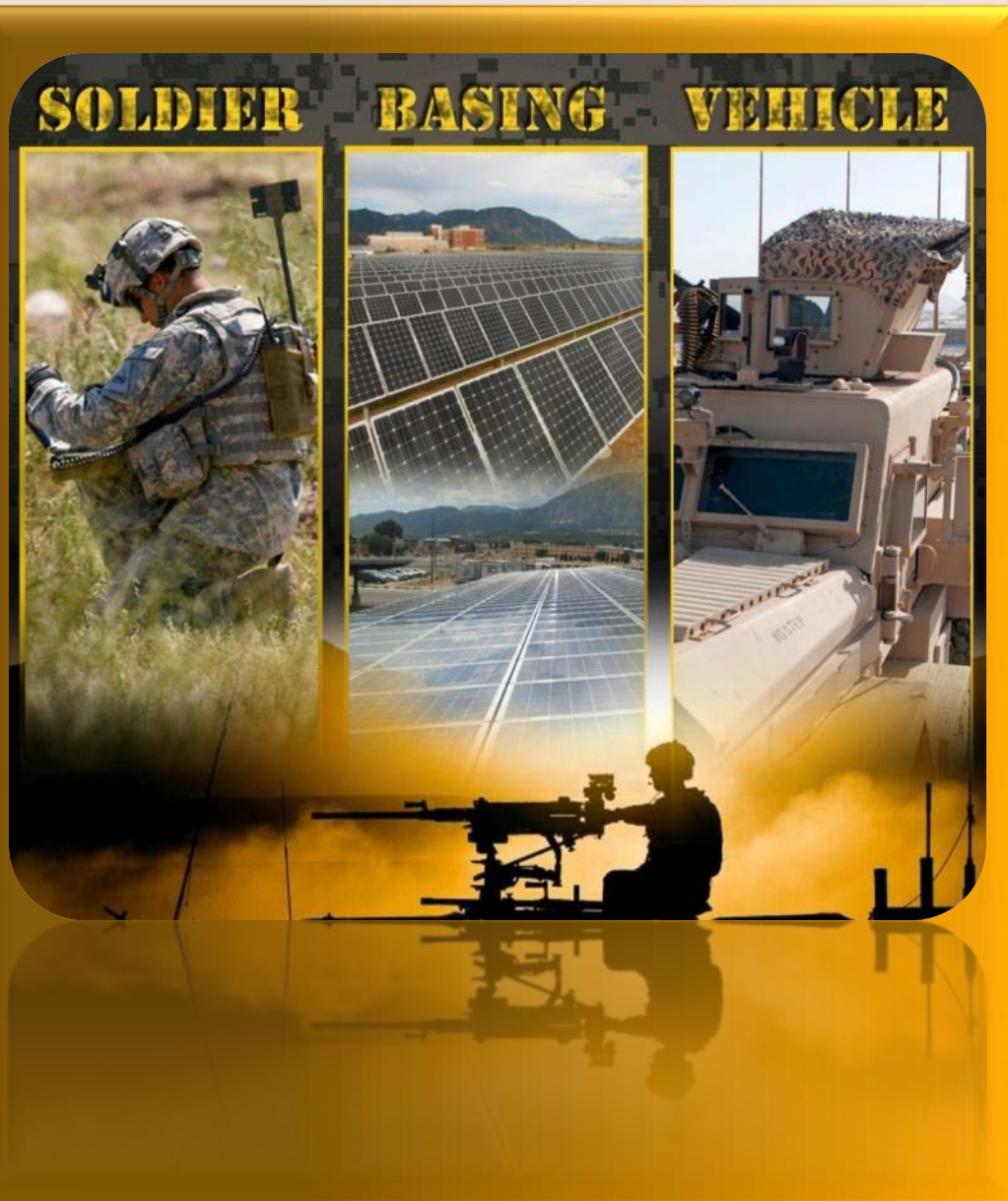




AMERICA'S ARMY:
THE STRENGTH OF THE NATION

Army Power and Energy



**Deputy Assistant Secretary of
the Army,
Energy and Sustainability**

Mr. Richard Kidd

**22nd North American Waste-
to-Energy Conference
9 May 2014**



Land Acreage (Summary Data)

- United States 13,482,669
- Europe 133,906
- Asia 27,491
- Other Overseas 1,361

Roads (paved and unpaved)

- 55,308 Lane Miles

Paved Area (excludes roads)

- 267,033,417 Sq. Yards

Railroads

- 2,252 (Miles)
- 57,742 (LF Bridges)

Buildings (Square feet)

- United States 680,159,316
- Europe 105,867,428
- Asia 42,549,120
- Other 3,204,439
- Leases 37,746,313
- Privatized 120,507,597
- WWII Wood 16,524,530

Utilities (Systems)

- (Electric, Gas, Water, Wastewater)
- Army-Owned 210
- Privatized 144

Army Installations

- IMCOM 66
- Army Reserve 3
- AMC 27
- DLA 5
- National Guard 48
- ARCENT 3
- TOTAL 152**

152 Small Cities

Army End-Strength

- Active 532,506
- USAR 198,209
- ABNG 17,735
- Civilians 255,566
- Retired 164,674

2.2 Million People

Aviation

- Multi-use 60
- Heliport 28

Family Housing Units

- Owned 16,009
- Leased 6,432
- Privatized 86,277

108,000 Homes

Adequate Barracks

- Permanent Party 127.2K
- Training 148.4K

Plant Replacement Value

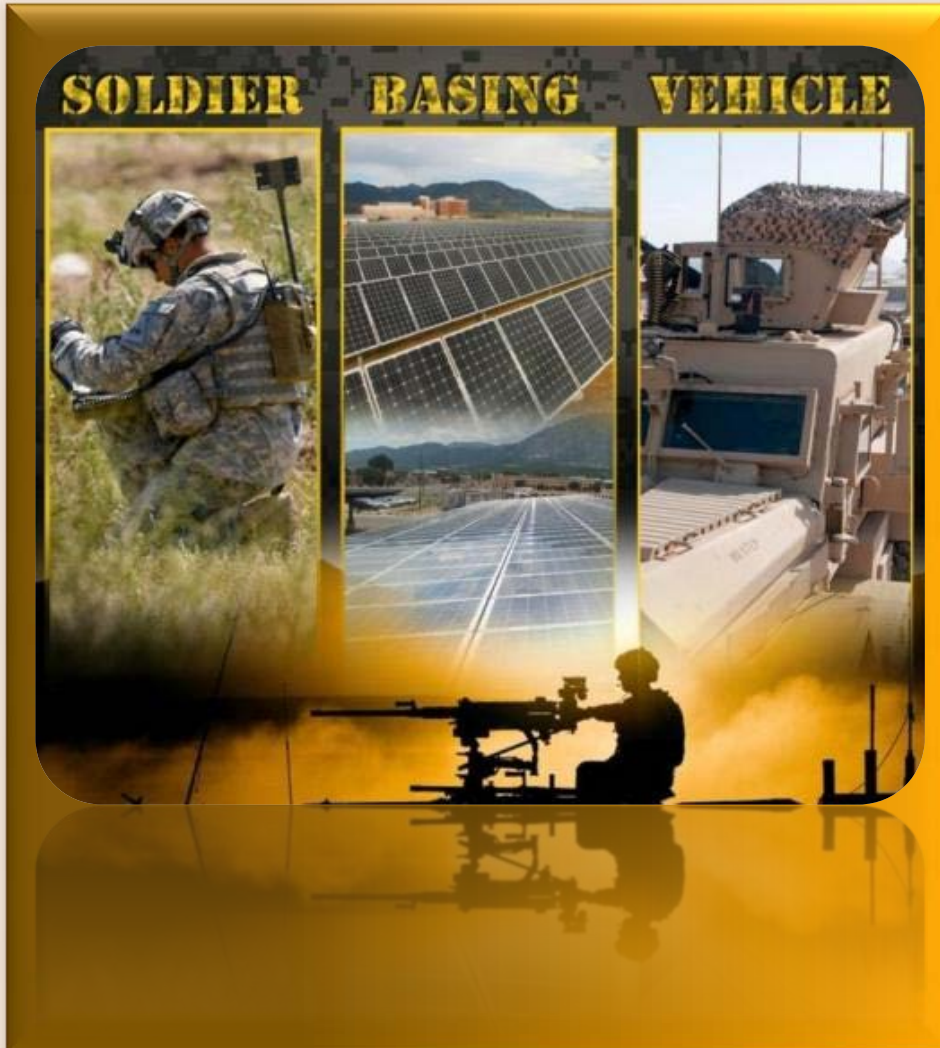
- \$304.4B

FY13
Army Demographics
 59% total married
 (8.7% dual military married)
 6.2% single parents
 837,052 family members

Environmental Clean-up Remaining

- (Installation Restoration Program & Military Munitions Response Program)
- Active Sites 1,392
- BRAC Sites 275
- Formerly Used Defense Sites 1,717

FY13 Installation Management Resources = \$18.9B



The Army is addressing **energy security** through a comprehensive program to ensure that we have **assured access to reliable supplies** of energy and the ability to protect and **deliver sufficient energy to meet mission-essential requirements.**

- **Soldier:**
 - Lightening soldier power loads
 - Agility and self-reliance through advanced portable power systems, lighter batteries, universal charging devices and water purifiers
- **Vehicles:**
 - Utilizing alternative fuels, hybrid and electric systems
 - Improving efficiency and extending engine life
 - Includes tactical (air and ground) vehicles and non-tactical vehicles
- **Basing:**
 - Improving installation fuel, water and energy efficiency
 - Net Zero strategy
 - Diversity of supply through renewable energy enhancing energy security
 - Energy Initiatives Task Force



The Army Energy Initiatives Task Force (EITF) was established by the Secretary of the Army on September 15, 2011.

EITF serves as the central management office for **partnering** with Army installations to implement **cost-effective, large-scale**, renewable energy projects, leveraging **private sector financing**.

- Projects **equal to or greater than 10MW**
 - Will coordinate with installations for 1-10MW opportunities
 - Potential for projects that exceed Army requirements
- Solar, Wind, Biomass and Geothermal technologies
- Resources to perform project development and execution
- Will use existing DoD land-use and third-party financing authorities

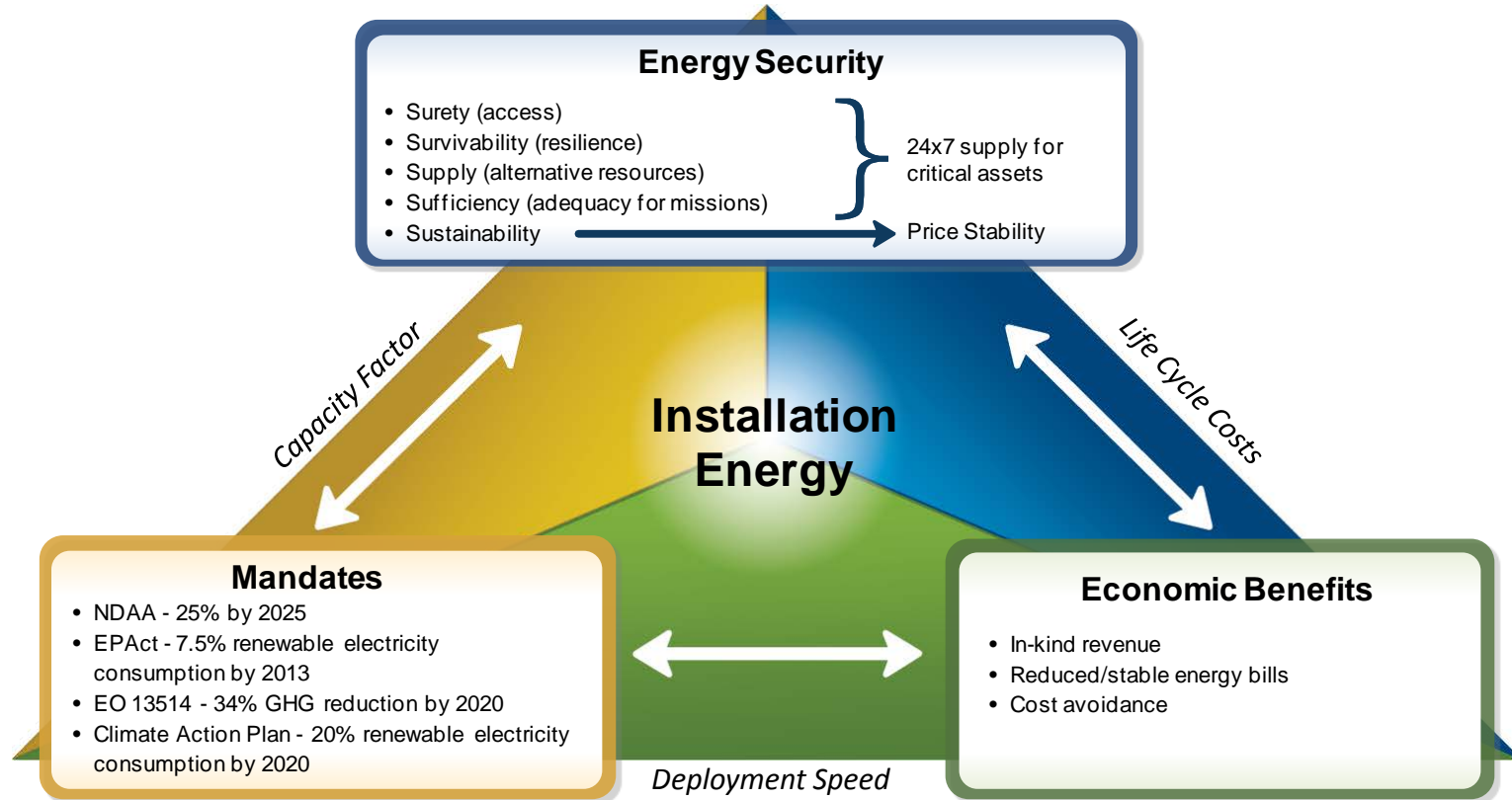


Secretary of the Army
John M. McHugh

The EITF's projects will help ensure the Army's goal to deploy 1 GW of renewable energy projects by 2025

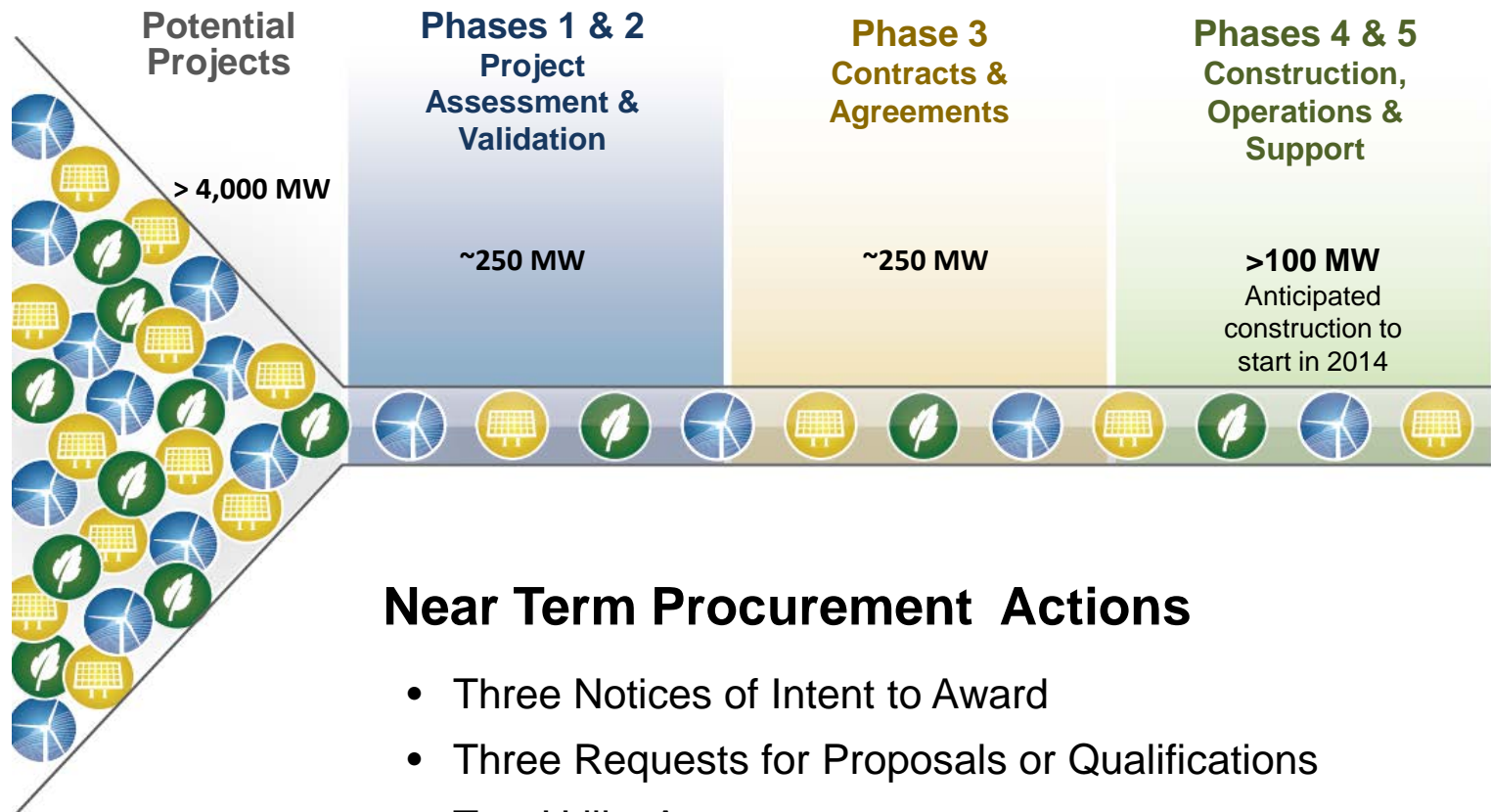


Securing Army Installations with energy



that is **clean, reliable, and affordable.**

Creating a balanced pipeline of opportunities serving three driving principles



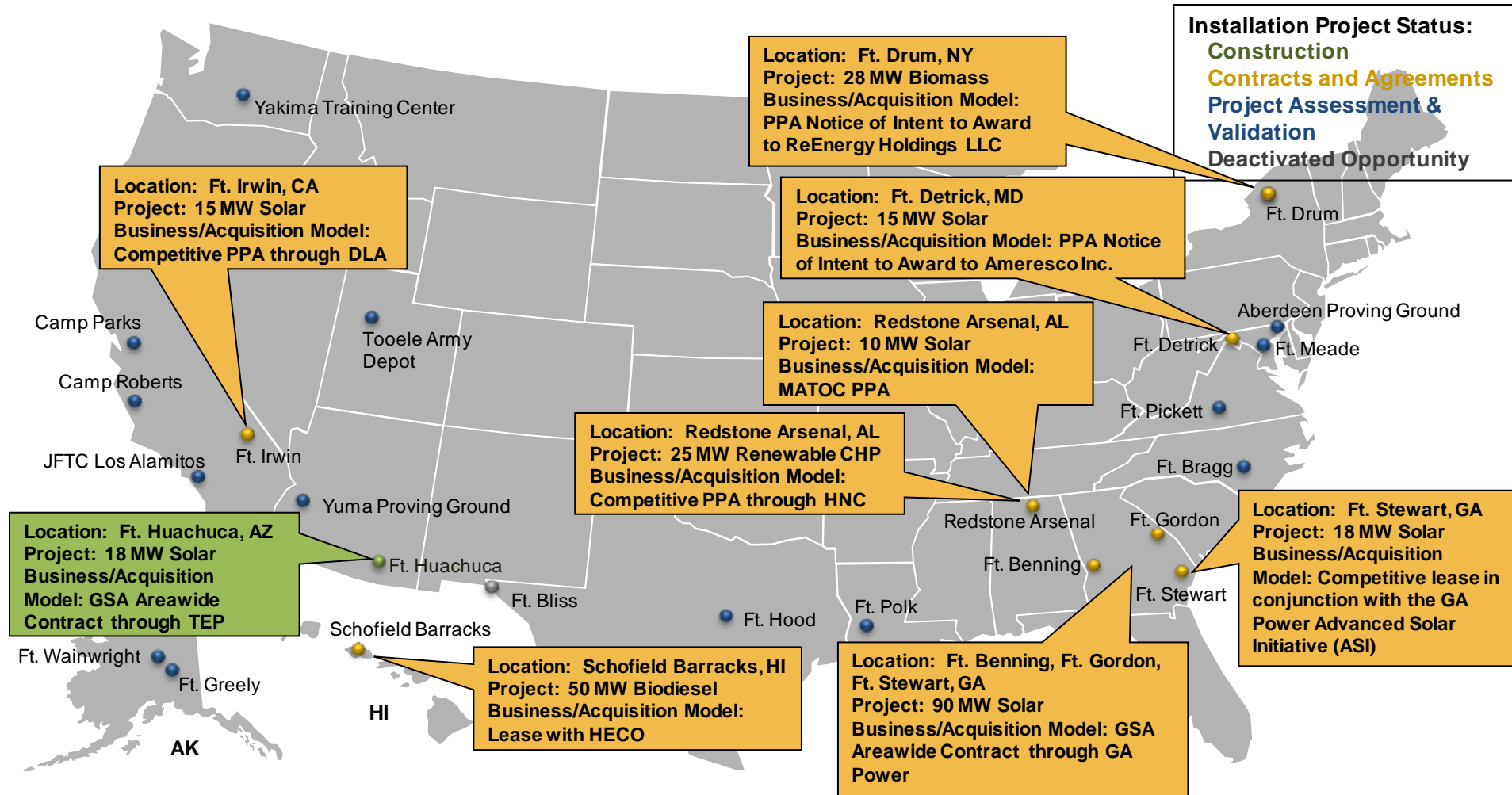


Project assessment criteria are reviewed on a weekly basis to identify roadblocks and key issues for successful project development



Project Assessment Criteria

Mission/ Security	<ul style="list-style-type: none"> • How does project enhance energy security on host and surrounding installations? • What are the possible impacts to Installation operations or tenant missions? • Has the project been approved by Installation, Army HQ, and DoD staffs?
Economics	<ul style="list-style-type: none"> • What is the estimate of the baseline capital cost? • What is the value of any RECs or other incentives? • What is the predicted resource? Has it been validated? • What is existing utility rate and alternative tariffs? • What are the impacts of the project to the POM?
Real Estate	<ul style="list-style-type: none"> • What is the Real Estate approach and what authority is being used? • Has the project received required BLM approvals? • Is the project consistent with the Installation Master Plan?
Regulatory	<ul style="list-style-type: none"> • What are the regulatory limits for interconnection, net-metering? • What is the status of getting required PUC approvals?
Off-Take	<ul style="list-style-type: none"> • Will the installation consume all electricity generated? • What is the status of state RPS and other incentives to drive external demand? • If power is to be sold off the installation, have off-takers been identified? • Can the utility wheel power to other potential off-takers?
Integration	<ul style="list-style-type: none"> • Is there sufficient line and substation capacity? What upgrades are required? • Are flow studies are required? What is the status? • Is the system upgradeable for smart grid and energy storage technologies?
Environmental	<ul style="list-style-type: none"> • What are the major NEPA issues? • Which parties will implement NEPA and what is the timeline?
Procurement	<ul style="list-style-type: none"> • What is acquisition strategy and timeline to implement? • What performance risks are there with the developer or other partners?



Contributing ~25% Towards Army's 1 GW Goal by 2025



79 Awards to 48 Companies, Including 20 Small Businesses



- Task order winners will finance, build, own, operate, and maintain the generation assets.
- The MATOC's total estimated value of \$7 billion refers to the total dollar value of energy available for purchase under all Power Purchase Agreement task orders for their entire term (up to 30 years).
- The Government will buy power from the asset through 10 U.S.C. 2922a for a contract term of up to 30 years.
- MATOC pool of qualified renewable energy firms includes:
 - 15 Biomass Companies
 - 6 Geothermal Companies
 - 38 Solar Companies
 - 20 Wind Companies
- Power purchases will be funded through existing must-pay utility bills.
- Awards under the MATOC are subject to the Davis Bacon Act and the Buy American Act.
- The MATOC can be used by the other DoD Services (Army, Air Force and Navy)
- The EITF uses multiple procurement vehicles in addition to the MATOC.



www.armyeitf.com



US Army Energy
Initiatives Task Force



ArmyEITF

#HOOAHenergy

- Energy and energy security continue to be key components to enhance Army mission capability and effectiveness.
- Renewable energy is and will continue to be a significant part of the Army's energy security strategy.
- Through the EITF, the Army is aggressively developing new and efficient business models to support the rapid deployment of 1 GW of renewable energy by 2025.