Sustainable Energy

HCS Group has experience designing high performance and sustainable buildings worldwide with knowledge of local available materials, equipment and utility resources. Our designs utilize these local materials and methods to produce a highly sustainable and maintainable site, infrastructure and/or facility.

HCS Group has designed numerous facilities with Resilient Islanded Micro-Grid (solar, wind and hybrid) power networks creating energy security on site while designing the facility with minimum energy consumption footprint.

Sustainable Design Features are considered in all aspects of each project to help preserve the environment by making more environmentally conscious design decisions to assist in the conservation of energy, water, materials, etc. The design direction should lead to economic benefits, reduced maintenance and operational costs as well as a healthier environment and facilities.

HCS Group personnel are LEED AP professionals and members of the US Green Building Council. Our energy programs have assisted the USAF in obtaining ENERGY STAR ratings for over 12 facilities during 2009 through 2012. One of the facilities, Aviano Medical Clinic located at Aviano Air Base, Italy, was the first facility outside of the USA allowed to achieve an ENERGY STAR rating.

Located off the coast of Nicaragua, HCS Group designed a Counter Narcotic Forward Operating Location at Cayos Miskitos. This hybrid solar/wind power system Energy Platform provides 100% of the power needed by the remote ocean Forwarding Operating Base platform in support of the Nicaraguan Marine Force. The system was designed as an off-grid Resilient Islanded Micro-Grid network with battery supplies to store enough energy to supply the base with sufficient power for running 24/7 mission operations.

Total cost was $3,000,000.

HCS Group designed the first solar farm at Soto Cano Air Base in Honduras. A complete solar center package was designed including solar modules, solar arrays, combiner cabinets, inverters and power system distribution interconnection. The system was designed as an on-grid network to supply power during daylight hours to sufficiently deliver enough power for the three adjacent Headquarter Buildings. The area was unusable for building structures due to the retaining wall and drainage structures, thereby capturing unbuildable space on the base.

Total Cost was $1,500,000

Phone: 334.277.6737 * **Email:** info@hcsgroupet.com * **Web:** www.hcsgroupet.com
8401 Crossland Loop * Montgomery, Alabama 36117

HCSgroup
Engineering and Technical Solutions

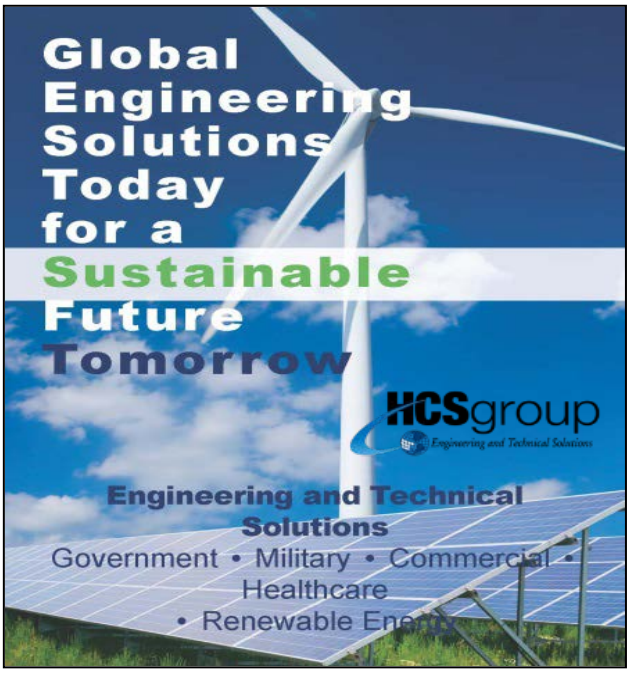
Leadership – "Our Team's Greatest Asset"
Integrity – "Our Teams Greatest Responsibility"
Service - "Our Team's Greatest Privilege"

At Punto Coco, Panama, HCS Group designed a hybrid solar/wind power system for the Counter Narcotics Forward Operations Base. The system was designed as a Resilient Islanded Micro-Grid network providing primary power with banks of battery supplies to store enough energy to supply the base with sufficient power for running 24/7 mission critical operations. The system was designed as an off-grid network with the local utility connection as a backup power supply. Critical missions require critical, reliable and sustainable power to run operations and communications systems from remote areas.

Total cost was $3,000,000.

Coronal Energy Powered by Panasonic:
HCS Group assisted Coronal Energy in performing the initial programming, planning and concept designs for the following projects:

Southern Company Solar Center - 70 MW Brackin Mill, Al
Southern Company Solar Center - 40 MW Webb East, AL
Cornflower Solar Center – 75 MW, Irvin County, GA
Happy Hollow Solar Center – 75 MW, Wilks County, GA
Raccoon Creek Solar Center – 75 MW, Mitchell County, GA



Resilient Islanded micro-grids are the key to energy security and standalone sustainable energy solutions with local based control capabilities.

The experienced engineers at HCS Group can assist you in your consideration of your Micro-Grid solutions and mission security.

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