

Contact: BJ Tomlinson
Renewable Energy &
Sustainability Program Manager
Fort Bliss Garrison
Directorate of Public Works

BLDG 777
1733 Pleasonton
Fort Bliss, TX 79916
Phone 915-241-6906



Frequently Asked Questions (FAQ)

Fort Bliss Seeks Information on Renewable Energy and Net Zero Technologies

Frequently Asked Questions (FAQ)

Fort Bliss, Texas, August 8, 2011: Fort Bliss has been designated by the Army as a Pilot Integrated Net Zero Installation to achieve net zero status in Energy, Water, and Waste by 2020. Fort Bliss aims to achieve Net Zero Energy by 2015 to be followed by Net Zero Water and Waste by 2018. This program is the tip of the spear for the Army push to become energy, water, and waste efficient and secure across its infrastructure.

- **Who is seeking Net Zero information?** Fort Bliss, TX (<https://www.bliss.army.mil/>) and the United States Army is seeking information on technology, processes, approaches, and solutions for Energy, Water, and Waste Net Zero to be developed for the installation. Fort Bliss has been designated by the United States Army as a pilot Net Zero Installation for Energy, Water, and Waste.
- **What is “Net Zero”?** Fort Bliss is seeking information on renewable and sustainable technologies and processes to support Net Zero energy, waste, and water. Army definitions for Net Zero are as follows:
 - *Net Zero Energy.* A Net Zero Energy Installation (NZEI) is an installation that produces as much renewable energy on site as it uses, over the course of a year. To achieve this goal, installations must first implement aggressive conservation

For Release August 8, 2011

more

and efficiency efforts while benchmarking energy consumption to identify further opportunities.

- *Net Zero Water*: A Net Zero Water Installation limits use of potable fresh water then captures, repurposes or recharges an amount of water equal to or greater than the amount of water it consumes.
- *Net Zero Waste*: The approach to creating a net zero waste installation is similar to creating a net zero energy installation. The components of net zero solid waste start with reducing the amount of waste generated, re-purposing waste, maximizing recycling of waste stream to reclaim recyclable and compostable materials, recovery to generate energy as a by-product of waste reduction, with disposal being non-existent.
- *For additional information, please visit <http://army-energy.hqda.pentagon.mil/netzero/default.asp>.*
- **What information is being sought?** Fort Bliss is seeking information on renewable and sustainable technologies, processes, approaches, and solutions to support Net Zero energy, waste, and water. The individual Requests for Information are summarized as follows:
 - *Waste-to-Energy*: Technologies and processes associated with the conversion of solid waste to energy.
 - *Wastewater Reclamation & Reuse*: Technologies and processes associated with the reclamation and reuse of grey and black water.
 - *Large Scale Energy Storage*: Technologies and processes associated with the storage of electrical energy for use on demand or as backup power.
 - *Large Scale Wind Energy*: Technologies and processes associated with the generation of electrical energy utilizing multi-megawatt, large size wind turbines.
 - *Small Scale Wind Energy*: Technologies and processes associated with the generation of electrical energy utilizing multi-kilowatt, building scale wind turbines to supplement building or building cluster energy requirements.
 - *Geothermal Energy*: Technologies and processes associated with geothermal energy including generation of electrical power from high or low temperature geothermal water sources and generation of thermal energy for heating or cooling applications.

- *Microgrids*: Technologies and processes associated with implementation of microgrids at the building or building cluster level that allows autonomous operation, control, monitoring, and integration of alternative energy generation and storage.
- *Solar Energy*: Technologies and processes associated with generation of electrical energy from the sun.
- *Net Zero Homes and Neighborhoods*: Technologies and processes associated with the design, fabrication, cost, operation, and maintenance of Net Zero Homes and Neighborhoods.
- **Why is Fort Bliss seeking this information?** The information gathered in this Request for Information will be utilized to help the Army understand the state of the art and the associated costs to reach mission objectives, be feasibly implemented, and achieve Net Zero for the installation. Review of the Requests for Information will be conducted by Army Energy Managers, Contracting, Legal, and subject matter expertise from the National Renewable Energy Laboratory (NREL). The Army will take the information and build the acquisition and implementation strategy for Fort Bliss to achieve the Army's Net Zero goals.
- **When is this information needed?** Fort Bliss is requesting response to a series of Requests for Information within 60 days of the Request for Information issue date; issued August 8, 2011 and closing October 7, 2011. Formatting or technical questions related to the Requests for Information will be accepted up to August 23, 2011. Answers to the questions will be posted to FedBizOps by September 12, 2011.
- **Who will be able to access the information that is submitted?** The information will be controlled for non-disclosure access only. The information will be made available to Army Energy Managers, Contracting Officers, Legal, Leadership, and subject matter experts from the National Renewable Energy Laboratory (NREL).
- **How will the information be used?** Fort Bliss will utilize the information gathered in the Request for Information to fully develop a strategy to acquire and implement sustainable and renewable technologies for energy, water, and waste. The information will allow the Army to understand the state of the art in technology and processes with regard to these approaches to Net Zero. In addition, the Army will have an understanding of the approximate costs for implementing projects that will lead to more informed solicitation of partnerships with industry based on a knowledgeable and feasible approach to Net Zero. The goal for the Army's pilot Net Zero Installation program is

to achieve the Net Zero status by 2020. However, Fort Bliss is implementing an aggressive strategy to achieve Net Zero Energy by 2015, and Net Zero Water / Waste by 2018 ahead of the Army goals. This information will be the backbone of what technologies and processes are viable, feasible, economic, and consistent with renewable and sustainable goals. The next steps in the process potentially includes an “Industry Day” that will bring developers and the Army together to examine technologies, approaches, and solutions to achieve Net Zero at Fort Bliss and across the Army.

- **How is the Army going to afford this technology?** The Army intends to leverage military construction funding as much as possible and to fully explore public private partnerships to leverage private capital for project development on Army land with a long term payback through commodity savings or direct purchases of the commodity from the private developers. The could utilize several instruments such as Extended Use Leases (EUL), Power Purchase Agreements (PPA), Energy Savings Performance Contracts (ESPC), Utility Energy Savings Contracts (UESC), among others to achieve the objective of private capital investment with long term pay off.
- **What about National Environmental Policy Act (NEPA) actions?** The Army intends on conducting much of the required programmatic National Environmental Policy Act (NEPA) actions prior to the development of project sites for renewable energy or other Net Zero projects. It will be the responsibility of the developer to fund and coordinate site-specific NEPA actions for the proposed facilities.
- **What about state regulatory requirements for utilities?** For energy, El Paso Electric (EPE) is the serving regulated utility for Fort Bliss with service in both New Mexico and Texas. The rate schedules for Fort Bliss Main Post, Biggs Army Airfield, and East Bliss in Texas are under the Public Utility Commission of Texas (PUCT) via Firm Rate Schedule 31, Fixed Fuel Charge schedule 98, and Fort Bliss 20% discount Schedule 95. On the New Mexico side of Fort Bliss, including the training ranges and base camps, Fort Bliss is under the Public Regulatory Commission of New Mexico (PRCNM) via Dona Ana and Oro Grande Schedule 4 and McGregor Schedule 9. For energy generation technologies sited on New Mexico Ft. Bliss lands, the PRCNM allows 3rd party owned and operated electrical generation systems on customer site interconnect to the distribution side of customer substation and sell power to customer. For energy generation technologies on TX Ft. Bliss, regulatory rules provide specific guidance for the location and development of renewable energy generation on Ft. Bliss property, as well as sales of electricity in this regulated area of Texas. El Paso Water Utilities is the public utility for water and

waste water. Texas Gas Service is the utility for Natural Gas supplied to the post. Fort Bliss also includes privatized utility owners within its utility infrastructure including Rio Grande Electric Coop for electrical distribution, Fort Bliss Water Utility for water infrastructure, and Texas Gas Service for Natural Gas infrastructure.