

Energy Efficiency & Renewable Energy



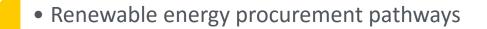


Federal Renewable Energy Procurement Options

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Presentation Outline



- Project process
- On-site renewable project considerations
- FEMP renewable procurement and technical assistance
- Energy Exchange RE Workshop and ESPC ESA Toolkit
- Websites and POCs



Renewable Energy

Procurement Pathways

Renewable Energy Procurement Pathways

On-Site Renewable Energy Projects with <u>Government</u> Ownership

On-Site Renewable Energy Projects with <u>Private</u> Ownership

Purchasing Renewable Energy From Off-Site Projects Purchasing Renewable Energy Certificates (RECs)



On-Site Renewable Projects with Government Ownership





Appropriated Projects

 Agencies with appropriations can pay directly for on-site renewable projects

Alternatively Financed Projects

- No up-front capital costs required for the equipment
- Include renewable energy conservation measures (ECMs) within:
 - Energy Savings Performance Contracts (ESPCs)
 - ESPC ENABLE (PV only)
 - Utility Energy Service Contracts (UESCs)



On-Site Renewable Projects with Government Ownership





Power Purchase Agreements

 Agency hosts on-site renewable project that is privately owned and operated, and agency purchases the electricity

Real Property Arrangement

 Agency hosts on-site renewable project that is privately owned and operated, and someone other than the government purchases some or all of the electricity



Agencies contract to purchase electricity from offsite projects:

Purchasing Renewable Energy From Off-Site Projects

- Typically in a competitive electric market or from serving utility's green pricing program
 - Procurement authority options include 10 USC
 501/FAR Par 41 (10 years or 10 years with 10 year
 option) or Western Area Power Administration (20 years)
- Competitive market procurement options:
 - GSA
 - DLA Energy
 - WAPA (WAPA power allocation customers may be able to purchase renewables in states with regulated electric markets, most likely requiring serving utility approval)



Purchasing Renewable Energy Certificates (RECs)

Agencies contract for the purchase of RECs through these methods:

Purchasing Renewable Energy Certificates (RECs)

- Aggregated procurements:
 - GSA
 - DLA Energy
 - Western Area Power Administration (will consider executing REC purchases, upon request)
- Individual agency procurements: Agencies can conduct their own REC purchases but should take care to ensure they meet all E.O. 13693 requirements, including CEQ guidance documents



On-Site Renewable Projects with Private Ownership

Power Purchase Agreement

• Best for large renewable projects (generally > 500 kW)

Renewable Developer	 Purchases, installs, owns, operates and maintains renewable equipment on federal land and/or buildings May be able to take advantage of tax incentives and/or sell the renewable energy certificates
	• Hosts an on site renewable energy project

Agency

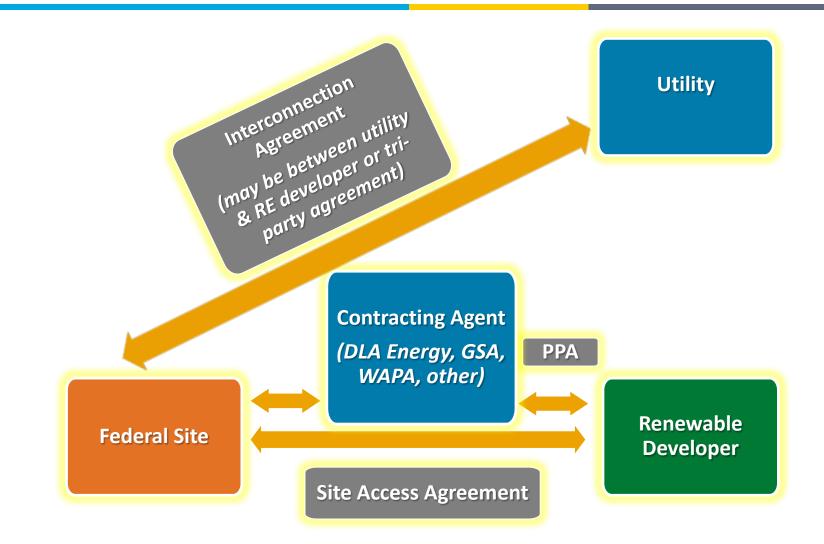
- Hosts an on-site renewable energy project
- Purchases energy from the renewable project for the life of the contract



Power Purchase Agreement

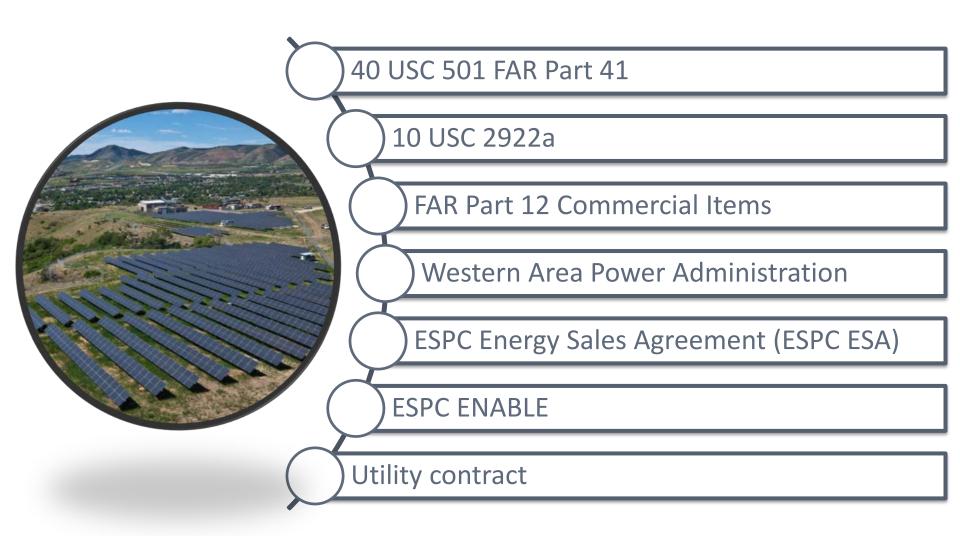
Advantages	Challenges
 No agency up-front capital required for the equipment Renewable developer (or partner) may be eligible for tax incentives and/or can sell the project RECs Renewable developer provides O&M Known long term electricity price for portion of site load Minimal risk to government Eligible for double bonus toward EO 13693 and EPAct 2005 RE goals Higher priority under EO13693 Section 3d Can provide energy security/resiliency if configured so that RE project operates when the grid goes down 	 Some states/utilities do not allow PPAs Contract term limitations Other contractual issues Transaction costs Less federal sector experience than ESPC and UESC Some funding will be required for activities such as NEPA, utility interconnection studies
11	ENERGY Energy Efficiency & Renewable Energy

Power Purchase Agreement





Procurement Options*



*Disclaimer: Not all options are available to all agencies. Check with your contracting and legal staff regarding available options.

PPA: 40 USC 501/FAR Part 41

- Contract term
 - 10 years
 - 10 years with 10 year option, with non-renewal payment if option is not exercised
- FAR Part 41 is a GSA authority
- Certain agencies (DOE, DOD) have a permanent FAR Part 41 delegation
- Agencies can request a delegation from GSA



PPA: 10 USC 2922a (Department of Defense only)

- Contract term: 30 years
- Department of Defense authority
 - Not available to civilian agencies
- Requires Secretary of Defense approval (delegated)
- Streamlined approval process



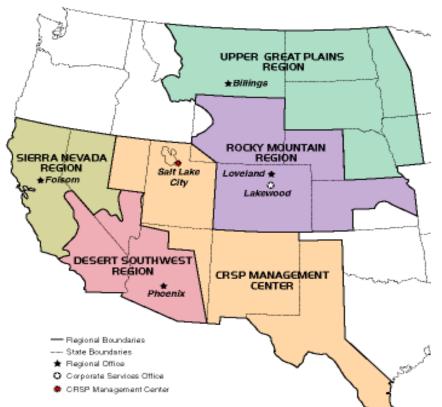
PPA: FAR Part 12 Commercial Items

- Contract length: most likely 5 years with multiple options
- Best if there is a non-renewal payment in case government does not exercise option
- Discuss with agency contracting officer and legal



PPA: Western Area Power Administration (WAPA)

- WAPA has a Renewable Resources for Federal Agencies (RRFA) program
- Long-term contract authority
- Only available for Federal agencies in their service territory
- Agency selects renewable developer
- WAPA negotiates and signs PPA contract
- Nominal fee for WAPA's services (some FEMP funding available for initial investigation and support)





ESPC ESA

• Utilize the 25-year ESPC authority for on-site renewable project on federal buildings/land

• Must meet all ESPC authority requirements

• Title retention and other OMB requirements apply



ESPC ENABLE

- GSA Federal Supply Schedule 84, SIN 246-53
- Pre-qualified vendors
 - 20 eligible ESCOs including 10 small businesses, as well as 6 firms that are also on the DOE IDIQ list
 - Several companies do their own solar work (should reduce overhead)
- Standardized and streamlined procurement process for small federal projects
 - No fixed minimum or maximum project sizes
- Can be structured as an ESPC ESA
 - Exploring pilot projects



Other Private Ownership Options: Utility Contract

- Utility or partner owns project on government land
- Site purchases some or all electricity, utilizing 40 USC 501/FAR Part 41 (most likely under GSA Areawide contract)
- Or, utility uses electricity with no purchase by site (real estate agreement required--usually lease or easement)





Other Private Ownership Options: Real Property Arrangement

- Site hosts privately owned renewable energy project on government land
- Requires real property instrument such as an easement, lease, license
- May or may not purchase electricity, using authorities on prior page





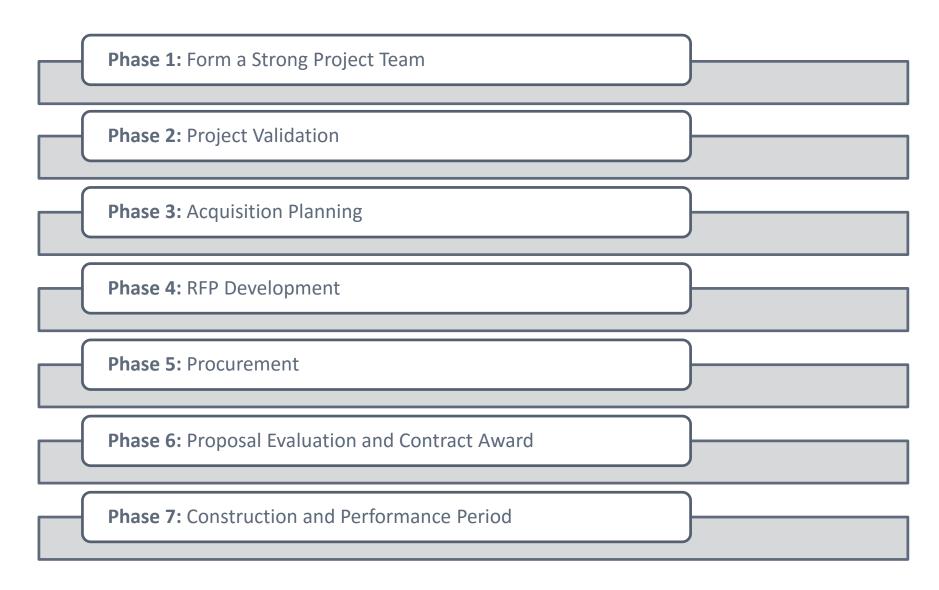
Summary: On-Site Renewable Energy Procurement Pathways

Project Ownership	Financing Method or Pathway	Authority or Pathway
Government Owned	Appropriations	
	ESPC	42 U.S.C. 8287
	ESPC ENABLE (PV)	42 U.SC. 8287
	UESC	42 U.S.C. 8256
Privately Owned	PPA	FAR Part 41/40 U.S.C. §501 FAR Part 12 Western Area Power Administration ESPC ESA & ESPC ENABLE (Title must transfer to Gov't by end of contract)
	Utility Contract	FAR Part 41/40 U.S.C. §501 EUL or other
	Real Property Arrangement	EUL or other



On-Site Renewable Project Process and Important Considerations

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On-Site Project Considerations

- PPA legality
- Building/land ownership and utility bill payment
- Site management, agency and other approvals
- OMB memo requirements (for ESPC ESA)
- Coordination with serving utility
- Site access agreement
- NEPA, NHPA, glint/glare and permitting

*Partial list





FEMP Procurement and Technical Assistance

FEMP can provide renewable project implementation assistance, including the following:

Project validation:

- Economic and technical feasibility
- Procurement option selection
- Other project considerations such as PPA legality

Procurement document development:

- RFP
- Site access agreement
- Source selection plan
- Other documents

Procurement process:

- Publicize RFP
- Coordinate preproposal conference
- Draft amendments and Q&As
- Evaluate proposals



Energy Exchange 2016 Pre-Conference Renewable Workshop

FEMP is holding a Federal Renewable Energy Workshop on Monday, August 8 from 1-5 pm:

- Introductory level (101)
- Will cover options for meeting federal renewable energy (RE) goals and the RE project delivery process from inception to completion
- Attendees are eligible to receive 0.4 CEUs
- Register at

https://www4.eere.energy.gov/femp/training/training/federalrenewable-energy-workshop



A resource that is focused on ESPC ESA projects* and includes the following:

- Process diagram, checklist and team responsibility chart
- Project consideration description
- Authorizing legislation and other applicable Information
- Editable templates RFP, site access agreement, acquisition plan and source selection plan

* This information is useful for other types of projects



Websites

• PPAs

http://energy.gov/eere/femp/federal-site-renewable-power-purchaseagreements

• PPA eTraining

https://www4.eere.energy.gov/femp/training/training/federal-site-renewablepower-purchase-agreements

Renewable Purchasing

http://energy.gov/eere/femp/purchasing-renewable-power-federal-facilities



Renewable Energy Procurement Program Points of Contact



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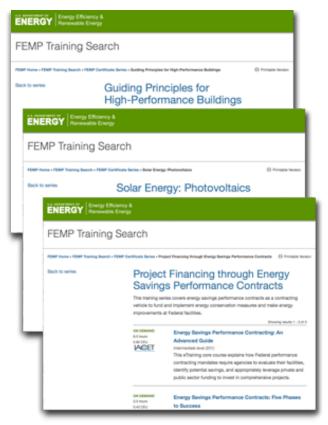
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