



United States Marine Corps

Sustainability Plan | 2011



Table of Contents

Part I: USMC Sustainability Policy and Strategy

- 1 Introduction
- 2 Purpose and Scope
- 2 Sustainability Supports the Marine Corps Mission
- 3 Sustainability Goals -- Focus and Priority Areas
- 5 Plan Implementation
- 6 Evaluating and Prioritizing the Use of Resources
- 7 Climate Change Strategy -- Mitigation and Adaptation

Part II: Performance Review and Annual Update

Goal 1: Improve Energy and Water Resources Management and Reduce Greenhouse Gases

- 10 Objective 1.1: Reduce Uses of Fossil Fuels
- 12 Objective 1.2: Improve Water Resources Management
- 13 Objective 1.3: Reduce Greenhouse Gases (GHGs)

Goal 2: Minimize Waste and Prevent Pollution

- 15 Objective 2.1: Minimize Solid Waste
- 16 Objective 2.2: Prevent Pollution
- 17 Objective 2.3: Improve Integrated Pest Management

Goal 3: Improve Integration of Sustainability Practices across All Mission Areas

- 18 Objective 3.1: Sustainable Buildings
- 18 Objective 3.2: Sustainable Acquisition and Procurement
- 19 Objective 3.3: Integrated Regional Planning
- 20 Objective 3.4: Environmental Management System (EMS)
- 20 Objective 3.5: Sustainable Ranges





A Message from the Commandant of the Marine Corps

The success of the Marine Corps in accomplishing our mission starts and ends with the individual Marine. In turn, every Marine depends on essential natural and built resources to ensure this success, both on the battlefield and at our bases, to include: energy, fuel, water, equipment, facilities, landscapes, airspace, and sea access. We must ensure our warfighters continue to have what they need to be successful, while recognizing the challenging reality that these resources are not unlimited. By using these critical resources effectively and efficiently we can meet this challenge and enhance our warfighting capability -- this is the essence of sustainability, and why attainment is a strategic, operational and tactical imperative for the Marine Corps.

Our Marine Corps Sustainability Plan focuses on leveraging innovation and opportunity at our bases and stations to ensure their capacity to enhance and endure the training and operational mission into the future. The Plan defines the goals and metrics, and roles and responsibilities to achieve this vision, and aligns with the priorities, direction and scope of the Department of Defense Strategic Sustainability Performance Plan.

Sustainability supports our continuing resolve to be resourceful and innovative while meeting our mission. As Marines, we take pride in our legacy of “doing more, with less.” Implementing sustainability practices and using our resources prudently, not only supports using our taxpayer dollars wisely, it supports and protects our most valued warfighting resource, our Marines.

Semper Fidelis,

(CMC signature)

James F. Amos

General, U.S. Marine Corps

Commandant of the Marine Corps

Part I: USMC Sustainability Policy and Strategy

Introduction

On October 5, 2009, President Barack Obama signed Executive Order (EO) 13514 that challenged Federal agencies to lead by example in making improvements in environmental, energy and economic performance by establishing an integrated strategy towards sustainability. The EO sets sustainability goals that require agencies to meet several energy, water, waste and pollution reduction targets; and requires agencies to develop Strategic Sustainability Performance Plans (SSPP) to define agency sustainability strategies, policies, implementation and progress to achieve sustainability goals and requirements. The Department of Defense (DoD) developed and published, on August 26, 2010, a DoD SSPP to meet EO 13514 and 13423 requirements and be in harmony with existing Federal statutory requirements such as those on energy and water efficiency in the Energy Policy Act of 2005, and the Energy Independence and Security Act of 2007, and others such as the Resource Conservation and Recovery Act, and the Farm Bill.

The DoD SSPP establishes a strategic framework for implementing sustainability across the DoD mission. It defines DoD sustainability policies, goals, performance targets and metrics, progress reporting protocols, investment priorities, integration with resource planning/budget processes, describes implementation methods and accomplishments, and establishes governance and functional roles and responsibilities. On October 8, 2010, the DoD directed DoD-wide implementation of the SSPP across the DoD mission, to include programming resources necessary to achieve sustainability goals and targets and reporting annual progress.

To meet DoD and Federal sustainability requirements, the Commandant of the Marine Corps has developed the United States Marine Corps (USMC) Sustainability Plan (the "Plan") presented in this document.



Purpose and Scope

The purpose of the Plan is to define a Marine Corps strategic framework for sustainability that fulfills the goals and requirements set forth by EO 13514 and aligns with the goals and policies of the DoD SSPP. The Plan accomplishes several objectives for USMC:

- 1) Defines sustainability performance goals, objectives, targets and metrics;
- 2) Identifies organizational functional roles and responsibilities;
- 3) Describes implementation strategies, policies, methods and progress; and
- 4) Serves as a guide/template for regional/installation sustainability plans.

In accordance with DoD and CMC policy, the scope and ethos of sustainability applies to all USMC mission and program areas, as discussed in the following section.

However, for purposes of this Plan, the scope of sustainability performance goals, objectives, metrics and targets defined in Part II of the Plan apply directly to USMC bases and stations, to include activities, personnel, resources, facilities, ranges, installations and non-tactical vehicles, systems and equipment, in the United States and overseas, consistent with EO 13514. Sustainability performance as it applies to the battlefield, that is the operational mission and expeditionary environment, is not covered in this plan, but rather, embedded in energy, water and waste reduction goals in the USMC Expeditionary Energy Strategy.

“Sustainability is not an individual Departmental program; rather, it is an organizing paradigm that applies to all DoD mission and program areas.”

--DoD SSPP

Sustainability Supports the Marine Corps Mission

The Marine Corps embraces sustainability as a means of improving mission accomplishment. The essence of sustainability is using mission-critical resources (i.e., energy, fuel, water, equipment, facilities, etc.) with greater efficiency while enhancing warfighting capabilities and mission. Operating more efficiently is a universal concept that can be achieved by better integrating sustainable practices across every facet of the USMC mission and capabilities, from: bases to battlefield, acquisition to fielding, concept to application.

In an expeditionary environment, sustainability is being driven by the needs of our operating forces to increase combat effectiveness and operational flexibility, reduce mission threat, and shrink the logistics footprint by employing critical resources such as energy and water in the most efficient manner and reducing waste which supports force protection and security. Sustainability is integral to the approach employed by the CMC

Expeditionary Energy Office (E2O) in articulating the USMC Expeditionary Energy Strategy and the USMC Integrated Process Team chartered to develop a Joint Capabilities Integration and Development System (JCIDS) Capabilities Based Assessment (CBA) on USMC Expeditionary Energy, Water, and Waste (E2W2). The CBA will provide analysis to support development of an E2W2 Initial Capabilities Document.



At our bases and stations, sustainability ensures the capacity of installations and ranges to enhance and endure the training and operational mission into the future. The focus of sustainability for USMC is leveraging innovation and opportunity to effectively and more efficiently use natural and manmade mission-critical resources. At our installations, sustainability drives us to continue to explore and implement resource conservation methods that meet mission needs. Sustainability supports energy security at home and abroad--ensuring a secure and reliable energy source is critical to our ability to maintain readiness.

The Marine Corps has been successful over the years due in part to Marines' ability to continuously assess their situations and adjust to the environments in which they must perform while concurrently preserving those core values and professional capabilities that help Marines to succeed in both war and in peace. Sustainability supports our continuing resolve to be resourceful and innovative while meeting our mission, now and into the future. As Marines, we must continue our legacy of "doing more with less." Lightening our load on the battlefield and at our bases--staying lean--will sustain our ability to be the Nation's expeditionary force of choice. As Marines, we are good stewards of the natural and built resources entrusted to us and needed to meet mission. Using these resources prudently, not only supports using taxpayer dollars wisely, it supports and protects our most valuable warfighting resource, our Marines.

"The Department's vision of sustainability is to maintain the ability to operate into the future without decline—either in the mission or in the natural and manufactured systems that support it."

--DoD SSPP

Sustainability Goals -- Focus and Priority Areas

The Plan is centered on three fundamental areas of focus and priority supporting an overall framework for sustainability performance, and defined by the following three sustainability goals to:

1. Improve energy and water resources management and reduce greenhouse gases;
2. Minimize waste and prevent pollution; and
3. Improve the integration of sustainability practices across all mission areas.

The sustainability performance goals and subordinate hierarchy of objectives and metrics/targets meet Federal sustainability requirements and align with the scope and metrics defined in the DoD SSPP.

GOAL 1: Improve Energy and Water Resources Management and Reduce Greenhouse Gases

The DoD recognizes that there are broad security challenges that result from the military's reliance on fossil fuels which must be addressed by the reduction of fossil fuel and non-renewable energy usage. The Marine Corps is aggressively pursuing plans to move away from traditional energy sources while increasing the use of renewable sources. The Marine Corps Expeditionary Energy Strategy provides a plan to increase combat effectiveness by reducing the energy, water and waste—the logistics footprint--of our operating forces; to improve energy and water efficiency at our bases and stations; and to emphasize an ethos to change behavior across the USMC to manage these critical resources more efficiently and prudently. Installations are retrofitting old buildings to increase energy-efficiency, and all new facilities buildings are constructed to meet LEED Silver certification standards. The Marine Corps is also testing the effectiveness of solar, wind, geothermal, and other types of renewable energy at various installations. To reduce the amount of fossil fuels consumed by garrison mobile equipment and vehicles, the USMC is increasing the number and type of alternative fuel vehicles used at our installations. By breaking our dependence upon fossil fuels, the Marine Corps becomes a more sustainable and mission-ready force.

The Marine Corps realizes that responsible water resource management is critical to mission success. Water is essential for military operations, drinking, hygiene, sanitation, food preparation, and medical care. The growing threat of water scarcity affects many Marine Corps installations. As a result, many fixed installations have developed efficient water management practices that include xeriscaping and using reclaimed water to reduce the



amount of potable water used for irrigation purposes. Installations have also been incorporating storm water management practices into their environmental programs to prevent wastewater treatment system overloads and to reduce the amount of pollutants entering bodies of water. At forward operating bases, the Marine Corps is developing new strategies to provide drinkable water in places of conflict without endangering our Marines in vulnerable convoys.

The reduction of GHG emissions goes hand-in-hand with employing energy strategies that conserve energy, reduce reliance on fossil fuels, and increase the use of renewables. Meeting the GHG reduction goals will also require investments in technologies and management practices to reduce GHG emissions from refrigerants, landfills, employee commuting, and business travel.

GOAL 2: Minimize Waste and Prevent Pollution

Many Marine Corps installations have well-established recycling and waste minimization programs. The most economically and environmentally effective program is one where as little waste is generated as possible by preventing pollution through source reduction, or as necessary, recycling what is economically feasible to support the mission. By effectively managing hazardous materials and wastes, the Marine Corps reduces the risk of contamination and financial liability that result from accidental spills, and provides a safer environment for our Marines and civilian workforce. The Marine Corps' Sustainable Acquisition program is an approach to purchase less hazardous materials and reduce life cycle costs and impacts. By buying sustainable products, the Marine Corps can be a good environmental steward, and a good neighbor to surrounding communities, while being fiscally-efficient.



GOAL 3: Improve Integration of Sustainability Practices across All Mission Areas

To achieve the Marine Corps sustainability goals and EO 13514 requirements, all program areas and personnel must work together to incorporate and integrate sustainable management practices into their everyday activities. The Plan and performance targets do not create a new Sustainability program; rather it acts as an “organizing paradigm” encompasses all mission and existing program areas and leverages sustainable opportunities in each. Integrated regional planning practices, for example, may create incentives that increase the use of alternative fuel vehicles or other transportation options, greater use of efficient travel routes which may also result in a reduction of GHG emissions and other environmental impacts, and ultimately, benefit the mission. Successful implementation of the Plan will allow the Marine Corps to continue its culture of excellence in environmental and fiscal stewardship and improve national security, both home and abroad.



Plan Implementation

The goal of sustainability is to use mission-critical resources such as energy, fuel, water, equipment, land, and facilities efficiently while enhancing warfighting capabilities. Achieving the sustainability goals of the Plan requires implementation and accountability by the responsible functional area owners. The matrix depicted in Table 1.1 depicts the organizational functional areas which have the lead responsibility or assist role for each Sustainability Goal and Objective.

Table 1.1 USMC Sustainability: Organizational Roles and Responsibilities Matrix							
	Sustainability Objectives	Environmental	Facilities	Logistics/Supply	Acquisition/Contracts	Transportation (GME/non-tactical)	Others
Goal 1: Improve Energy and Water Resources Management and Reduce GHG	1.1 Reduce Uses of Fossil Fuels	O	X	O	O	X	O MCCS
	1.2 Improve Water Resources Management	O	X		O		
	1.3 Reduce GHGs	X	O	O	O	O	O Expeditionary Energy
Goal 2: Minimize Waste and Prevent Pollution	2.1 Minimize Solid Waste	O	X	O	O		O MCCS
	2.2 Prevent Pollution	X	O	X	O		O LOGCOM
	2.3 Improve Integrated Pest Management	O	X		O		O MCCS
Goal 3: Improve Integration of Sustainability Practices Across All Mission Areas	3.1 Sustainable Buildings	O	X		O		O MCCS
	3.2 Sustainable Acquisition & Procurement	O		O	X		O MCCS/ C4
	3.3 Integrated Regional Planning	O	O			O	X CP&LO
	3.4 Environmental Management Systems (EMS)	X	O	O	O	O	
	3.5 Sustainable Ranges	O	O				X Ops & Training
Key	X: Lead O: Assist						

USMC Policy, Planning, and Budget Integration

The Marine Corps framework for implementing the sustainability requirements reflected in the goals and objectives contained in the Plan relies upon their allocation and integration into existing functional programs, as outlined under the organizational matrix in Table 1.1. Per DoD policy, and as noted earlier in the Plan, sustainability is not a separate Departmental program itself (i.e., no individual, separate budget is established for sustainability), but rather, it is spread across, and an integral part of, existing, established programs. For each USMC functional program, applicable sustainability requirements will be integrated into the respective policies, planning and budget to support meeting these requirements and achieving the goals, objectives, and targets/metrics defined in the Plan. The incremental investment to meet these requirements may not necessarily be visible in the individual respective programs budgets until, and if, DoD creates the capability to track sustainability requirements as separate budget line items under each applicable, respective program.

Methods of Evaluating Progress

The Marine Corps is required to track and report progress to the Department of the Navy (DoN) and the DoD, on each of the sustainability targets defined in the Plan. Subsequently, the DoD will report annual progress on the DoD SSPP to the Office of Management and Budget (OMB) and the White House Council on Environmental Quality (CEQ) in accordance with EO 13514. DoD is aware that the Marine Corps, along with other DoD components, may not have the systems in place to collect data on every new metric/requirement, and plans to issue additional guidance as necessary.

Internal Coordination and Dissemination

The Marine Corps will ensure that all USMC personnel are aware of the USMC Sustainability Plan and its purpose to support the mission by using internal channels of communication. USMC sustainability policy will be issued to define objectives, direct procedures and responsibilities, and ensure accountability. Training will be provided to reach installation personnel with specific responsibilities for implementing the Sustainability Plan. The Marine Corps will conduct outreach efforts to Marine Corps families and civilians that emphasize how behavioral changes can support achievement of sustainability goals, as well as individual goals at home, such as conserving energy and water to save money and resources.

Evaluating and Prioritizing the Use of Resources

Evaluating Return on Investment

The Marine Corps is building sustainability into Operations and Maintenance (O&M) procedures and budgets for installations. By creating well-organized O&M practices, the Marine Corps can significantly improve energy and water efficiency and reduce GHG emissions. All USMC decisions or projects should calculate the return on investment as part of their approach to considering and selecting sustainability solutions. The calculation should include quantitative factors that can be weighed one against another, such as the initial purchase cost versus the energy or water costs associated with operating the equipment, differing maintenance requirements, and/or equipment lifetimes.

Factors in Acquisition and Procurement Decisions

Decisions made in the acquisition of weapon systems and the procurement of goods and services directly impact sustainability performance—for example, the demand for supporting resources to sustain these systems/products over their useful life and ensuring responsible disposal decisions. DoD is currently developing sustainability criteria



to aid researchers, developers, and program managers to make better, sustainability decisions during the acquisition process. The criteria offer many suggestions and explore opportunities for alternative products that meet DoD requirements. The criteria being developed include a set of sustainability factors to be considered at key milestones in the acquisition process; guidance on the types of lifecycle costs to be considered when analyzing alternatives, making trade-offs, and developing designs; and guidance on how to weigh or score various non-cost performance factors.

Environmental, Social, and Community Considerations

The Marine Corps recognizes that its decisions and activities affect local communities and regions, and demonstrating leadership in protecting the natural and cultural resources within our purview is an important part of our mission. Sustainable practices promote the health, safety and welfare of our Marines, their families, our civilian workforce, and our neighboring communities. The Marine Corps makes the evaluation and prioritization of its activities based upon factors beyond simply financial and regulatory elements, to include environmental, social, and community concerns and considerations as well. USMC program planning activities coordinate with key stakeholders to develop solutions to shared challenges such as:

- land use
- energy
- pollution
- population growth

We engage with stakeholders at all levels for which we operate: international, national, regional and local. The Marine Corps strives to be a good steward of the environment, and respects the protection of natural and cultural resources while ensuring the capability to conduct our operational training and testing mission. The Marine Corps also works to ensure that encroachment and resource competition surrounding our installations and ranges does not compromise training and mission capabilities. All of these considerations must be balanced to maintain sustainable practices while supporting mission readiness.



Climate Change Strategy – Mitigation and Adaptation

The DoD has outlined a strategic approach to climate change in the Congressionally-mandated Quadrennial Defense Review (QDR), published in February 2010. The USMC climate change strategy will align with the DoD policy direction provided in the QDR and address two general facets of climate change—mitigation and adaptation. Mitigation is generally defined by plans and actions to

reduce GHG emissions and the causes of, or contributors to, climate change; whereas, adaptation generally focuses on plans and actions to cope with, and adjust to, the effects and consequences of climate change.

“The Department must complete a comprehensive assessment of all installations to assess the potential impacts of climate change on its missions and adapt as required.”

-- 2010 DoD QDR

Mitigation

Climate change mitigation is primarily achieved through one of two general methods: reduction of GHG emissions from GHG sources (which produce carbon), or increases in carbon sequestration from sinks (which remove carbon from the atmosphere). GHG emissions are primarily attributable to fossil fuel combustion activities, and USMC reduction opportunities generally rely upon energy strategies that conserve energy, reduce reliance on fossil fuels, and increase the use of renewables. These strategies require investments in both technological and management practices. A small percentile of GHG emissions are attributable to non-energy USMC activities, such as methane

gas generated from landfills and wastewater treatment, and the use of refrigerants. Carbon sequestration activities may include agricultural, forestry and other land use and management practices that occur at USMC installations and ranges. Climate change mitigation efforts are covered under Goal 3 of the Plan.

Adaptation – Risks and Vulnerabilities

In the QDR, DoD identified how climate change will affect our national security mission in two broad ways while shaping the operating environment, roles, and missions we undertake. First, it will affect the deployment of our forces—both for purposes of responding to contingencies and resolving conflicts for which climate change may act as an accelerant of instability or cause geopolitical impacts; and when called upon to support humanitarian assistance or disaster relief and response both abroad or here in the United States. Second, DoD will need to adjust to the impacts of climate change on our facilities and military capabilities. Although the United States and the DoD has significant capacity to adapt and cope with climate change, it will pose challenges to both, especially given our extensive coastal infrastructure. Accordingly, consistent with DoD policy direction in the QDR, and forthcoming interagency guidance prompted by EO 13514 climate change requirements (i.e., a National Climate Change Adaptation Strategy), the USMC must complete a comprehensive assessment of all installations and ranges to assess the potential impacts of climate change on its mission and adapt as required.



General Planning Approach. The USMC is constantly assessing, planning and implementing projects and activities that support our ability to meet the mission of the USMC. Some of these activities, although not primarily directed to support climate change adaptation, nonetheless may assist in these efforts and provide mutual benefits. The effects of climate change are characterized by a degree of variability and uncertainty for a range of forecasting and modeling scenarios. Although specific climate change effects and outcomes cannot be predicted with accuracy and certainty, there are general attributes and trends in climate change that are reasonably expected to occur and can be considered in planning and conducting USMC activities. Some examples of USMC activities at installations which, indirectly or otherwise, support climate change adaptation efforts include: 1) wildfire preparation management; 2) water conservation; 3) hurricane preparedness; and 4) natural resources management.



Adaptation to Increased Risk of Wildfires. Several climate change predictive modeling scenarios include an increase in the frequency and severity of wildfires in some geographic regions affected by climate change. In Southern California for example, after increased frequency and severity of wildfires over the past few years, the USMC has initiated replacement of select aboveground communications and utilities lines to underground as much as economically feasible, so that they are clear of any fire damage should they occur, and to avoid recapitalization costs to replace fire-damaged infrastructure.

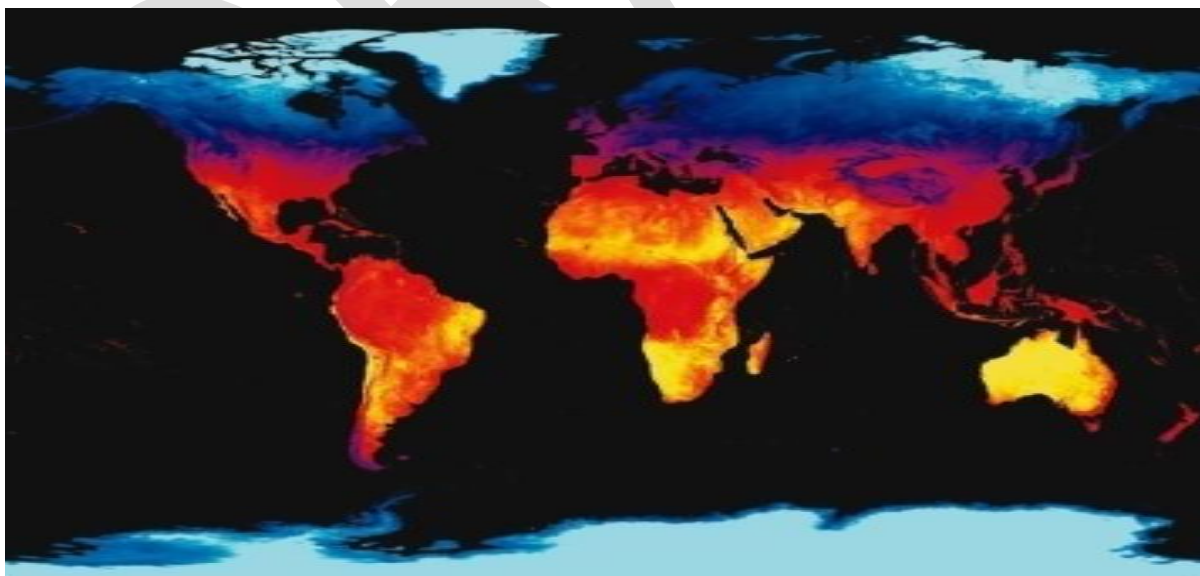
Adaptation to Increased Risk of Drought. Under a changing climate, water resources in some areas will be less abundant and face increasing pressures for demand. We are specifically seeing the early stages of this event in Southern California, where frequent drought conditions coupled with ever increasing population growth has severely taxed clean water supplies. Consequently, the USMC is expanding our use of recycled water at our installations, primarily for irrigation and other non-potable water use requirements.

Adaptation to Increased Risk of Severe Storms. The majority of USMC installations are located in coastal areas where amphibious landing and other mission critical training and operational exercises are conducted to directly support the USMC mission and our Naval mission. The forecasted increase in frequency and severity of hurricanes and tropical storms on the Eastern seaboard of the United States could directly impact this mission. Consequently, the USMC continues to consider hurricane damage vulnerability and base evacuation requirements in all facilities and operational contingency planning.



Adaptation to Changing Ecosystems. Characteristics of climate change include changing temperatures and precipitation patterns. These changes would undoubtedly alter wildlife and habitat patterns and distributions. Associated changes in ecosystems and land use decisions will also result to varying degrees in some geographic regions. The USMC monitors ecosystem conditions and trends and has adopted an adaptive management strategy for implementing Integrated Natural Resource Management Plans (INRMP) for our installations. The USMC also actively participates in numerous broader, regional partnerships to better integrate conservation strategies throughout a given region of ecosystem.

As climate science advances, the CMC will regularly reevaluate climate change risks, vulnerabilities and opportunities in order to develop USMC policies and plans to manage its effects on our operating environment, missions, and facilities. Managing national security effects of climate change will require the USMC to work jointly with other DoD components, and collaboratively with Federal agencies and traditional allies and new partners, through a whole-of-government approach.



Part II: Performance Review and Annual Update

Introduction

The Marine Corps Sustainability Plan hierarchy consists of three performance goals, eleven objectives, and twenty-three targets, as follows:

Goal 1: Improve Energy and Water Resources Management and Reduce Greenhouse Gases

Objective 1.1: Reduce Uses of Fossil Fuels

Objective 1.2: Improve Water Resources Management

Objective 1.3: Reduce GHGs

Goal 2: Minimize Waste and Prevent Pollution

Objective 2.1: Minimize Solid Waste

Objective 2.2: Prevent Pollution

Objective 2.3: Improve Integrated Pest Management

Goal 3: Improve Integration of Sustainability Practices across All Mission Areas

Objective 3.1: Sustainable Buildings

Objective 3.2: Sustainable Acquisition and Procurement

Objective 3.3: Integrated Regional Planning

Objective 3.4: Environmental Management System (EMS)

Objective 3.5: Sustainable Ranges

For each objective, the following section provides:

- A narrative description of progress and accomplishments,
- Planned initiatives, and
- Applicable Targets, Metrics and Annual Target table

The performance targets in the Plan allow flexibility in the methods used to achieve them. The Targets are quantitative and are carefully defined by a performance metric that provides a neutral, rigorous means of reporting and tracking progress against the Target.

Goal 1: Improve Energy and Water Resources Management and Reduce Greenhouse Gases

Objective 1.1 Reduce Uses of Fossil Fuels

Progress and Accomplishments

The Marine Corps is committed to reducing the United States' dependence upon petroleum products and fossil fuels by implementing sustainable practices. The Marine Corps Expeditionary Energy Strategy for installations and facilities focuses aggressively upon reducing energy intensity of existing facilities, increasing energy efficiency in new construction, expanding the use of renewable resources, installing advanced meters, and procuring energy efficient products with the intent to reduce operational costs and pollutant emissions associated with completing missions. The Marine Corps Garrison Mobile Equipment (GME) program focuses upon procuring, maintaining, and managing, in a cost-effective and environmentally conscious manner, the 15,000 non-tactical vehicles that support day-to-day operations at Marine Corps installations. Both programs have had significant success in implementing sustainable policies during the past few years. Some examples of successful projects include:

- A new hydrogen facility at MCB Hawaii that services hydrogen-powered SUVs
- A facility at MCB Camp Pendleton that provides compressed natural gas (CNG) and an Internal Combustion bus that runs between two installations

- Photovoltaic panels at MCAS Yuma that charge electric vehicles and almost all fuel sites on base
- Training swimming pool at MCB Camp Pendleton heated by solar energy whose motors are powered by thermal energy
- Landfill gas recovery project at MCLB Albany

Planned Initiatives

In accordance with EO 13514 and the DoD SSPP, the Marine Corps continues to actively pursue energy-efficient and economical practices consistent with achieving mission success. It is becoming increasingly important to lessen our dependence upon fossil fuels, and the Marine Corps is determined to achieve these targets by:

- Procuring hybrid vehicles for the recruiting fleet, converting medium and heavy duty vehicles from diesel to CNG, downsizing the fleet by using smaller vehicles, and reducing the varying amounts of vehicles per installation and replacing candidate vehicles with plug-in vehicles
- Implementing facilities and GME energy strategies identified in the Marine Corps Expeditionary Energy Strategy
- Continuing to investigate and implement opportunities to promote renewable and alternative energy

Target 1.1.1 Energy Intensity of Facilities Reduced by 30 % of FY 2003 Levels by FY2015 and 37.5% by FY 2020

Define Requirement: EO 13514 §2(a)(i), §2(g)(vi); DoD SSPP Sub-Goal 1.1

Responsible CMC Office: Facilities

Metric

The percent reduction relative to FY 2003 in the total fossil fuel-generated energy consumed by USMC facilities per gross square foot of totally USMC building space. A facility is defined as per the Energy Independence and Security Act of 2007 (EISA) §432(1)(C) to be any building, installation, structure, or other property (including any applicable fixtures) owned or operated by, or constructed or manufactured and leased to, USMC. The term facility includes a group of facilities at a single location or multiple locations managed as an integrated operation, and contractor-operated facilities owned by USMC. It does not include and land or site for which the cost of facilities is not paid by USMC.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 1.1.1	18%	21%	24%	27%	30%	31.5%	33%	34.5%	36%	37.5%

Target 1.1.2 18.3% of Energy Consumed by Facilities is Produced or Procured from Renewable Sources by FY 2020

Define Requirement: EO 13514 §2(g)(iv), §2(g)(v), §2(a)(ii); DoD SSPP Sub-Goal 1.2

Responsible CMC Office: Facilities

Metric

The percent of total energy consumed by USMC facilities that is produced or procured from renewable energy sources. The energy is produced by USMC, produced from a USMC controlled location, or procured from another source. Renewable energy is defined as per 10 U.S.C. §2911(e) to be either thermal or electrical energy that is produced from renewable sources, including solar, wind, biomass, landfill gas, ocean (including tidal, wave, current and thermal), geothermal (including electricity and heat pumps), municipal solid waste, and new hydroelectric generation capacity if achieved from increased efficiency or additions of new capacity at existing hydroelectric projects. A facility is defined as per EISA §432(1)(C).

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 1.1.2	6.5%	7.5%	8.8%	10.2%	11.5%	12.9%	14.2%	15.6%	16.9%	18.3%

Target 1.1.3 Use of Petroleum Products by Vehicle Fleets Reduced 30% by FY 2020 Relative to FY 2005

Define Requirement: EO13514 §2(a)(iii); DoD SSPP Sub-Goal 1.3

Responsible CMC Office: LFS-2

Metric

The percent reduction in petroleum product consumption by USMC non-tactical motor vehicle fleets relative to FY 2005. Only fleets numbering 20 motor vehicles or more are covered.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 1.1.3	12%	14%	16%	18%	20%	22%	24%	26%	28%	30%

Objective 1.2 Water Resources Management Improved

Progress and Accomplishments

The Marine Corps recognizes the importance that water conservation practices can have upon the impact of training and mission accomplishment. The Marine Corps water management program has been implementing water conservation practices and policies for many years prior to Federal sustainability initiatives. The water management program focus is to reduce water intensity of existing facilities, increase water efficiency in new construction, install advanced meters, and procure products that use water efficiently. Some recent Marine Corps accomplishments include:

- 2009 SecNav Energy and Water Management Award given to MCAS Miramar for their water conservation efforts that resulted in an 18 percent reduction per square foot and a savings of more than 50 million gallons of water
- Successful replacement of water-thirsty plants with plants that minimize the need for irrigation, called xeriscaping, at MCIWEST installations

Planned Initiatives

In accordance with EO 13514 and the DoD SSPP, the Marine Corps is continuing to pursue high water efficiency targets and economical practices. With this Plan, the Marine Corps is reaffirming its standing commitment to develop and implement resourceful water management procedures. The Marine Corps is aiming to meet the following targets by:

- Completing a comprehensive water evaluation of facilities every four years to fix problems and promote innovation
- Updating water metering systems
- Continuing to xeriscape, especially in desert areas

Target 1.2.1 Potable Water Consumption Intensity by Facilities Reduced by 26% of FY 2007 Levels by FY 2020

Define Requirement: EO 13514 §2(d)(i), §2(d)(iii); DoD SSPP Sub-Goal 2.1

Responsible CMC Office: Facilities

Metric

The percent reduction relative to FY 2007 in total water consumed by USMC facilities per gross square foot of total building space. Consumption includes the loss of water after it is delivered (for example though leaking or malfunctioning fixtures such as toilets). A facility is defined as per EISA §432(1)(C).

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 1.2.1	8%	10%	12%	14%	16%	18%	20%	22%	24%	26%

Target 1.2.2 Industrial and Irrigation Water Consumption Reduced by 20% of FY 2010 Levels by FY 2020

Define Requirement: EO13514 §2(d)(ii); DoD SSPP Sub-Goal 2.2

Responsible CMC Office: Facilities

Metric

The percent reduction relative to FY 2010 in total water consumed by USMC for irrigation (agricultural and/or landscaping) and industrial purposes.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 1.2.2	2%	4%	6%	8%	10%	12%	14%	16%	18%	20%

Target 1.2.3 All Development and Redevelopment Projects of 5,000 Square Feet or Greater Maintaining Pre-Development Hydrology to the Maximum Extent Technically Feasible

Define Requirement: EO 13514 §2(d)(iv); DoD SSPP Sub-Goal 2.3

Responsible CMC Office: Facilities

Metric

The percent of covered projects (those development and redevelopment projects of 5,000 square feet or greater) that can demonstrate with documentation that storm water design objectives were met through practices that infiltrate, evapotranspire and/or harvest and use the rainfall to the maximum extent technically feasible. The criterion for maximum extent technically feasible is the full employment of accepted and reasonable storm water infiltration and reuse technologies subject to site and applicable regulatory constraints.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 1.2.3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Objective 1.3 Reduce GHGs

Progress and Accomplishments

The Marine Corps continues to strive to reduce GHG emissions through energy conservation and efficiency projects, and the promotion of renewables and alternative energy sources. GHG emissions have been reduced by implementing renewable energy projects for installations and alternative fuels for vehicle fleets. Some accomplishments include:

- An eight percent reduction since FY 2003 in GHG emissions from energy intensity as of FY 2009

Planned Initiatives

Plan and implement energy policies and projects to support achievement of this and other Marine Corps energy and environmental goals.

Target 1.3.1 GHG Emissions from Scope 1 and Scope 2 Sources Reduced 34% by FY 2020 Relative to FY 2008

Define Requirement: DoD SSPP Goal 3

Responsible CMC Office: Environmental

Metric

N/A

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 1.3.1		10%			19%			28%		34%

Target 1.3.2 GHG Emissions from Scope 3 Sources Reduced 13.5% by FY 2020 Relative FY 2008

Define Requirement: EO13524 §2(b); DoD SSPP Goal 4
Responsible CMC Office: Environmental

Metric
N/A

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 1.3.2	0%	1%								13.5%

Target 1.3.2.1 GHG Emissions from Employee Air Travel Reduced by 7% by FY 2020 Relative to FY 2011

Define Requirement: CEQ guidance on EO 13514 §2(b)(ii); DoD SSPP Sub-Goal 4.1

Responsible CMC Office: Environmental/Defense Travel System

Metric

The percent reduction of GHG emissions from air travel by MC employees on MC business, relative to FY 2011, as calculated from travel data captured by the Defense Travel Management Office.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 1.3.2.1	0%	0%	1%	2%	2%	3%	4%	5%	6%	7%

Target 1.3.2.2 30% of Eligible Employees Teleworking at Least Once a Week on a Regular, Recurring Basis by FY 2020

Define Requirement: CEQ guidance on EO 13514 §2(b)(ii); DoD SSPP Sub-Goal 4.2

Responsible CMC Office: Human Resources

Metric

The percent of MC employees eligible to telework who are doing so at least once a week on a regular, recurring basis. Telework can be at any approved location: home, a regular General Services Administration telework Center, and/or a secure telework site meeting the additional requirements for facility construction, network security, and access control for employees needing access to classified networks. An employee's day off during a compressed work schedule cycle does not count as a telework day.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 1.3.2.2	10%	15%	17%	19%	21%	23%	25%	27%	29%	30%

Target 1.3.2.3 50% of Non-Hazardous Solid Waste Diverted from Disposal in Landfills Not Owned by USMC by FY 2015, and Thereafter Through FY 2020

Define Requirement: CEQ guidance on EO 13514 §2(b)(ii); DoD SSPP Sub-Goal 4.3

Responsible CMC Office: Facilities

Metric

The percent of the non-hazardous solid waste stream generated and collected by USMC facilities (by weight), without construction and demolition debris, that by reuse, recycling, and/or composting is directed away from disposal in landfills not owned by the Marine Corps.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 1.3.2.3	42%	44%	46%	48%	50%	50%	50%	50%	50%	50%

Goal 2: Minimize Waste and Prevent Pollution

Objective 2.1 Minimize Solid Waste

Progress and Accomplishments

The Marine Corps will continue to follow Federal and DoD requirements to achieve our goals of reducing solid waste (SW) generation and increasing the number of recycling programs. The Marine Corps has followed and will continue to follow the hierarchy approach for SW management: source reduction, reuse, donation, recycling, composting/mulching, incineration for volume reduction with energy recovery, other forms of volume reduction, and landfilling. All installations have implemented a Qualified Recycling Program (QRP) where income is gained from recycling brass, cardboard, and plastic. Fifty percent of the money is reinvested into pollution prevention programs while the remaining fifty percent is devoted to welfare and recreation projects. In recent years, the Marine Corps accomplishments include:

- Increased revenue by \$700,000 per FY on average at MCB Butler by applying a more streamlined recycling process
- Achieved an average Construction and Demolition (C&D) diversion rate of over ninety-four percent at MCAS Yuma during the period of FY05 thru FY08
- Integrated C&D waste into training exercises to replicate demolished town buildings at MCB Camp Lejeune and MAGTFTC Twentynine Palms

Planned Initiatives

The Marine Corps is planning to implement several initiatives to support installation efforts to increase diversion of SW, other solid waste (OSW), and C&D debris. These efforts include:

- Periodically publishing a newsletter to engage the installation SW community in discussions to increase awareness of SW diversion goals, current and future initiatives, and installation success stories.
- Conducting a review of installation solid waste management plans to identify areas for improvement as well as initiatives that can be shared across USMC installations.
- Surveying a representative set of installations to identify areas where Headquarters Marine Corps can provide support by issuing policy or guidance to help improve SW diversion. Initial efforts could focus on the largest generators of SW.

Target 2.1.1 All USMC Organizations Implementing Policies by FY 2014 to Reduce the Use of Printing Paper

Define Requirement: EO 13514 §2(e)(iv), §2(i); DoD SSPP Sub-Goal 5.1

Responsible CMC Office: Facilities

Metric

The number of USMC facilities that: 1) have issued a policy that establishes a program for reducing the use of printing paper, where the program consists of two or more initiatives that drive the transition to a culture of reduced paper; and 2) are actively implementing that program.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 2.1.1	1	6	24	31	31	31	31	31	31	31

Target 2.1.2 50% of Non-Hazardous Solid Waste Diverted from the Waste Stream by FY 2015, and Thereafter though FY 2020

Define Requirement: §2(e)(ii); DoD SSPP Sub-Goal 5.2

Responsible CMC Office: Facilities

Metric

The percent of the total non-hazardous solid waste stream generated and collected by USMC facilities (by weight), without construction and demolition debris, that is directed away from the waste stream, for example by reuse, recycling, and/or composting.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 2.1.2	42%	44%	46%	48%	50%	50%	50%	50%	50%	50%

Target 2.1.3 60% of Construction and Demolition Debris Diverted from the Waste Stream by FY2015, and Thereafter through FY 2020

Define Requirement: §2(e)(iii); DoD SSPP Sub-Goal 5.3

Responsible CMC Office: Facilities

Metric

The percent of construction and demolition materials and debris generated and collected by USMC facilities (by weight) that is directed away from the waste stream, for example by reuse, recycling, and/or mulching.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 2.1.3	42%	44%	46%	48%	50%	50%	50%	50%	50%	50%

Objective 2.2 Prevent Pollution

Progress and Accomplishments

The Marine Corps Pollution Prevention program focuses upon source reduction through increased efficiency in the use of raw materials, energy, water, and other resources; the purchase of sustainable goods; improved hazardous material management; and the support of recycling programs onsite. One critical aspect of the Pollution Prevention program is hazardous material and waste management. The Marine Corps follows all Federal requirements under CERCLA, RCRA, HSWA, and all other applicable regulations. Some accomplishments of the Pollution Prevention program include:

- The hosting of annual Earth Day celebrations at all installations to emphasize the importance of sustainable practices while at work and opportunities at home
- A twenty-four percent reduction in Toxic Release Inventory (TRI) chemicals as of CY 2008 primarily attributable to a decrease in nitrates as a by-product of wastewater treatment

Planned Initiatives

The Marine Corps will continue to explore and implement compliance and pollution prevention opportunities to reduce TRI chemicals and reportable releases. To support hazardous materials reduction, the Marine Corps has recently implemented the Authorized Use List (AUL) policy which prohibits installations from purchasing or using hazardous materials that are not found on an approved list. By buying sustainable materials and increasing the amount of hazardous material tracking and visibility, will reduce costs as well as environmental pollution and occupational health risks.

Target 2.2.1 On-Site Releases and Off-Site Transfers of Toxic Chemicals Reduced 15% by FY 2020, Relative to FY 2007

Define Requirement: EO 13514 §2(e)(v); DoD SSPP Sub-Goal 6.1

Responsible CMC Office: Environmental

Metric

The total release of toxic chemicals to the environment and off-site transfers of such chemicals, in terms of the Toxics Release Inventory (TRI) Reportable Quantity (in pounds released or transferred), relative to the calendar year 2007 baseline for EPCRA Section 313 toxic chemicals reported between January 1 - December 31, 2006. DoD reports this information to EPA annually. The sub-goal does not include releases from ammunition production, military munitions, operational range activities, mission critical weapon system support activities, and conventional and chemical military munitions demilitarization.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 2.2.1					5%			10%		15%

Target 2.2.2 100% of Excess or Surplus Electronic Products Disposed of in an Environmentally Sound Manner

Define Requirement: EO §2(i)(iii); DoD SSPP Sub-Goal 6.2

Responsible CMC Office: Facilities

Metric

The percent of excess or surplus USMC electronic products disposed of in an environmentally sound manner, where environmentally sound is defined as either:

- donating to a charitable cause;
- using a manufacturer's take-back or trade-in service; or
- trading-in, recycling (including refurbishment and resale) or disposal through a facility that is fully licensed for treatment and disposal, and in a manner consistent with the EPA guide titled "Plug-In to eCycling: Guidelines for Materials Management"

(<http://www.epa.gov/osw/partnerships/plugin/pdf/guide.pdf>).

Electronic products are defined as per the DoD Electronics Stewardship Plan: devices that are dependent on electric currents or electromagnetic fields in order to work properly.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 2.2.2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Objective 2.3 Integrated Pest Management

Progress and Accomplishments

In accordance with Marine Corps policy, installations have established Integrated Pest Management (IPM) programs that conform to DoD requirements and assure compliance with applicable laws and regulations. NAVFAC Atlantic is supporting the Marine Corps by collecting information on the percentage of USMC installations with current IPM Plans.

Planned Initiatives

The Marine Corps is strengthening established compliance audit mechanisms (i.e., through the Marine Corps Environmental Compliance Evaluation Program) to ensure USMC installations are complying with IPM requirements and regulations, and have implemented an effective IPM program.

Target 2.3.1 100% of USMC Personnel and Contractors Who Apply Pesticides Are Properly Certified Through 2020

Define Requirement: EO §2(e)(vii); DoD SSPP Sub-Goal 6.3

Responsible CMC Office: Facilities

Metric

Percent of personnel who applied pesticides on USMC installations during the fiscal year who were properly certified. Direct hire employees, certified in accordance with DoD 4150.7-P and DoDI 4150.7-M, have a maximum

of two years to become certified after initial employment. Contracted employees shall have appropriate State or host-nation certification in the appropriate categories at the time the contract is effective. These certifications are in accordance with Environmental Protection Agency rules and regulations and are accepted as valid certifications.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 2.3.1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Target 2.3.2 All USMC Installations Have Integrated Pest Management Plans Prepared, Reviewed, and Updated Annually by Pest Management Professionals

Define Requirement: EO §2(e)(vii); DoD SSPP Sub-Goal 8.3

Responsible CMC Office: Facilities

Metric

The percent of USMC installations that maintained integrated pest management plans that were prepared, reviewed and updated annually by a USMC-certified pest management consultant and/or the installation pest management coordinator. These plans describe how the installation will prevent, manage and control animal and plant pests while following the principles of integrated pest management and Federal, State and local laws. The plans are generated by the installation, are updated annually and are reviewed and approved by the respective Military Department senior pest management professional(s).

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 2.3.2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Goal 3: Improve Integration of Sustainability Practices Across All Mission Areas

Objective 3.1 Sustainable Buildings

Progress and Accomplishments

The Marine Corps implements sustainable building performance criteria through facilities maintenance and construction standards provided by NAVFAC. The NAVFAC Engineering Construction Bulletin (ECB) 2011-01 (20 December 2010) was recently issued to require that all repair or alteration of existing buildings comply with the Guiding Principles of Federal Leadership in High Performance and Sustainable Buildings. Per ECB 2011-01, building repair projects with project thresholds exceeding \$2.5M shall be developed to reduce the consumption of energy, water, and materials and to identify alternatives that reduce maintenance costs.

Planned Initiatives

The Marine Corps Order for Energy will be revised to incorporate this requirement and facilitate tracking performance.

Target 3.1.1 15% of Existing Buildings Conform to the Guiding Principles on High Performance and Sustainable Buildings by FY 2015, Holding Through FY 2020

Define Requirement: EO 13514 §2(g)(ii), §2(g)(iii); DoD SSPP Sub-Goal 7.2

Responsible CMC Office: Facilities

Metric

The percent of existing buildings over 5,000 ft² (combined owned and leased) that meet the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (Guiding Principles), as per the December 2008 implementation guidance developed by the Interagency Sustainability Work Group.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 3.1.1	7%	9%	11%	13%	15%	15%	15%	15%	15%	15%

Objective 3.2 Sustainable Acquisition and Procurement*Progress and Accomplishments*

The Marine Corps Sustainable Acquisition and Procurement program (formally known as “Green Procurement”) follows the directive and Federal requirements in Executive Orders 13423 and 13514 to promote sustainable purchasing practices. This program requires the purchase of sustainable, federally-mandated products and services. Types of products include: recycled content, bio-based, energy-efficient, EPEAT-registered, alternatives to hazardous and toxic chemicals, renewable energy sources, alternative fuels, and alternative fuel vehicles.

Planned Initiatives

The Marine Corps will continue to work with the General Services Administration (GSA) and the Defense Logistics Agency (DLA) to procure sustainable products at all installations purging all unnecessary products like Styrofoam from the supply chain. The Marine Corps will also educate contract writers, vendors, and product purchasers about sustainability requirements and mandates. Federal Procurement Data System (FPDS) data is available for contract actions on recycled content products. However, FPDS currently does not have the ability to track or report contract actions for products that are energy/water efficient, environmentally preferable, bio-based, less toxic/non-toxic, and/or non-ozone depleting. The General Services Administration expects that updates to FPDS will be completed in FY 2012 to incorporate contract actions for these other types of green products.

Target 3.2.1 95% of Procurement Conducted Sustainably

Define Requirement: EO 13514 §2(h), EO 13514 §2(g), EO 13514 §2(i); DoD SSPP Sub-Goal 7.1

Responsible CMC Office: Acquisition/Contracts

Metric

The percent of contract actions (new contracts and modifications) that adhere to the principles of sustainability by containing requirements for (as relevant and where such products and services meet USMC performance requirements): energy-efficient (Energy Star or Federal Energy Management Program (FEMP) designated), water efficient, bio-based, environmentally preferable (e.g., certified by the Electronic Product Environmental Assessment Tool), non-ozone depleting, containing recycled content, and/or are non-toxic or less-toxic alternatives. The sub-goal applies to products and services, including task and delivery orders, but excluding the acquisition of weapon systems and their components and spare parts. The Federal Procurement Data System will be used as the source of data on contracts meeting these requirements.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 3.2.1	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%

Objective 3.3 Integrated Regional Planning*Progress and Accomplishments*

The Community Plans and Liaison Office’s (CPLO) primary purpose is mission sustainment. This takes the form of cooperative community planning across the board for installations, ranges, and military training routes by working with Federal, regional and local planning agencies on a continuous basis. Efforts involve planning for transportation and energy resource development to include partnerships in developing environmental and energy/utility sustainment projects. HQMC CPLO provides policy and funding to the Regions in support of its sustainment mission, the Regional CPLO’s work with states on regional planning initiatives such as the SouthEast

Regional Partnership for Planning and Sustainability, and the installations' work with local and sub-regional communities.

The USMC ensures that Environmental Impact Statements (EIS) and Environmental Assessments (EA) for proposals under NEPA comply with regional and local integrated planning requirements contained in E.O. 13514 and reflected in the DoD SSPP.

Planned Initiatives

The USMC NEPA Manual is currently being updated to reflect the EIS/EA requirements contained in E.O. 13514.

Target 3.3.1 Sustainability of Transportation and Energy Choices in Surrounding Areas Optimized by Coordinating with Related Regional and Local Planning

Define Requirement: EO13514 §2(f); DoD SSPP Sub-Goal 8.2

Responsible CMC Office: CP&LO

Metric

Instances of coordination by USMC, at any level, which ensured that all relevant factors, including GHG emissions, were considered in making the best decisions in the interest of sustainable transportation and energy choices in the area. This engagement can take the form of coordinating its own transportation, energy, and/or facility planning with surrounding communities, and/or participating in regional- or community-level planning related to transportation or energy (including environmental impact statements and environmental assessments).

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 3.3.1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Objective 3.4 Environmental Management System (EMS)

Progress and Accomplishments

The Marine Corps has effectively implemented a well-established and integrated EMS at all USMC installations.

Planned Initiatives

The Marine Corps will continue to implement EMS at all appropriate organizational levels. We will also ensure that that EMS is appropriately maintained to achieve the performance necessary to meet the goals of Executive Order 13514. While Marine Corps installations continued to improve their EMS, Headquarters Marine Corps (HQMC) has undertaken several initiatives to improve EMS performance under this objective.

Target 3.4.1 All Environmental Management Systems Effectively Implemented and Maintained

Define Requirement: EO13514 §2(j)(i), §2(j)(ii), §2(e)(x), §2(i)(v), §2(g)(vii); DoD SSPP Sub-Goal 8.1

Responsible CMC Office: Environmental

Metric

Overall USMC status using the Federal Environmental Management System Metrics as reported in the Defense Environmental Programs Annual Report to Congress. The overall USMC status is a color rating (Green, Yellow or Red) for all USMC facilities and organizations for which an environmental management system (EMS) is appropriate. Status is based on the color ratings for individual facilities determined using the Federal EMS Metrics. An overall Green rating requires at least 80% of all EMS-appropriate facilities and organizations to have Green EMSs, with no more than 5% total Red EMSs. An overall Yellow requires no more than 10% Red EMSs. An overall Red is assigned when the status is neither Green nor Yellow.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 3.4.1	green	green	Green	green	green	green	green	green	green	green

Objective 3.5 Sustainable Ranges

Progress and Accomplishments

Marines must train on operational ranges that will prepare them to execute their mission using modern warfare tactics. This training requires sufficient land area, airspace, sea space, frequency spectrum, and training range infrastructure to safely and effectively accomplish the full spectrum of mission-essential training. Increasingly, however, encroachment near training areas may potentially impact current and future military training. Encroachment assessments were performed to evaluate the effects of factors such as threatened and endangered species, munitions restrictions, noise restrictions, and adjacent land use have upon the training mission. The Marine Corps is confident, however, that it will continue to meet the rigorous training demands required to properly prepare Marines despite challenges placed upon training and limited resources.

The Range Environmental Vulnerability Assessment (REVA) Program is a sustainable ranges program that has completed baseline assessments of all USMC operational ranges and training areas for potential threats to human health and the environment. No such threats have been found or determined.

Planned Initiatives

The Marine Corps will continue to aggressively invest in range modernization and correct range-accessibility shortfalls. Land acquisition and the mitigation of encroachment are top priorities. To maintain ranges capable of preparing our Marines to achieve mission success abroad, the Marine Corps will focus upon achieving the following six objectives:

- Preserve and enhance live-fire combined arms training, including the capability to support large-scale exercises
- Recapture littoral training capabilities at Camp Lejeune and Camp Pendleton
- Leverage technology and provide feedback for better training
- Mitigate encroachment
- Facilitate cross-service utilization
- Support the Joint National Training Capability

Target 3.5.1 Range Environmental Vulnerability Assessments

Define Requirement: CMC Policy (MCO P5090.2 Rev.)

Responsible CMC Office: LFL Environmental

Metric

Percent completion of scheduled subsequent Marine Corps REVA assessments to update baseline REVA assessments to be completed, at a minimum, every five years (from the baseline or previous assessment) or whenever significant changes occur that may affect the determinations made during the previous assessment (e.g., a major orientation change in the operational range, or the operational range undergoes a modification).

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 3.5.1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Target 3.5.2 (TBD by TECOM SRI Mgmt Office)

Define Requirement: DoD's Sustainable Ranges Initiative (SRI)

Background: The Marine Corps Sustainable Ranges milestone goals are contained in the DoD Comprehensive Training Range Sustainment Plan (2010). In addition, the USMC Mission Capable Ranges Program provides a

strategy for defining and executing the range management program to meet the needs and capabilities of the warfighter. For guidance about implementation and priorities of the Mission Capable Ranges program, see the Marine Corps Reference Publication (MCRP) 3-0C, *Marine Corps Operational Training Ranges Required Capabilities*. Responsible CMC Office: Ops & Training (TECOM)

Metric

TBD by TECOM.

Annual Targets

Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target 3.5.2										