SUBJECT: USPACOM Energy Strategy

This Energy Strategy defines United States Pacific Command’s approach to the Asia-Pacific energy environment and reflects our adherence to four guiding principles: security first, cooperation, financial savings and regulation. These principles assist with shaping the role the United States has and will play with our allies and partners in the Asia-Pacific region. To that end, the regional energy security environment has traditional and modern imbalances between resources and requirements, energy transit risks, infrastructure challenges, under-developed renewable resources along with vulnerability and fragility concerns.

We will work closely with partners across the U.S. government and the Asia-Pacific region in our strategic approach to ensure energy will never be an operational constraint, using energy to enhance partnerships and finding the efficiencies and savings where possible. United States Pacific Command is committed to this strategic cornerstone in our dynamic environment, ensuring a resilient energy system that is both lean and efficient in peacetime and strong and robust in times of conflict.

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INTRODUCTION

The U.S. Pacific Command (USPACOM) area of responsibility (AOR) encompasses approximately half the earth’s surface and more than half of its population. The 36 nations that comprise the Asia-Pacific include: two of the three largest economies and nine of the ten smallest; the most populous nation; the largest democracy; the largest number of island-nations of any region; and the smallest republic in the world. The region is a vital driver of the global economy and includes the world’s busiest international sea lanes and nine of the ten largest ports. By any meaningful measure, the Asia-Pacific is also the most militarized region in the world, with seven of the world’s ten largest standing militaries and five of the world’s declared nuclear nations.

However, the AOR is one of the poorest in the world in fossil fuels, resulting in large transfers of capital out of the region in exchange for importing energy. This, coupled with exceptionally high energy demand, is leading the region to the most rapid expansion of nuclear power in the world. Furthermore, the region’s geography drove development of thousands of smaller energy systems (primarily island-based electric grids), thereby foregoing the efficiencies inherent in a smaller number of large systems.

In contrast, the region is rich in renewable sources of energy. Geothermal, solar, wind, and ocean-based opportunities are collectively higher than in any other region in the world. These opportunities are, however, largely undeveloped.

This Energy Strategy defines Commander, USPACOM’s strategic intent and approach in support of U.S. defense priorities in this region. Proceeding from a hierarchy of national level planning guidance, it provides the Command’s vision for resourcing in light of national level emphasis on the Asia-Pacific.

GUIDING PRINCIPLES

This Energy Security Strategy adheres to four guiding principles, all of which are in support of the seven guiding principles outlined in the USPACOM Strategy. These principles appear as consistent themes throughout this document:

- **Security first.** Energy will not be a constraint or vulnerability to USPACOM.

- **Cooperation.** Energy can be a productive point of engagement with our partners and allies in the region.

- **Financial Savings.** Reduce costs of energy in normal and wartime operations.
Regulation. Adhere to executive guidance and law on energy usage.

ASIA-PACIFIC ENERGY ENVIRONMENT

These principles help shape the roles the United States has and will continue to play in the Asia-Pacific. The complex interdependencies between economic development, military power, access to and movement of energy resources through the region and technological progress solidifies energy’s high-visibility status for the foreseeable future. Within this context, USPACOM is focused on the following key aspects of the regional security environment.

Imbalance Between Traditional Resources and Modern Needs. The Asia-Pacific region consumes more energy than any other region in the world, accounts for over 70% of the total growth in energy consumption since 2000, and may represent up to 50% of the world’s consumption by 2035. Conversely, the region holds roughly one third of the world’s proven coal reserves, less than 10% of the world’s known natural gas reserves, and less than 5% of the world’s proven oil reserves.

Trade Imbalances. For the foreseeable future, countries in the region will need to import large quantities of fossil fuels from outside the region to meet their needs. Currently, the majority of it flows west to east—Asia consumes nearly 75% of all the oil exports from the Middle East. However, due to significant increases in US production, exports of both oil and natural gas may create an east to west flow of energy into the theater. In either scenario, treasure will continue to flow out of countries in this region to countries outside the Asia-Pacific, creating both friction points and opportunities to engage.

Energy Transit. Geography and trade patterns result in high commercial traffic transiting multiple easily-disrupted bottlenecks, whether by moving on land or sea. The distance from sources to consumption point is significantly longer than in other regions in the world, and will face higher risks during that transit.

Infrastructure Challenges. Due to the large number of small countries and islands, the energy infrastructure in the region is fragmented and does not enjoy the effectiveness and efficiencies associated with scale. Electric grids in particular suffer from the fragmentation, which precludes the use of large, highly efficient power generation stations and reliance on a larger network in case of failures. This loss of efficiency and effectiveness increases energy costs.
Available Renewable Resources. While the Asia-Pacific region suffers from a deficit in fossil fuels, it enjoys a high percentage of renewable resources, including solar, wind, geothermal and wave/tidal sources of power. These resources are largely under-developed in the region.

Vulnerability and Fragility. Much of the region’s infrastructure is old, particularly on island-nations. Advances in the region’s military forces mean this infrastructure is increasingly vulnerable to potential adversary attack (either kinetic or non-kinetic). Furthermore, the high frequency of natural disasters in the region magnifies the fragile nature of this infrastructure.

STRATEGIC APPROACH

The U.S. energy security strategy in the Asia-Pacific focuses on ensuring energy will never be an operational constraint, using energy to enhance partnerships, and finding efficiencies and savings wherever possible.

Build a Resilient Energy System

The USPACOM Strategy requires assured presence throughout the region, the ability to project force to any corner of the region, and that we will always be ready to fight and win. Having a resilient energy system to support each of these goals—one that is lean and efficient in peacetime but strong and robust in times of conflict—is the cornerstone of this strategy.

- Expansive Energy Requirements. The United States is and will continue to be a Pacific power. U.S. territory in the USPACOM AOR includes the states of Alaska and Hawaii, and the territories of Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands. We have protectorate obligations with the Federated States of Micronesia, the Marshall Islands, and the Republic of Palau. The energy required to support the U.S. as a Pacific power is expansive. We will ensure energy will not be a constraint in the execution of missions and tasks assigned to the USPACOM. This means identifying new sources and types of energy, having multiple accesses to energy, and ensuring energy is where we need it when we need it. We will reduce our risk by expanding our options.

- Reduce Vulnerability and Fragility. Sources of energy, methods of transportation, and infrastructure are vulnerable to adversary attack. They are also aging and fragile, which is a particular concern given the number and severity of natural disasters in the region. We will create a resilient and robust energy ecosystem to enhance mission assurance and continuity of operations in the face of adversary attack or natural disasters.
We will harden our infrastructure where we can and create actionable mitigation and remediation alternatives to minimize the effects of attacks and natural disasters, should they occur.

Positively Shape the Theater

The USPACOM Strategy requires building partnerships and alliances, enhancing homeland defense in both our states and territories, and strengthening the respect of international rules by all countries. Energy can be a positive point of engagement with nearly any nation in the region.

- **Alliances.** We enjoy treaty alliances with Australia, Japan, Republic of Korea, Philippines, and Thailand. These countries form the cornerstone of U.S. engagement in the region. *We will strengthen these alliances by enhancing interoperability of our energy infrastructures, enhance energy-related technology, and work together to reduce threats to resources acquisition and movement.*

- **Partnerships.** Energy—particularly energy efficiency and renewable energy technology development—is a non-confrontational point of international engagement. It can also be a fruitful, productive point on engagement. *We will use energy-related engagement to help strengthen existing partnerships and build new relationships,* particularly with multilateral constructs such as the Association of Southeast Asian Nations (ASEAN). India is a particularly important partner, with whom we share many common energy concerns. We will also work to enhance our partnerships with Indonesia, Malaysia, Singapore, and Vietnam.

- **Other Government Agencies, Non-Governmental Organizations (NGOs) and Private Sector Engagement and Coordination.** USPACOM will closely coordinate with Federal partners to coordinate and cooperate on energy-related issues whenever and wherever possible. USPACOM will also collaborate with NGOs and private industry to advance common interests.

- **Senior Leader Engagement.** USPACOM will leverage senior leader visits to socialize the role of energy in the region, engender dialogue, and build opportunities for further cooperation.

Financial Savings

Energy represents a significant financial requirement for USPACOM forces, with approximately $1B spent in CY 2011 and CY 2012 on operational and installation energy. In the current fiscal climate, this is unacceptable and unsustainable.
USPACOM will review all options throughout the DOTMLPF-P spectrum to increase energy efficiency and reduce costs, doing so without adversely affecting operational capabilities.

- **Technology Adoption and Material Solutions.** USPACOM will identify appropriate, cost-effective materiel solutions to increase energy efficiency and reduce energy consumption, and work with the Service Departments and Joint Staff to help implement these.

- **Nonmaterial Solutions.** USPACOM will identify appropriate non-material changes that will enhance energy efficiency, reduce energy spending, and identify organizational and policy updates to reduce energy consumption.

**Follow Executive Orders and Regulations**

The United States places a premium on energy savings and efficiency. Both the Executive and Legislative branches of government have issued orders and passed laws directing the United States Government to reduce energy consumption, increase renewable energy use, and decrease greenhouse gas emissions. Additionally, the State of Hawaii, in cooperation with USPACOM, are pursuing energy efficiency goals independent of federal mandates.

- **Comply with or exceed energy-related goals outlined in Executive Orders and US Federal Law.** USPACOM will be an exemplar entity within the US government with respect to meeting—and exceeding—Executive Orders and federal law. Given the enormous collaborative United States and partner national security cooperation opportunities within the Command, USPACOM will pursue energy efficiency, alternative energy, energy security, and greenhouse gas goals to the best of our ability, while always keeping operational capabilities in mind.

- **Partner with local governments to enhance energy profiles.** Given that USPACOM and its components are the largest energy user in the State of Hawaii, the Command will be a full and willing participant in the Hawaii Clean Energy Initiative. Additionally, USPACOM will take advantage of the relationships with Allies and Partners that host our forces on a permanent or regular basis by being desirable partners on energy matters by respecting, and where possible, exceeding, host country energy-related requirements and mandates.
CONCLUSION

USPACOM protects and defends the United States, its territories and interests; promotes regional security; deters aggression; and is prepared to respond if deterrence efforts fail. It accomplishes these missions through strong relationship with allies and partners, and assured presence through a distributed force posture. At no time can energy become an operational constraint on the conduct of these missions. USPACOM, in concert with other U.S. government agencies, will ensure these interests are protected, and the energy to do will be guaranteed.

\[i\] IEEJ, April 2011. “A Joint Study to Develop the Asia Energy Outlook.” [http://eneken.ieej.or.jp/data/3796.pdf](http://eneken.ieej.or.jp/data/3796.pdf)

\[ii\] Y. Matsuo, et al., A global energy outlook to 2035 with strategic considerations for Asia and Middle East energy supply and demand interdependencies, Energy Strategy Reviews (2013), [http://dx.doi.org/10.1016/j.esr.2013.04.002](http://dx.doi.org/10.1016/j.esr.2013.04.002)