engage its primary shareholders on progress to embody the principles of sustainability in 2008. We invite you to download the complete *2009 Army Sustainability Report* at <http://www.aepi.army.mil>.

At the end of FY08, more than 130,000 soldiers were deployed in Iraq and Afghanistan, many on their third or fourth tours. Army Civilians supported infrastructure reconstruction missions, including but not limited to providing electricity, oil and natural gas, water, roads, security, and facilities for health and education. This time overseas puts significant pressure on the Army Family. Yet, the Army's Soldiers, Families, and Civilians continue to answer the call of duty and to display courage with distinction.

Although much work remains, the Army continues to pursue strategies to increase sustainability—to support the mission by reducing impact on the environment and improving community relations and Soldier, Family, and Civilian well-being.

In the 2008 Army Earth Day message the senior Army leadership challenged all Army personnel to commit to minimizing the Army's *footprint*. The Army continues to pursue the goals of the 2004 *Army Strategy for the Environment*, which called the Army to:

- Foster a Sustainability Ethic
- Meet Test, Training, and Mission Requirements
- Strengthen Army Operations
- Minimize Impacts and Total Ownership Costs
- Enhance Well-Being
- Drive Innovation

Each year the Army will continue to assess progress, seek partnerships, and improve its reporting to reflect the interests of the public and the Army's mission priorities. Army leadership challenges all members of the Army team, Soldiers, Family, and Civilians, to be **Army Green, Army Strong!**



Why use the GRI's Sustainability Reporting Guidelines?

Writing a report does not make the Army sustainable, but it helps to identify trends and where the Army may need to refocus. The Global Reporting Initiative (GRI) is a network-based organization that developed the *Sustainability Reporting Guidelines* (G3) and *Sector Supplement for Public Agencies* through a consensus-seeking process with business, civil society, labor and professional participants. They represent an internationally accepted and common baseline for all types of organizations, used by over 1000 entities in 2008. By using these guidelines as the baseline, the Army can provide the public with a recognizable and consistent way to access the information in which they are most interested.

Metric definition (units)	FY04
Net cost of Army operations (\$B)	135.78
Active Army end strength (000s)	493.54
Reserve and National Guard end strength (000s)	547.05
Total Acres permanently protected by Army Compatible Use Buffer Partnerships	22,431
Environmental Funding (\$ millions)	1,456
Installation Integrated Strategic and Sustainability Planning	7
Army New Environmental Enforcement Actions	89
Solid waste (SW) and construction and demolition (C&D) debris generated (million tons)	2.76
Overall SW and C&D Recycled Rate	57%
HW disposal (million lbs by CY)	33.39
HW disposal indexed to net cost of Army operations (pounds HW per \$1000)	0.25
TRI releases (million lbs by CY)	21.48
TRI releases indexed to net cost of Army operations (pounds TRI per \$1000)	0.16
Installations with up-to-date Integrated Natural Resource Management Plans (INRMP)	98%
Army facility water use (Billion gallons)	66.15
Facility energy use intensity (KBtu/GSF)	FY04
Military Accident Fatalities Rate (per 1000 service members)	0.37
Army Civilian Lost Time Claims (per 1000 Civilians)	19.9
Retention (000s) (Active, Reserve, National Guard)	123.35
Recruiting (000s) (Active, Reserve, National Guard)	148.09
Number of Community Covenants Signed	

Please note the above data is a snapshot of information publicly available. It is not intended to be all inclusive or to render judgment of the data. Please refer to the 2009 Army Sustainability Report for more information.

The *2009 Army Sustainability Report* contains an index to all 87 indicators, the Army fully reports data on 25 and partially on 62. The Army will continue to work with the Army to issue this report in accordance with GRI Application Note 15, by providing more detail on each indicator.



The Army's Triple Bottom

Army leadership challenges all Army members to embrace the Army's mission, environment, and community. At the individual, unit, and organizational levels. Realizing water, fuel, and energy efficiency, utilizing alternative energy sources, and supporting deployed units as long as necessary. Encouraging Army Civilians as well as encouraging community strength of the Army. Furthering the Army's true cost of doing business as well as the Army's mission.

Army sustainability aligns closely with the Army's business strategy to reduce total ownership costs, and accelerate innovation.

Line Metrics

	FY05	FY06	FY07	FY08	FY07-08 Change
	146.43	164.61	168.92	190.5	12.8%
	492.73	505.4	522.02	543.64	4.1%
	522.18	536.26	542.59	557.37	2.7%
	28,419	63,370	81,587	95,962	17.6%
	1,467	1,454	1,493	1,520	1.8%
	12	13	16	21	31.3%
	91	101	94	130	38.3%
	2.14	2.33	2.83	2.25	-20.5%
	45%	59%	65%	58%	-7.0%
	45.71	63.7	45	76.5	70.0%
	0.31	0.39	0.27	0.40	48.2%
	18.87	18.76	23.87	21.96	-8.0%
	0.13	0.11	0.14	0.12	-14.3%
	99%	98%	98%	98%	0%
	45.93	43.44	45.25	45.9	1.4%
	FY03 = 99.6 04-FY06 unavailable		91.873	89.802	-2.3%
	0.44	0.37	0.37	0.29	-21.6%
	6.79	7.75	7.66	7.22	-5.7%
	119.8	126.61	127.26	120.05	-5.7%
	142.99	175.06	174.06	169.86	-2.4%
	Program began in FY08			85	

not available at the time this report was written. It is not intended to see the complete report for a discussion of each metric.

7 recommended GRI sustainability performance metrics. Of
lly reports data on 22. This level of reporting enables the
Level B. The 2009 report improved upon the index reporting

Line (TBL)—Plus

Army personnel to incorporate the “triple bottom line—plus”:
community, plus economic benefit into Army operations at all
and energy efficiencies, protecting natural resources, and
enables the Army to deploy faster, travel farther and sustain
required. Caring for the health of the Soldiers, Families, and
aging community relationships sustains the people – the
er, the Army recognizes that sustainable practices reduce the
well as impacts on the environment and the community.
transformation efforts to improve Army processes, lower

Mission Highlights

The Army’s primary mission is to defend the United States—its people, its land, and its heritage. Army sustainability addresses both present and future mission needs by supporting Soldiers, Families, and Civilians while strengthening community partnerships that improve its ability to organize, equip, train, and deploy. Some key highlights and trends for FY08 include:

- 4.1% increase in active Army end strength
- 2.7% increase in Reserve and National Guard end strength
- 17.6% increase in total acres permanently protected by Army Compatible Use Buffer partnerships

Environment Highlights

Using sustainability as a conceptual planning framework for the Army’s compliance, conservation, and pollution prevention programs helps it to proactively identify and manage future problems. Facing significant mission demands, the Army progressed in key areas such as energy and water, though it continues to face significant challenges from toxic releases and hazardous waste disposal. Some key highlights and trends for FY08 include:

- 21 Army installations have undergone Integrated Strategic and Sustainability Planning
- 100% of FY08 construction required to be designed to the USGBC LEED Silver standard, including being 30% more energy efficient than the ANSI/ASHRAE/IEASNA 90.1-2004 standard.
- 1.4% increase in Army facility water use since FY07, a total of 45.9 billion gallons in FY08. This represents a 30.6% decrease since FY04.
- 2.3% decrease in Army facility energy use intensity since FY07, a total of 89.8 kBtu/GSF in FY08. This represents a 10.4% decrease since FY03.
- 70% increase in hazardous waste disposal as reported for CY06 to CY07 – and a 48.2% increase per unit of net cost of operations (pounds/\$1000) related to operational increases and industrial requirements
- 8% decrease in absolute TRI releases as reported for CY03 to CY07—and a 14.3% decrease per unit of net cost of operations (pounds/\$1000)

Community Highlights

The triple bottom line—plus values not only natural resources, but also the health and safety of Soldiers, the Army Family, Civilians, and local communities—inside and outside the fence line. This cannot be achieved alone. Sustaining the future requires a deep commitment from every member of the Army team—leaders, Soldiers, Families, and Civilians. Sustainability requires the involvement of local communities as well as the cooperation, collaboration, and commitment of the administration, Congress, DoD, industry, and the general public. Some key highlights and trends for FY08 include:

- 21.6% decrease in Army military accidental fatalities
- 5.7% decrease in Army civilian lost time claims
- 5.7% decrease in Army retention, still above the retention goal
- 2.4% decrease in Army recruiting, still above the recruiting goal
- 85 Community Covenant signings across the country, the first year of the program