Energy Exchange
Federal Sustainability for the Next Decade
U.S. Department of Energy

Army Office of Energy Initiatives Project Contracting Methods

Mr. Mike McGhee
Army Office of Energy Initiatives
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Agenda

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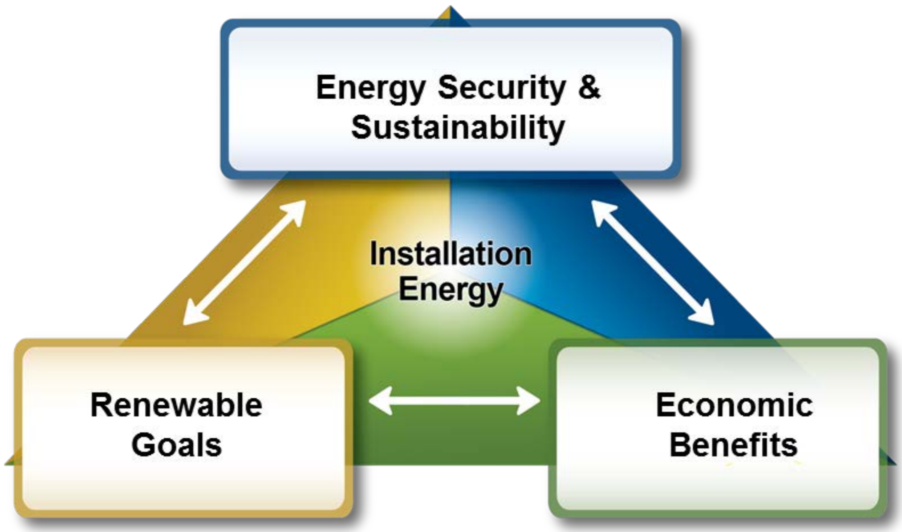
OEI Overview



SecArmy Directive

"The OEI will serve as the Army's central management office for the development, implementation and oversight of all privately financed, large-scale renewable and alternative energy projects"

Guiding Principles

- **Priced at or below grid parity**
- **On/near an installation**
- **Brings some form of energy security enhancement**

Challenge

Develop projects that attract private financing IAW market conditions and balance all three drivers

OEI Projects

*Ft. Benning: Operational, expect receipt of final required contract documents

Assistant Secretary of the Army (Installations, Energy & Environment)

Key Authorities for Project Development

OEI leverages existing statutory authorities to meet renewable energy principles

10 USC 2922a* - RESA
- Contracts up to 30 years for provision of production facilities and purchase of energy
- Army consumption from a renewable energy generation facility (REGF) located on- or off-site
- Project avoids Army utility costs and increased energy resiliency through advanced controls

FAR 41 - GSA Areawide
- Utility services for up to 10 years
- Army provides the servicing utility an easement to host rate-based energy generation on-site
- On-site generation alleviates congestion on utility line near the installation

10 USC 2668* - Easement
- Granting rights-of-way access to military lands to promote public interest
- Army issues an easement to a utility for on-site energy generation
- Provides a streamlined outgrant for utilities to construct generation for the community

10 USC 2667* - Lease
- Lease non-excess property to promote nation defense or public interest
- Army issues a lease for on-site energy generation to be consumed off-site
- On-site generation provides a secure location to reestablish power for the installation and community after an outage

Typical Business Models

RESA/Lease

GSA/ Easement

Stand-alone Lease

*Department of Defense-Specific Authorities

Typical Business Model Considerations

Areas of Consideration	RESA/Lease	GSA/ Easement	Stand-alone Lease
Site	Is private land off the installation or non-excess land on the installation available?	Is non-excess land on the installation available?	Is non-excess land on the installation available?
Energy Price	Are installation energy prices high?	Are utility energy prices low?	Are regional wholesale energy prices high?
Regulatory	Is the use of a power purchase agreement legal under local regulation?	Can power be purchased using FAR Part 41 (up to 10 years) with a regulated utility?	Is the sale of power off the installation authorized in the location?
Transmission	Is economical local distribution available?	Is economical local distribution available?	Is economical transmission capacity to off-takers available?
Off-take	Is the installation demand sufficient to use the energy produced by the facility?	Is the installation demand sufficient to use the energy produced by the facility?	Are off-takers other than the installation available to buy power from the facility?

Typical Business Model Performance

Typical Business Models	Typical Performance			Procurement Aspects
	Energy Security & Sustainability	**Economic Benefits**	**Renewable Goals**	
RESA/Lease	Better/Best	Better/Best	Better	**Timeline:** More time to Complete **Flexibility:** Competitive RFP enhances flexibility **Complexity:** Increased given energy price and lease consideration negotiations
GSA/ Easement	Average	Average	Better	**Timeline:** Shortest time to Complete **Flexibility**: Limited given the existing GSA **Complexity:** Low with no energy price negotiation and standard land use payment structure
Stand-alone Lease	Better/Best	Average/ Better	Better	**Timeline:** More time to Complete **Flexibility:** Competitive RFP enhances flexibility **Complexity:** Increased given negotiation of energy security value as consideration

Case Study: Schofield Barracks, HI

- 50 MW Biofuel
- Stand-alone Lease
- Expected operation: Dec 2018
- Black start capable
- 5 day fuel supply on post, 30 day fuel supply on island
- During normal operations the Army purchases power from the Oahu grid
- During outages/threats the Army has “first call”
- Meets peak requirements for 3 installations
- Shortens time to restore power to community

Case Study: Fort Drum, NY

- 60 MW Biomass
- RESA/Lease
- Operational Sep 2014
- Black start capable
- 32.5 day fuel supply on post
- Supplies 100% of garrison's electricity
- Can operate independently of local utility

Summary

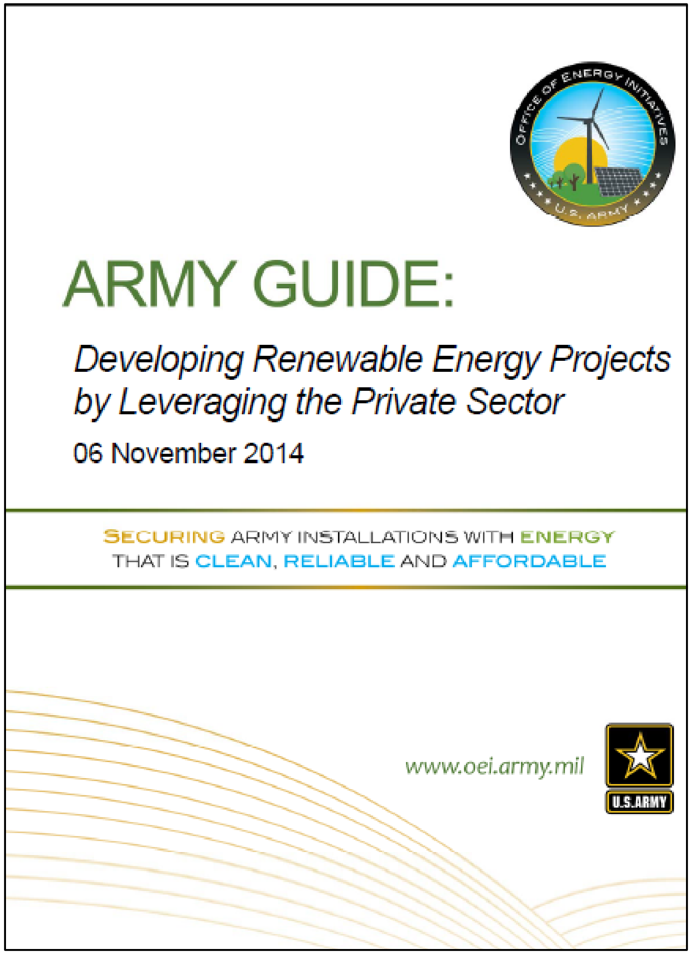
- **No “one size fits all” procurement model**

- **3 typical business models:**
  - **RESA/Lease**
  - **GSA/Easement**
  - **Stand-alone Lease**

- **No-cost resiliency enhancements are not always available**

- **Always looking for additional models**

OEI Contacts


ARMY GUIDE:

Developing Renewable Energy Projects by Leveraging the Private Sector

06 November 2014

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Mr. Michael McGhee

Executive Director

(703) 601-0004

michael.f.mcghee.civ@mail.mil

Ms. Krista Stehn

Director, Opportunity Development

(703) 601-0497

Krista.r.stehn.civ@mail.mil

Backup

Quiz Questions

1. T/F. There is one acquisition strategy that is always preferred for private-sector financed renewable energy deals. (Answer: False)

2. T/F. The three most typical business models utilized by OEI are: RESA/Lease, GSA/Easement, Stand-alone Lease. (Answer: True)