



MARINE CORPS INSTALLATIONS COMMAND

INSTALLATION CAMPAIGN PLAN FOR ENVIRONMENTAL RESILIENCE AND ENERGY READINESS

OCTOBER 2023



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Message from the Commander, Marine Corps Installation Command Assistant Deputy Commandant, Installations and Logistics (Facilities)



Marine Corps installations are a foundational element of our combat readiness, serving as training and force projection platforms to prepare Marines for deployment worldwide. Our installations are also integral to taking care of our Marines and their families, providing the support required to ensure their quality of life.

The Marine Corps faces increasingly contested environments and multi-dimensional threats including a changing climate. Due to their location, Marine Corps installations are particularly vulnerable to destructive events such as hurricanes, floods, droughts, fires, and sea level rise. Such events have the potential to cause severe disruptions to operations and require upgrades and repairs to infrastructure that can have a significant impact in cost and time. In order to meet this challenge, our installations must be prepared and resilient to any threat and be sustainable for the future.

This **Installation Campaign Plan for Environmental Resilience and Energy Readiness** frames our Marine Corps approach to plan, build and sustain climate-resilient installations that can operate in and adapt to any environment. It requires collaborating with our neighboring communities on issues of mutual interest and training our workforce on climate readiness and sustainability. This plan supports the objectives of Force Design 2030 and Installations and Logistics 2030 to prepare our installations to support the future force and to enhance installation modernization and readiness. It also provides our roadmap on how we will achieve the requirements of Presidential, Secretary of Defense, and Secretary of the Navy directives, policies, and guidance.

Preparing our installations to address these challenges will be a significant effort. However, the severe risk to readiness of not preparing for, adapting to, and mitigating these effects is clear. Although MCICOM will lead this effort, it will require Marine Corps-wide commitment and support to ensure that our installations and our Marines and their families can continue to operate and thrive in any situation.

Semper Fidelis,

A handwritten signature in blue ink, reading "D W Maxwell".

David W. Maxwell
Major General, U.S. Marine Corps
Commander, Marine Corps Installations Command
Assistant Deputy Commandant, Installations and Logistics (Facilities)



INTRODUCTION

The ability of the Marine Corps to operate in all conditions is among our chief competitive advantages and the reason why we are the nation's premier ready force. Marine Corps installations across the globe provide forward presence as stand-in forces and enable rapid response capability for expeditionary units. Our bases, stations and depots are foundational to the training, logistics, power projection, and quality of life activities that enable Marines to respond swiftly and effectively to any crisis or conflict.

Our ability to generate, maintain, and project ready forces from those installations is challenged by the complex contested operating environment we face today. Natural and man-made events can disrupt or degrade key operating and support capabilities, presenting an omnipresent risk to unrestricted operations, both at home and abroad. Addressing those risks to preserve tactical and strategic advantage is essential for Marines to remain a ready, relevant force. These challenges are something we know how to attack.

Our strategy is centered on building Marine Corps installation resilience to enable uninterrupted operations under any conditions. It lays out actions to plan, adapt, and respond under contested circumstances, providing a counterweight to our vulnerabilities, building upon the *National Defense Strategy* (Ref (a)), *Marine Corps Force Design 2030* (Ref (b)), and *Installations and Logistics 2030* (Ref (c)) to enable a resilient, ready force prepared to operate and prevail in any environment (Figure 1).



Figure 1. Resilience as a Strategic Design Imperative

This Campaign Plan addresses key elements of installation resilience: environmental resilience, energy readiness, and building partnerships. It outlines steps the Marine Corps will take to avoid, prepare for, minimize the effects of, adapt to, and recover from threats that may impact our installations, consistent with the *Department of Defense Climate Adaptation Plan* (Ref (d)); *Department of Defense Plan to Reduce Greenhouse Gas Emissions* (Ref (e)); *Department of the Navy Climate Action 2030* (Ref (f)); Executive Order 14057, "Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability" (Ref (g)); and Secretary of the Navy guidance (Ref (h) – (k)) through enhanced installation resilience and sustainability. Marine Corps Installations Command (MCICOM) is the Service lead for this resilience and readiness campaign plan and its implementation across Marine Corps installations.





GOVERNANCE

This plan lays out many aggressive, but achievable actions, grouped into three major “lines of effort.” Measuring our progress towards each of the objectives described below is an essential element of this strategy and shall be the first organizing task we undertake. The Commander, MCICOM will develop a forum, format, and periodicity for tracking progress towards meeting each of these goals and provide a summary to Marine Corps leadership as part of the annual program and budget build each year.

PROGRESS

The Marine Corps is aggressively promoting readiness by taking actions to reduce our dependence on external power sources for critical missions using microgrids; increase use of alternative energy; reduce non-tactical fuel use; and protect our infrastructure from environmental threats. We are also taking action to reduce energy and water use and control waste that contribute to climate impacts. Figure 2 shows the progress the Marine Corps has made to date, while recognizing there is more to be achieved.

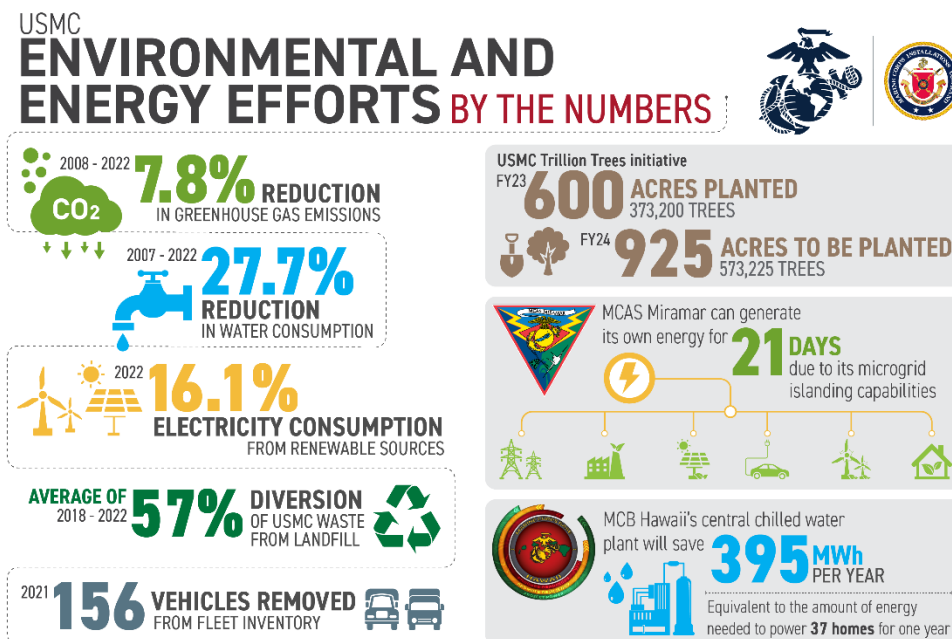


Figure 2. USMC Environmental and Energy Efforts by the Numbers



Net-Zero Energy: Marine Corps Logistics Base (MCLB) Albany, Georgia became the first installation in the Department of Defense to become Net Zero electric, generating more energy than it consumes. The base worked with local partners to harness landfill gas, steam from a private industrial facility off-base, and installing solar and geothermal power as well as mobile, solar-powered electric vehicle charging stations.



OBJECTIVES AND LINES OF EFFORT (LOE)

The Marine Corps will optimize our resilience efforts moving forward by pursuing three Objectives and associated Lines of Effort (LOEs) as shown in Table 1.

Table 1. Installation Campaign Plan for Environmental Resilience and Energy Readiness Objectives and Lines of Effort

Objectives	Lines of Effort	Strategic Outcomes
Promote Environmental Resilience	<ul style="list-style-type: none"> • Water Resilience • Resilient and Sustainable Buildings • Solid Waste Management and Sustainable Procurement • Natural Infrastructure and Ecosystems 	Ensure our installations can continue to operate effectively in the face of all hazards and threats to include changing environmental conditions.
Achieve Energy Readiness	<ul style="list-style-type: none"> • Energy Resilience • Hybrid and Electric Non-Tactical Vehicles 	Manage energy resources responsibly to ensure their long-term sustainability to enable readiness.
Build Partnerships and Rally Support	<ul style="list-style-type: none"> • Engage and Cultivate Partners • Bolster and Enhance Local Community Resilience • Develop a Resilience- and Readiness-focused Workforce 	Collaborate with partners and stakeholders and develop a resilience- and readiness-focused workforce to enhance our ability to address environmental and energy challenges.

Objective 1: Promote Environmental Resilience. Marine Corps installations will continue to operate effectively in the face of all hazards and threats to include changing environmental conditions.

LOE 1.A: Installation Water Resilience

Desired Endstate: Marine Corps installations will have reliable, resilient, and sustainable potable water systems that ensure adequate water supplies in any contested scenario through implementation of water conservation, reuse, recharge, storage, efficiency, and security.

Goals:

- **Resilience:** Achieve 14 days of water resilience for key mission critical Marine Corps facilities by 2035. [Ref (i)]
- **Sustainability:** Reduce overall potable water consumption by 15% by 2035 compared to a 2021 baseline. [Ref (f), (g), and (i)]



**Directed Actions:**

- **Resilience:**

- 1 Assess, prioritize and begin to address mission critical water requirements NLT 31 Dec 2025. [MCICOM GF Office of Primary Responsibility (OPR); MCICOM G3/5, MCICOM Regions/Installations Office of Coordinating Responsibility (OCR)]

- **Resilience/Sustainability:**

- 2 Develop water system operational, conservation, and security performance standards and metrics NLT 31 Dec 2026. [MCICOM Regions/Installations (OPR); MCICOM GF (OCR)]
- 3 Identify priority installations to investigate privatization or other alternatives to help recapitalize water systems in poor condition NLT 31 Dec 2025. [MCICOM Regions/Installations (OPR); MCICOM GF (OCR)]

LOE 1.B: Resilient and Sustainable Buildings

Desired Endstate: Plan, build, repair, and maintain infrastructure that can withstand or quickly recover from adverse environmental-related events. Employ sustainable design and construction materials, where appropriate, to reduce carbon footprint, increase structure lifecycle, and reduce maintenance costs and energy demand.

Goals:

- **Resilience:** Identify and address the most urgent installation environmental resilience threats by 2030.
- **Sustainability:** Incorporate sustainable design elements and achieve net-zero building emissions by 2045, including a 50 percent reduction in emissions from buildings by 2032 from a 2008 baseline. [Ref (f), (g), and (j)]

Directed Actions:

- **Resilience:**

- 4 Use the DoD Climate Assessment Tool (DCAT) and other tools and incorporate Installation Resiliency Summaries into Master Plans to assess threats to installations and prioritize mitigation measures NLT 31 Dec 2026. [MCICOM Regions/Installations (OPR); MCICOM GF (OCR)]
- 5 Develop a Geographical Information System-based Hub for environmental hazard screening to support predictive modeling in installation master planning and integration into the DCAT NLT 31 Dec 2026. [MCICOM GF (OPR)]

- **Sustainability:**

- 6 Develop guidance and specifications for achieving reduction in emissions from buildings NLT 31 Dec 2025. [MCICOM GF (OPR); MCICOM Regions/Installations (OCR)]





- 7 Research and develop methods and policy for the use of sustainable building materials NLT 31 Dec 2026. [MCICOM GF (OPR); G7 (OCR)]
- 8 Incorporate sustainable design elements into new construction and renovation projects, where appropriate, beginning NLT 31 Dec 2028. [MCICOM GF (OPR); MCICOM Regions/Installations (OCR)]



Climate Resilient Buildings: On September 14, 2018, Hurricane Florence made landfall in North Carolina, bringing high winds, a thirteen-foot storm surge, and record rainfall. Marine Corps Base (MCB) Camp Lejeune and Marine Corps Air Station (MCAS) New River sustained widespread damage to facilities, roads, privatized housing, and other base infrastructure. Enhanced building standards have been integrated into reconstructed buildings to ensure facilities can sustain future destructive weather events. These facilities, built to withstand extreme weather events, ensures Marine Corps units are able to support readiness in any environment.

LOE 1.C: Solid Waste Management and Sustainable Procurement

Desired Endstate: A reduction of environmental impacts and operating costs through integrated solid waste management and preference for procurement of sustainable products and services.

Goals:

- **Resilience:** Ensure waste can be safely managed during a significant loss of service or weather event.
- **Sustainability:**
 - Annually divert at least 50 percent of non-hazardous solid waste from landfills, including food and compostable materials and construction and demolition waste and debris by 2025 and 75 percent by 2030. [Ref (f) and (g)]
 - Procure sustainable products and services, where appropriate. [Ref (k)]

Directed Actions:

- **Resilience:**
 - 9 Conduct assessments to ensure adequate processes are in place to safely manage waste during a loss of service or extreme weather event NLT 31 Dec 2025. [MCICOM Regions/Installations (OPR); MCICOM GF (OCR)]
- **Sustainability:**
 - 10 Conduct opportunity assessments for source reduction, sustainable acquisition/procurement and reuse of materials to minimize solid waste generation and environmental impacts at targeted installations NLT 31 Dec 2025. [MCICOM Regions/Installations (OPR); MCICOM GF (OCR)]





LOE 1.D: Natural Infrastructure and Ecosystems

Desired Endstate: Enhance the sustainability and resilience of Marine Corps installations through the protection, restoration and management of ecosystems and by increasing carbon sequestration while reducing environmental impacts to our infrastructure.

Goals:

- **Resilience:**
 - Identify, assess, and deploy nature-based solutions to prepare for, adapt to, and recover from threats such as flooding, sea level rise, droughts, heat, and wildfires; protect mission-critical assets; promote water resilience and sustainable land management; and to enhance and restore natural systems that are key to support military training. [Ref (f) and (j)]
 - Employ habitat management practices to ensure installations preserve flexibility to support current and future development and training opportunities.
- **Sustainability:**
 - Manage, enhance, and restore ecosystems and increase vegetation to draw down an additional 2.5 million metric tons of CO₂ equivalents per year by 30 September 2027. [Ref (f) and (j)]
 - Target 40% tree canopy cover for installations east of the Mississippi River. [Ref (j)]

Directed Actions:

- **Resilience/Sustainability:**
 - 11 Complete natural infrastructure opportunity assessments to identify projects to build resilience; sequester carbon; promote groundwater recharge, stormwater retention and sustainable land management; and reduce climate impacts NLT 31 Dec 2025. [MCICOM GF (OPR); MCICOM Regions/Installations (OCR)]
- **Sustainability:**
 - 12 Conduct opportunity assessments and develop a tree canopy cover plan within three months of receiving ASN(EI&E) baseline tree canopy assessments for individual Marine Corps installations east of the Mississippi River. [MCIEAST/MCINCR Regions/Installations (OPR); MCICOM GF (OCR)]



Natural Infrastructure: MCAS Yuma and MCAS Cherry Point received FY23 DoD Legacy Resource Management funds for *Regenerative Grazing for Water Infiltration and Carbon Sequestration* and *Developing a Regional Framework Using Sediment as a Nature Based Solution to Improve the Resilience of Coastal Habitat*. These projects allow the Marine Corps to preserve, offset, and modernize training areas and ranges as necessary to ensure readiness for the current and future force.





Objective 2: Achieve Energy Readiness. Marine Corps installations will manage energy resources responsibly to ensure their long-term availability and address environmental impacts.

LOE 2.A: Installation Energy Resilience

Desired Endstate: Marine Corps installations will operate and maintain an effective, efficient, and sustainable energy infrastructure that is able to avoid, minimize, adapt to, and recover from anticipated and unanticipated energy disruptions to sustain mission essential functions and critical installation services.

Operational energy is the fuel required for training, moving, and sustaining military forces and weapons platforms for military operations. ***Installation energy*** is a key component of ***Operational energy***, ensuring that our Marines have access to and efficiently use these vital resources to live and train on our bases in the same way as they fight on the battlefield.

Goals:

- **Resilience:**
 - Achieve 99.9% backup power availability for key mission critical Marine Corps facilities by 2030.
 - Achieve 14 days of off grid energy resilience capability for mission critical Marine Corps facilities by 2035.
- **Sustainability:**
 - Achieve a 65% reduction in scope 1 and 2 greenhouse gas emissions by 2030 from a 2008 baseline. [Ref (f) and (g)]
 - Reduce energy use per square foot by 15% by 2035 from a 2021 baseline.
 - Achieve 100% carbon pollution-free electricity by 2030; at least 50% will be locally supplied clean energy to meet 24/7 demand. [Ref (f) and (g)]

Directed Actions:

- **Resilience:**
 - 13 Assess, prioritize, and begin to address mission critical energy requirements NLT 31 Dec 2025. [MCICOM GF (OPR); MCICOM G3/5, MCICOM Regions/Installations (OCR)]
 - 14 Conduct electrical distribution readiness studies to include electric vehicle support equipment (EVSE) assessments NLT 31 Dec 2028. [MCICOM GF (OPR); Regions/Installations (OCR)]
 - 15 Verify reliability of backup power systems and identify mission interdependencies NLT 31 Dec 2026. [MCICOM Regions/Installations (OPR); MCICOM GF (OCR)]





- 16 Conduct at least one Energy Resilience and Black Start Readiness exercise NLT 31 Dec 2024 and annually thereafter. [MCICOM GF (OPR); MCICOM Regions/Installations (OCR)]

- **Sustainability:**

- 17 Coordinate with the OSD Carbon Pollution-Free Electricity (CFE) Management Office and CFE Steering Council to begin to assess and develop CFE projects NLT 31 Dec 2024 and annually thereafter. [MCICOM GF (OPR)]
- 18 Assess opportunities to design and build net zero emissions facilities beginning NLT 31 Dec 2024 and annually thereafter. [MCICOM GF (OPR)]



Energy Resilience: Marine Corps Air Station (MCAS) Miramar, California partnered with the City of San Diego in 2012 to use biogas from an on-base landfill, providing over three megawatts of energy and reducing reliance on the city's electric grid by 45% while reducing emissions. The installation also installed an advance microgrid in 2021 to protect flight line operations during power outages. This innovative approach and partnership provides flexibility that allowed the Marine Corps to continue operations while reducing demands on community infrastructure on multiple occasions, notably during peak energy demand periods during the Summer of 2022.

LOE 2.B: Hybrid and Electric Non-Tactical Vehicles

Desired Endstate: Marine Corps installations will deploy a hybrid and electric non-tactical vehicle fleet, resulting in reduced dependence on fossil fuels and emissions of greenhouse gases and increased infrastructure capacity to support operational fuel requirements.

Goals:

- **Sustainability:**
 - Acquire 100 percent zero-emission non-tactical vehicles by 2035, including 100 percent zero-emission light duty vehicles by 2027. [Ref (f) and (g)]
 - Execute energy infrastructure upgrades and modernization to support charging infrastructure projects in support of Marine Corps transition to zero-emission light-duty non-tactical vehicles by 2027.

Directed Actions:

- **Sustainability:**
 - 19 Issue Zero-Emission Vehicle and Electric Non-Tactical Vehicle Letter of Instruction NLT 31 Dec 2023. [MCICOM G4 (OPR); MCICOM Regions/Installations (OCR)]





- 20 Develop hybrid/electric non-tactical vehicle acquisition and supporting infrastructure plan NLT 31 Dec 2024 and update annually thereafter. [MCICOM G4 (OPR); MCICOM GF, Regions/Installations (OCR)]



Electric Vehicles: A solar-powered electric vehicle charging station was installed at Marine Corps Base Camp Pendleton, CA, in 2022. The Marine Corps' Southwest Region Fleet Transportation Office recently acquired two of these charging stations to add to the existing permanent electric vehicle charging infrastructure at Camp Pendleton. This addition ensures that the Marine Corps can continue to operate while meeting the warfighters growing needs and demands on and off the installation.

Objective 3: Build Partnerships and Rally Support. The Marine Corps will actively collaborate with partners and stakeholders and develop a resilience and readiness-focused workforce to enhance our ability to address climate impacts.

LOE 3.A: Engage and Cultivate Partners

Desired Endstate: Build partnerships with organizations with a shared interest in climate resilience to increase the impact and positive influence of our mutual efforts.

Goals:

- **Resilience:** Expand use of Readiness and Environmental Protection Integration (REPI) Program and Intergovernmental Support Agreements (IGSA), Cooperative Research and Development Agreements (CRADA), and other mechanisms to strengthen bonds between Marine Corps installations and surrounding communities and support installation resilience and encroachment management opportunities. [Ref (f)]

Directed Actions:

- **Resilience:**
 - 21 Conduct opportunity assessments to develop cost effective and impactful solutions (e.g., REPI, natural infrastructure) to environmental challenges in collaboration with relevant stakeholders NLT 31 Dec 2025. [MCICOM G7 (OPR); MCICOM GF and Regions/Installations (OCR)]
 - 22 Develop a Strategic Engagement Plan for critical encroachment and resilience issues NLT 31 Dec 2024 and update annually thereafter. [MCICOM G7 (OPR); MCICOM Regions/Installations (OCR)]
 - 23 Issue guidance and policy to increase the use of IGSA, CRADA, and other authorities to promote installation/environmental resilience NLT 31 Dec 2024. [MCICOM G7 (OPR)]





Partnerships: In December 2021, the Department of the Navy renewed a memorandum of understanding with the California Energy Commission that will help the Navy, Marine Corps and the state collaborate on energy and water resilience, greenhouse gas reductions and alternative fuel vehicles. This partnership enables the Marine Corps to continue functioning and training, while ensuring maximum flexibility and minimizing impacts on current and future resources.

LOE 3.B: Bolster and Enhance Local Community Resilience

Desired Endstate: Develop partnerships and agreements between local communities and Marine Corps installations that address local environmental threats and enhance base and local community resilience.

Goals:

- **Resilience:**
 - Identify and address local community challenges and resilience threats by sharing best practices and lessons learned. [Ref (f)]
 - Expand use of DoD and other Federal programs to enhance mutual installation and community resilience solutions. [Ref (f) and (j)]

Directed Actions:

- **Resilience:**
 - 24 Assess, expand, and implement community focused measures and projects at all installations by engaging with existing DoD program offices, such as the REPI Program and Office of Local Defense Community Cooperation (OLDCC) to include the Defense Community Infrastructure Pilot (DCIP) Program, beginning NLT 31 Dec 2024. [MCICOM G7 (OPR)]
 - 25 Conduct at least one assessment of local community vulnerabilities in collaboration with states and local partners to identify and support adaptation strategies NLT 31 Dec 2025 and annually thereafter. [MCICOM G3 (OPR)]
 - 26 Develop policy and guidance to encourage participation in external resilience funding opportunities and formulate strategy for expanding REPI program to additional installations NLT 31 Dec 2025. [MCICOM G7 (OPR)]





Community Partnerships: As part of the Department of Defense's 2023 REPI Challenge, MCB Hawai'i partnered with the State of Hawai'i Department of Land and Natural Resources to support an \$8.7 million project to manage invasive species and conserve Oahu's water resources, increasing climate and installation resilience. This effort also increases community resilience which enables service training and force readiness.

LOE 3.C: Develop a Resilience- and Readiness-Focused Workforce

Desired Endstate: A workforce with the knowledge, data, skills, and abilities to apply and address environmental and energy considerations across all installation functions. [ref (f), (g), (h), (i), (j), and (k)]

Goals:

- **Resilience/Sustainability:**
 - Establish the tools and processes to establish a resilience-literate and sustainability-focused workforce by 2026.
 - Encourage cross-organizational/functional approaches to environment-associated installation resilience challenges.
 - Develop metering, sensing, and visualization tools to track progress and provide commanders with decision-making capabilities.

Directed Actions:

- **Resilience/Sustainability:**
 - 27 Identify, review, and update key region and installation position descriptions for existing and new billets to incorporate installation resilience responsibilities and criteria for new hiring actions NLT 31 Dec 2025. [MCICOM G1 (OPR); MCICOM (all directorates)/MCICOM Regions/Installations (OCR)]
 - 28 Identify appropriate training opportunities on environmental resilience and energy readiness challenges, best practices, and emerging topics NLT 31 Dec 2025. [MCICOM G1 (OPR); MCICOM (all directorates) (OCR)]
 - 29 Make environmental resilience and energy readiness literacy training available to multiple audiences, including senior leaders and staff NLT 31 Dec 2025. [MCICOM G3/5 (OPR); MCICOM GF, G7 (OCR)]
 - 30 Develop an "Environmental Resilience and Energy Readiness 101" for MCICOM leaders and Installation Commanders NLT 31 Dec 2025. [MCICOM G3/5 (OPR); MCICOM GF, G7 (OCR)]





- 31 Incorporate installation resilience and sustainability as considerations in all appropriate MCICOM policies NLT 31 Dec 2028. [MCICOM (all directorates) (OPR)]
- 32 Identify resource requirements associated with real-time metering and sensing NLT 31 Dec 2023 [MCICOM GF (OPR); MCICOM Regions/Installations (OCR)]
- 33 Establish a Plan of Action and Milestones (POAM) to place meters/sensors and tie them to the Future Data Environment dashboard NLT 30 Jun 2024. [MCICOM GF (OPR); MCICOM G6/Regions/Installations (OCR)]

CONCLUSION

The Marine Corps is committed to addressing the magnitude and complexity of numerous threats to our installations, including environmentally-induced hazards. Operating from installations in a contested environment includes threats posed by the full spectrum of environmental and energy risks. To successfully implement this plan, MCICOM will lead efforts to update applicable guidance/policies and annually assess progress in meeting its goals. We need everyone's participation and support to achieve the desired end states and ensure our installations are ready and available to support Marines and our mission in any clime or place, today and in the future.





MARINE CORPS ENVIRONMENTAL RESILIENCE AND ENERGY READINESS DIRECTED ACTIONS

Directed Action	Description	Proponent	Deliver By
<div> Environmental Resilience Directed Actions Energy Readiness Directed Actions Building Partnerships Directed Actions </div>			
1	Assess, prioritize and begin addressing mission critical water requirements.	MCICOM GF	31 Dec 2025
2	Develop water system performance standards and metrics.	MCICOM Regions/ Installations	31 Dec 2026
3	Identify priority installations for privatization or other alternatives.	MCICOM Regions/ Installations	31 Dec 2025
4	Use the DoD Climate Assessment Tool (DCAT) and other tools to assess threats to installations and prioritize mitigation measures.	MCICOM Regions/ Installations	31 Dec 2026
5	Develop a Geographical Information System-based Hub for environmental hazard screening.	MCICOM GF	31 Dec 2026
6	Develop guidance and specifications for achieving reduction in emissions from buildings.	MCICOM GF	31 Dec 2025
7	Develop methods and policy for the use of sustainable building materials.	MCICOM GF	31 Dec 2026
8	Begin incorporating sustainable design elements into new construction and renovation projects, where appropriate.	MCICOM GF	31 Dec 2028
9	Assess waste management processes for a loss of service or extreme weather event.	MCICOM Regions/ Installations	31 Dec 2025
10	Conduct opportunity assessments at targeted installations for source reduction, sustainable acquisition/procurement and reuse of materials.	MCICOM Regions/ Installations	31 Dec 2025
11	Complete natural infrastructure opportunity assessments.	MCICOM GF	31 Dec 2025
12	Conduct opportunity assessments and develop a tree canopy cover plan for Marine Corps installations east of the Mississippi River.	MCIEAST/ MCINCR	Within three months of receiving ASN(EI&E) baseline tree canopy assessments
13	Assess, prioritize, and begin to address mission critical energy requirements.	MCICOM GF	31 Dec 2025
14	Conduct electrical distribution readiness studies to include electric vehicle support equipment (EVSE) assessments.	MCICOM GF	31 Dec 2028
15	Verify reliability of backup power systems and identify mission interdependencies.	MCICOM Regions/ Installations	31 Dec 2026



MARINE CORPS ENVIRONMENTAL RESILIENCE AND ENERGY READINESS DIRECTED ACTIONS

Directed Action	Description	Proponent	Deliver By
<div> Environmental Resilience Directed Actions Energy Readiness Directed Actions Building Partnerships Directed Actions </div>			
16	Conduct at least one Energy Resilience and Black Start Readiness exercise annually.	MCICOM GF	Annually starting 31 Dec 2024
17	Coordinate with the OSD Carbon Pollution-Free Electricity (CFE) Management Office and CFE Steering Council to begin to assess and develop CFE projects.	MCICOM GF	Annually starting 31 Dec 2024
18	Assess opportunities to design and build net zero emissions facilities.	MCICOM GF	Annually starting 31 Dec 2024
19	Issue Zero-Emission Vehicle and Electric Non-Tactical Vehicle Letter of Instruction.	MCICOM G4	31 Dec 2023
20	Develop hybrid/electric non-tactical vehicle acquisition and supporting infrastructure plan.	MCICOM G4	Annually starting 31 Dec 2024
21	Conduct opportunity assessments to address environmental challenges in collaboration with relevant stakeholders.	MCICOM G7	31 Dec 2025
22	Develop a Strategic Engagement Plan for critical encroachment and resilience issues.	MCICOM G7	Annually starting 31 Dec 2024
23	Issue guidance and policy to increase the use of Intergovernmental Support Agreements (IGSA) and other authorities to promote installation/environmental resilience.	MCICOM G7	31 Dec 2024
24	Begin assessing, expanding, and implementing community focused measures and projects by engaging with existing DoD program offices.	MCICOM G7	31 Dec 2024
25	Conduct at least one assessment of local community vulnerabilities in collaboration with states and local partners to identify and support adaptation strategies.	MCICOM G3	Annually beginning 31 Dec 2025
26	Develop policy and guidance to encourage participation in external resilience funding opportunities and formulate strategy for expanding the Readiness and Environmental Protection Integration (REPI) program to additional installations.	MCICOM G7	31 Dec 2025
27	Identify, review, and update key region and installation position descriptions to incorporate installation resilience responsibilities and criteria for new hiring actions.	MCICOM G1	31 Dec 2025
28	Identify appropriate training opportunities on environmental resilience challenges, best practices, and emerging topics.	MCICOM G1	31 Dec 2025
29	Make environmental and energy literacy training available to multiple audiences, including senior leaders and staff.	MCICOM G3/5	31 Dec 2025
30	Develop a "Environmental Resilience and Energy Readiness 101" for MCICOM leaders and Installation Commanders.	MCICOM G3/5	31 Dec 2025
31	Incorporate installation resilience and sustainability as a consideration in all appropriate MCICOM policies.	MCICOM all Directorates	31 Dec 2028
32	Identify resource requirements associated with real-time metering and sensing.	MCICOM GF	31 Dec 2023
33	Establish a Plan of Action and Milestones (POAM) to place meters/sensors and tie them to the Future Data Environment dashboard.	MCICOM GF	30 Jun 2024

REFERENCES

- a) Office of the Secretary of Defense, “National Defense Strategy,” October 27, 2022
- b) U.S. Marine Corps, “Force Design 2030,” March 2020
- c) U.S. Marine Corps, “Installations and Logistics 2030,” February 2023
- d) Department of Defense, “Climate Adaptation Plan,” September 1, 2021
- e) Department of Defense, “Department of Defense Plan to Reduce Greenhouse Gas Emissions,” April 2023
- f) Department of the Navy, “Climate Action 2030,” May 24, 2022
- g) Executive Order 14057, “Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability,” December 8, 2021
- h) Assistant Secretary of the Navy (Energy, Installations, and Environment), “Chief Sustainability Officer Serial One: Infrastructure,” January 3, 2023
- i) Assistant Secretary of the Navy (Energy, Installations, and Environment), “Chief Sustainability Officer Serial Two: Water Security,” March 21, 2023
- j) Assistant Secretary of the Navy (Energy, Installations, and Environment), “Chief Sustainability Officer Serial Three: Nature-Based Resilience,” April 28, 2023
- k) Assistant Secretary of the Navy (Energy, Installations, and Environment), “Chief Sustainability Officer Serial Four: Sustainable Acquisition and Procurement,” June 26, 2023



