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A River of Energy Solutions

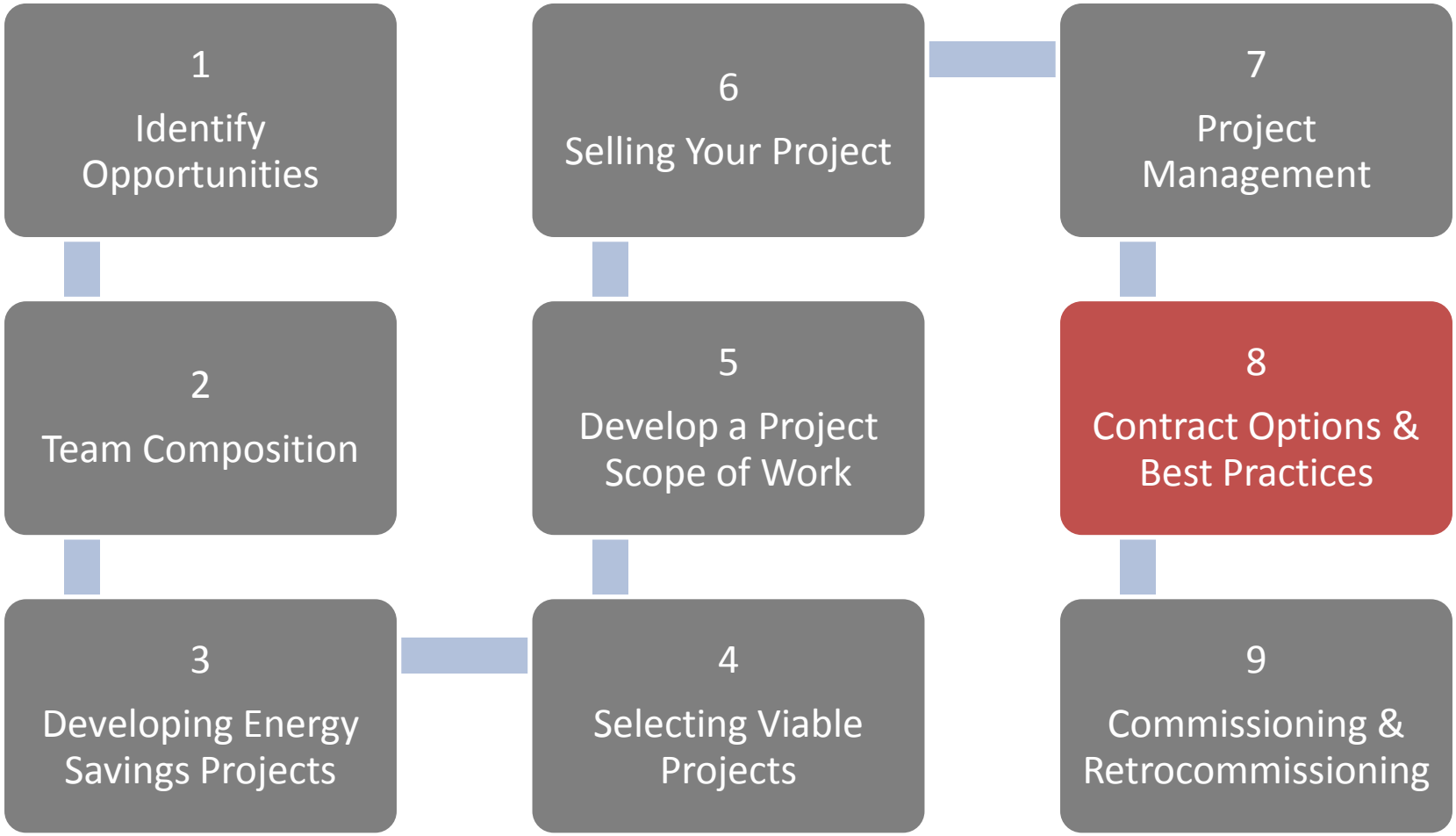
Session 8
Contracting: The Devil is in the Details

Energy Projects A-Z

Contracting

The Devil is in the Details

The Energy Project A-Z Track



Agenda

1. Contracting Choices
   - PPA, UESC, ESPC, EUL
2. Statement of Work (SOW) Implementation
3. Engaging Your Contracting Officer
4. Building a Bulletproof Contract

On-Site Renewable Power Purchase Agreement (PPA)

On-Site Renewable Power Purchase Agreement

- Renewable developer installs, owns, operates and maintains customer-sited renewable equipment
- Site purchases electricity (or possibly thermal energy) through power purchase agreement

Pros

- Renewable developer eligible for tax incentives, accelerated depreciation
- No agency up-front capital required
- Renewable developer provides O&M
- Minimal risk to government
- Usually known long term electricity price for portion of site load

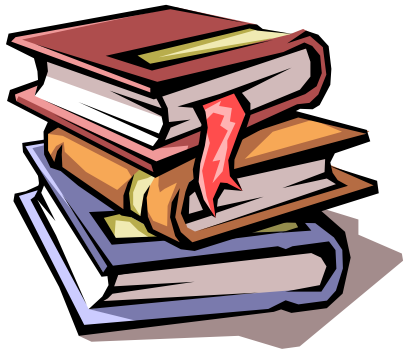
Cons

- Transaction costs
- Limited federal sector experience
- Contract length limitations (for civilian agencies)

Utility Energy Service Contracts (UESC)

Utility Energy Service Contracts (UESC)

- **Definition:** Contracts that allow utilities to provide agencies with comprehensive energy and water efficiency improvements and demand reduction services.
- **Utilities front the capital costs**, assess the opportunities, design and implement the ECMs, and are paid out of savings.



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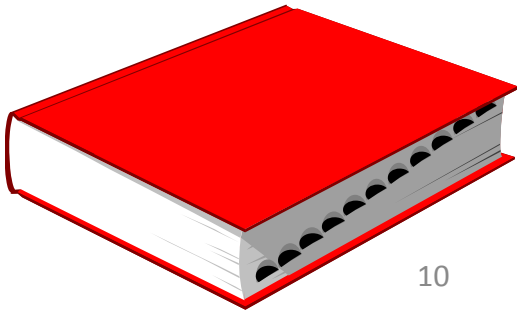
UESC

- Typically renewable projects bundled with energy efficiency
- Contract term up to 25 years, varies by agency
  - GSA legal opinion states that extended utility agreements are allowed. (See UESC Enabling Documents, p. 76-77 available at http://www1.eere.energy.gov/femp/pdfs/uesc_enabling_documents09.pdf)
  - EISA Section 513 prohibits agency policies that limit maximum contract term for a period shorter than 25 years
- Contract options – areawide contract (AWC), basic ordering agreement (BOA), site specific contract

Energy Savings Performance Contract (ESPC)

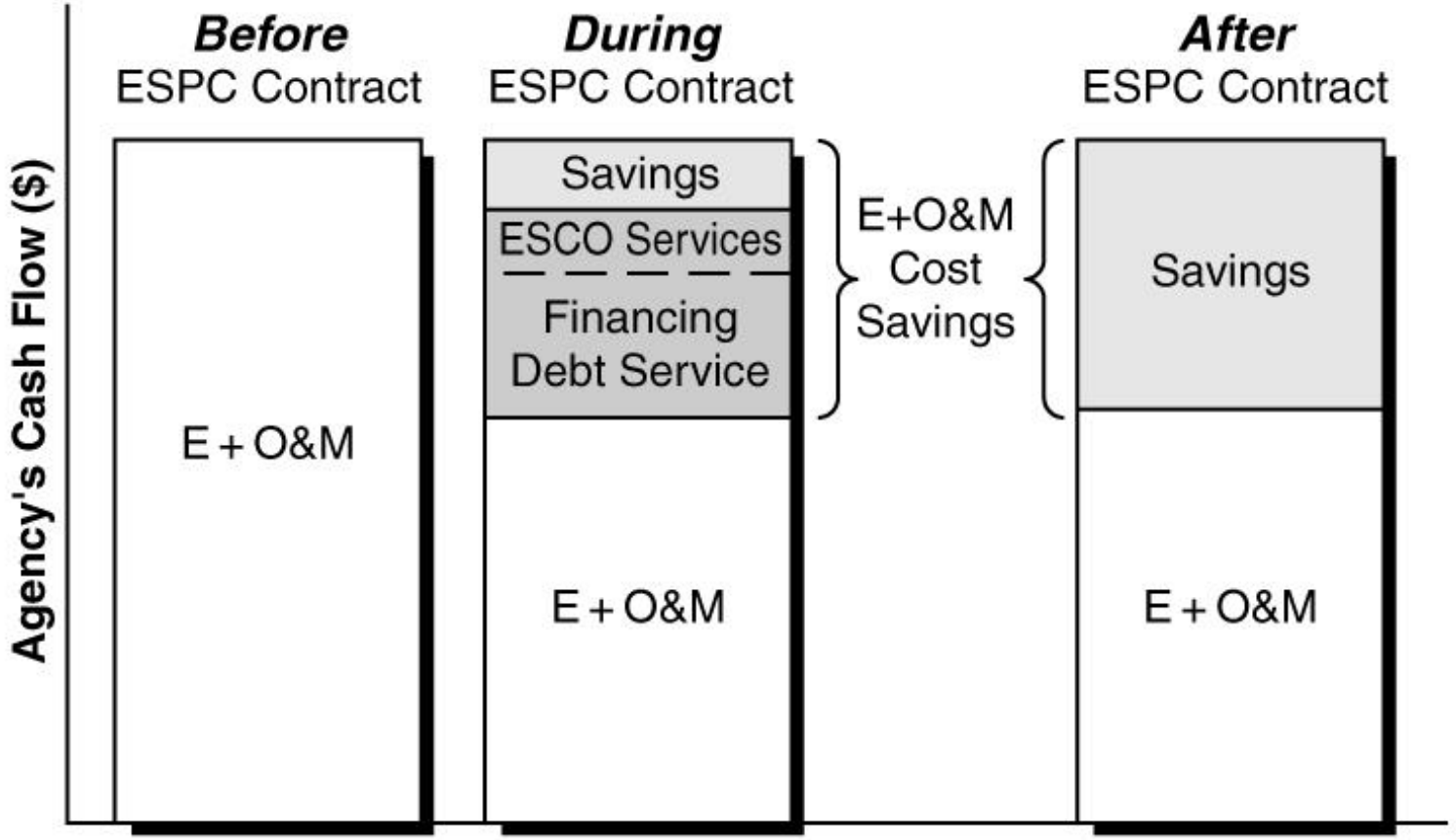
- **ESPC** is a no-upfront-cost contracting method. The contractor incurs the cost of implementing energy conservation measures (ECM) and is paid from the energy, water, wastewater and operations savings resulting from these ECMs.



Reallocate the Government's Utility Bill

Reallocation means:

- ✓ Stop paying for waste and pollution
- ✓ Start paying for efficiency!



Enhanced Use Lease (EUL)

Enhanced Use Lease (EUL)

- EUL is a real estate agreement
- The lease is competed (rather than the energy purchase, as in a PPA)
- Payment or in-kind consideration
- Usually for large projects where project size > site load
- Department of Defense authority: 10 USC 2667
- Past GovEnergy presentations:
  - 2010 http://www.govenergy.com/2010/Workshop/Presentations.aspx (Session 3 and 5)
  - 2009 http://www.govenergy.com/presentations.php#finance (Session 5)
  - 2008 http://www.govenergy.com/2008/presentations2008.html#finance (Session 5)

How to Choose & Comparison

How To Choose

- What is the size of the proposed renewable project? Small projects are best implemented through UESC or ESPC, bundled with EE.
  - Do you have energy efficiency opportunities?
  - What is your agency policy related to ESPC and UESC?

UESC questions:

  - Does your utility have a federal program?
  - Have you done any energy projects through your utility?
  - Does your site have a good relationship with your utility?

ESPC questions:

  - What is the estimated size of the proposed RE and EE project (ESPC projects are typically at least $1 million)?
  - Have you done any ESPC projects?

How To Choose

- If proposed renewable project is large, then consider PPA or EUL

- What is expected energy generation relative to load? EUL is a good option If energy generation is significantly greater than load.
  - Does your agency have an EUL authority?

- If estimated generation is less than load most of year, but may be greater than load during certain time periods: Research net metering, feed-in tariff and other applicable policies.

UESC, ESPC & PPA Comparison

	PPAs	DOE ESPCs	UESC
AUTHORIZATION	40 USC 501 (FAR Part 41)	EPAct 1992 42 USC 8287 10 CFR 436	EPAct 1992 42 USC 8256 10 USC 2913 10 USC 2866
COMPETITION	Competitive	Competitive (FedBizOpps not required for delivery orders)	Exempt from CICA, sole source to utility; AWC includes requirements for small business subcontracting plan and competitive selection of subcontractors
CONTRACTING PARTY	Contract with a renewable developer	Contract with energy services company (ESCO)	Contract with utility
PERFORMANCE	Contractor only gets paid if project generates electricity (or therms)	Guaranteed performance required	Guaranteed performance negotiable
TERM	Varies (10 years with FAR Part 41, up to 30 years with DOD 10 USC 2922A)	25 years	Up to 25 years allowed; varies by agency

UESC, ESPC & PPA Comparison

	PPAs	DOE ESPCs	UESC
PAYMENTS	Invoice	Invoice	Utility bill or invoice
QUALIFIED	None	Multiple contractors selected list required	Use of qualified contractors list not required
MEASUREMENT & VERIFICATION	Not required (see Performance).	M&V and annual energy M&V Report required	M&V and annual energy audit negotiable
OPERATION & MAINTENANCE	Required	O&M negotiable	O&M negotiable
CONTRACT COORDINATION	DLA Energy, Western Area Power Administration and/or agency	Agency coordinates contract through DOE or lead agency	Agency coordinates contract
CONTRACTOR RELATIONSHIP	Typically no existing relationship is in place with the renewable developer	Typically no existing relationship is in place with ESCO	Relationship with utility usually well established
TIME & RESOURCE REQUIREMENTS	Relatively new process. Will get simpler with time.	Streamlined selection process	Simplified select ion process

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Time to Develop a Statement of Work

What is a SOW?

- A detailed document that conveys the government's needs to contractors to ensure accurate bids and successful performance.
- A clear and concise explanation of "What I Need"
- The "heart of your procurement"

Why are **Clear** and **Concise** Important?

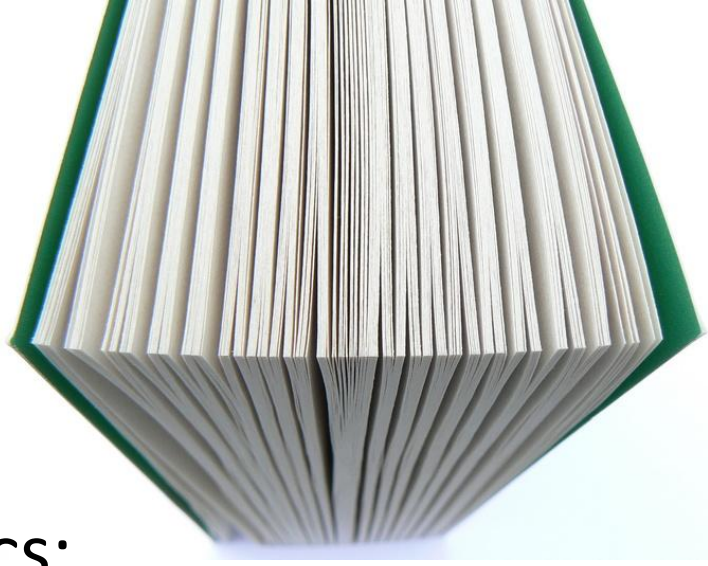
- Provides a clear understanding of the requirements
- Establishes a baseline for proposal evaluation
- Reduces evaluation and negotiation time
- Minimizes need for future changes
- Baselines contractor performance measures


What about performance-based contracting?

What is performance-based contracting?

- Structure all aspects of the acquisition around the purpose of the work
- Set forth contract requirements in clear, specific, and objective terms with measurable outcomes
- Stay away from:
  - Specifying manner by which the work should be performed
  - Broad and imprecise statements of work

According to F.A.R.



- F.A.R. 37.601
- A performance-based contract has the following characteristics:
  - Requirements are described in terms of results vs. methods
  - Work is performed using measurable performance standards (timeliness, quantity, quality, etc.)
  - Procedures are defined for a reduction of fees or price of a Fixed-Price contract when services do not meet contract requirements
  - Performance incentives are used when appropriate

Performance Work Statement (PWS)

- Government prepared document incorporated into the RFP that states the overall objectives
- Can be used in solicitations where the intent is to provide maximum flexibility to each offeror to propose an innovative development approach

SOW vs. PWS

- Traditional SOW
  - Detailed specifications on how to do the work
  - Contractors receive little or no incentive to:
    - Develop innovative approaches
    - Increase efficiency
    - Decrease costs
    - Improve the level of customer satisfaction
- PWS
  - Encourage contractors to design work approaches that link measurable outcomes with contract incentives.

SOW for baking one dozen chocolate chip cookies

Ingredients	
1 cup butter	2 ¼ cup flower
1 cup dark brown sugar	½ cup granulated sugar
2 large eggs, beaten	2 tsp vanilla extract
12 oz chocolate chips	1 cup shelled walnuts
1 tsp milk	½ tsp water
1 tsp baking soda	½ tsp salt

Directions
Preheat oven to 325° F
Use an electric mixer to mix sugars and butter in a large bowl. Add the other wet ingredients, mixing well. Then mix in flour, baking soda, and salt. Finally, mix in chocolate and nuts.
Place tablespoon-sized balls of cookie dough on an ungreased baking sheet and bake for about 11 minutes (cooking times may vary). The cookies will be extremely soft when removed from the oven. Carefully lift the cookies with a spatula and place them on a rack to cool. Ensure there is protection from flies and rodents.
Packaging should provide adequate moisture protection so that cookies remain fresh and no more than five percent of the delivered cookies experience breakage.
Delivery must be made not later than 7 days after contract award at GovEnergy 2011, Session 8. Acceptance will be made by the COR after tasting a random sample.

PWS for baking one dozen chocolate chip cookies

What?	Bake one dozen delicious chocolate chip cookies.
When?	One week from today.
Where?	GovEnergy 2011, Session 8
How well?	Must taste good and not be broken.

Benefits of PWS

- Government pays for results, not activity.
- Maximizes performance. Contractor & government focus on results, not procedure.
- Detailed processes are not required. Allows contractor flexibility in proposing the best solution.
- Maximizes competition. Not only in cost but also ideas and innovation.

3 Key Questions

Successful acquisitions in performance-based contracts center around three questions:

1. **What do I need?**
2. **When do I need it?**
3. **How do I know that it's good?**

Can you spare some change?

- Self-Funding
  - Design-Bid-Build
  - Design-Build
  - Performance Contracting
- No money
  - Performance Contracting

Self-Funding + Design-Bid-Build

Acquisition Team Selection

RFQ Professional Services

Energy Audit Engineering Design

SOW

Contractor Selection

Energy Project Implementation

Commissioning + M&V

Self-Funding + Design-Build

Acquisition Team Selection

PWS

Design-Build Contractor Selection

Energy Audit + Project Design

Energy Project Implementation

Commissioning + M&V

Energy Savings

Performance Contracting

Acquisition Team Selection

PWS

Design-Build Contractor Selection

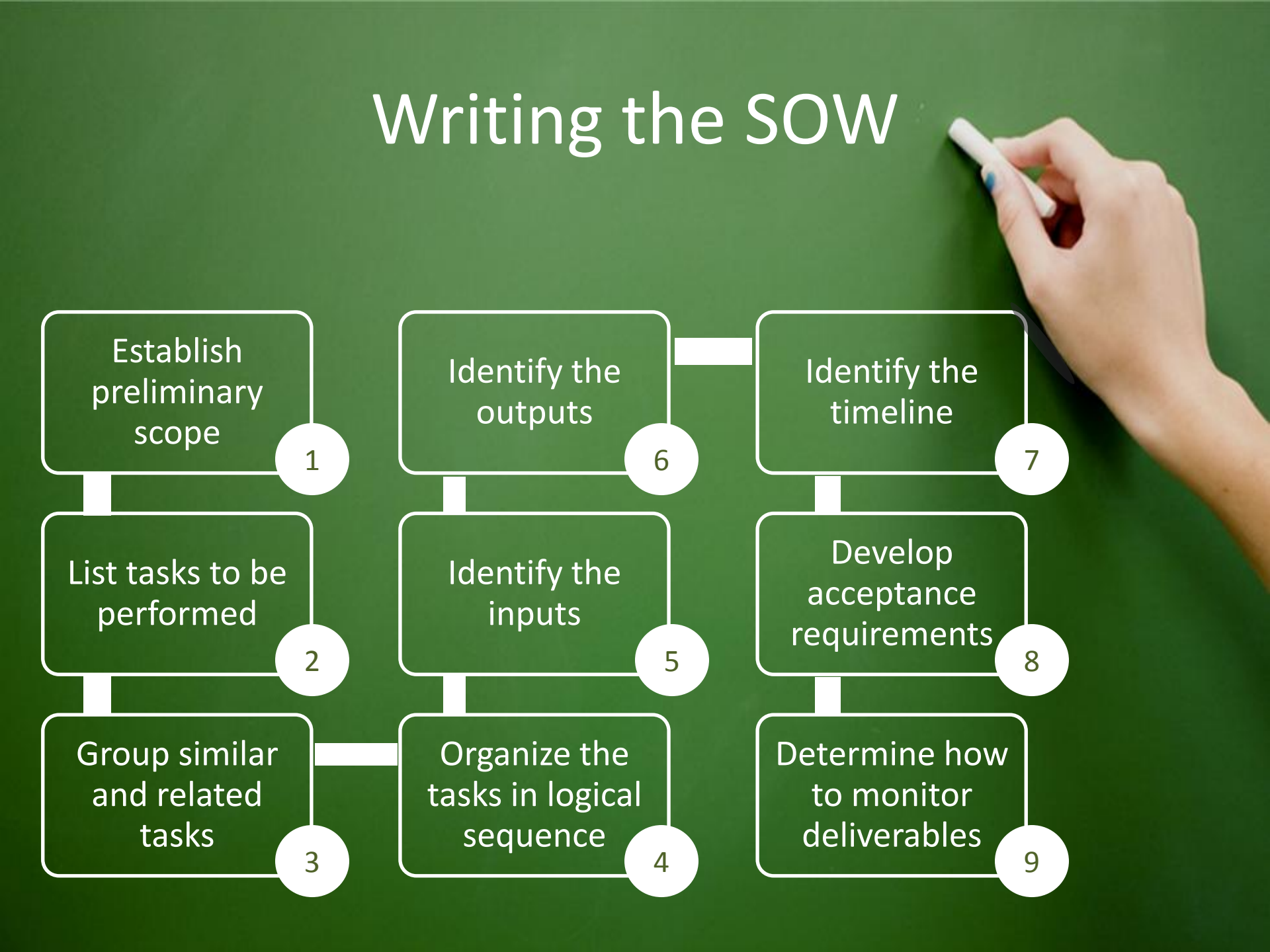
Energy Audit + Project Design

Energy Project Implementation

Commissioning + M&V

Guaranteed Savings + Finance Payments

Writing the SOW



Step 1: Establish a Preliminary Scope Statement that:

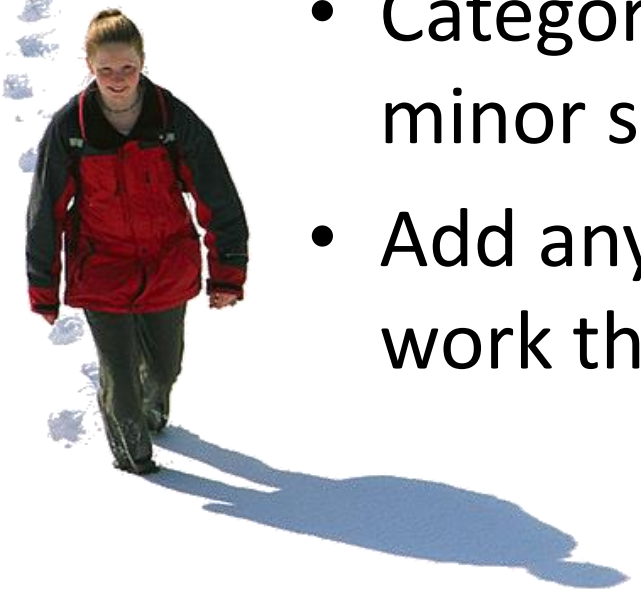
- Identifies the objective or purpose of the procurement
- Description of work to be performed
- Define the magnitude of work to be performed
- Defines the boundaries of performance and responsibilities

Step 2

List Task to be Performed that will:

- Accomplish the objective of the SOW
- Focus of “what” not “how” the contractor will perform

Step 3



Group Similar & Related Tasks

- Categorize tasks as either major or minor sub-tasks
- Add any additional tasks as you work through this step

Step 4

- Organize task(s) in logical sequence
  - Chronological order
  - Time-phase
  - Discipline
- Ensure task required meets any minimum requirements
- Delete unnecessary or repetitive tasks

Step 5: Identify Inputs

- Identify the required resources for each task (input)
  - Labor, equipment & materials
  - Government provided (if any)
- Identify any operating restrictions or procedures

Step 6: Identify Outputs

- Identify required results and or deliverables (output)
  - Energy Improvements + Savings
  - Reports
- Provides information to develop oversight plan
- Contractor responsible for the work (input to output)

Step 7

Identify the frequency and timeline of deliverables

- Assists in
  - Refining SOW
  - Method of surveillance (quality assurance)
  - Surveillance plan (Government oversight)
  - Cost estimate

Step 8

Develop performance standard or acceptance criteria expressed in:

- Quality
- Quantity
- Time
- Appearance

- Should include elements such as ***what, when, where, how many times***
- Should be appropriate for the contract
  - Necessary
  - Realistic
  - Objective and measurable

Step 9

Determine how you will monitor the deliverables

- Must be appropriate for the contract
- Cost effective
- Methods Include
  - 100% inspection
  - Random sampling
  - Periodic inspection
  - Customer complaints
  - Review of progress milestones
  - Reports by contractor

Take-away

The key factor in the success of a performance based contract is the ability of

YOU

The customer, to write good requirements

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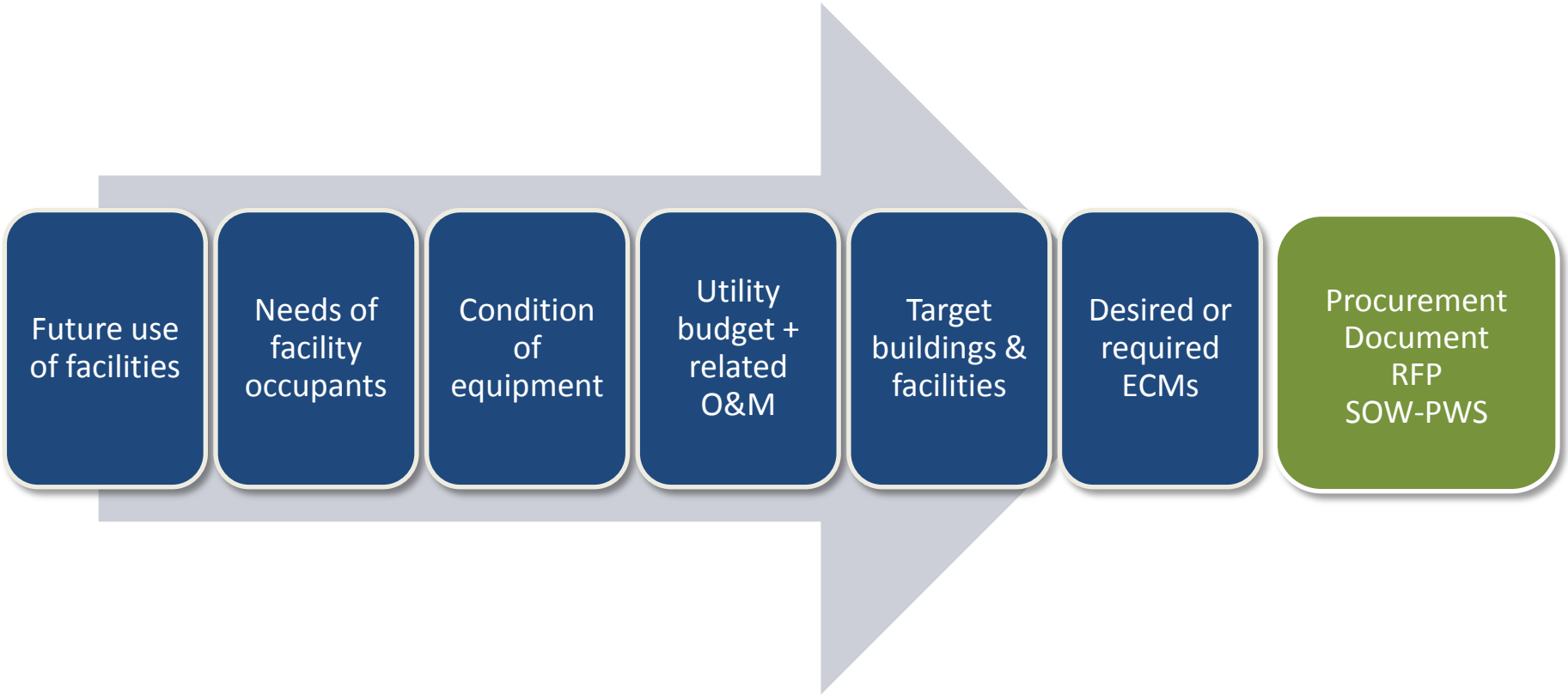
Engaging Your Contracting Officer

- Know your roles and stick to them
  - Technical
  - Contracting & Procurement
- What you should do to help
  - Get all the appropriate individuals involved early in the project
  - Obtain “buy-in” from management
  - Develop a clear sense of scope and ***suggestions*** of contracting methods
  - Clear & Concise SOW or PWS

Form an Acquisition Team

Key Issues for Team to Address



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Bulletproof Contracts

- Are a myth
  - Best foot forward
  - Know what leverage you have …or don't
- Communication is Key
  - Good Faith
  - Written & Verbal

Risk is the name of the game

Primary Types of Risks in Energy Projects

- Payment ($)
- Schedule
- Energy Savings

Allocation of Risks

- Develop a Risk Allocation Matrix to Clearly Identify:
  - Risk Area
  - Responsible Party (Contractor, Owner, or Shared)
  - Remedies, if applicable (Schedule relief, compensation)

Risk Allocation Matrix Example

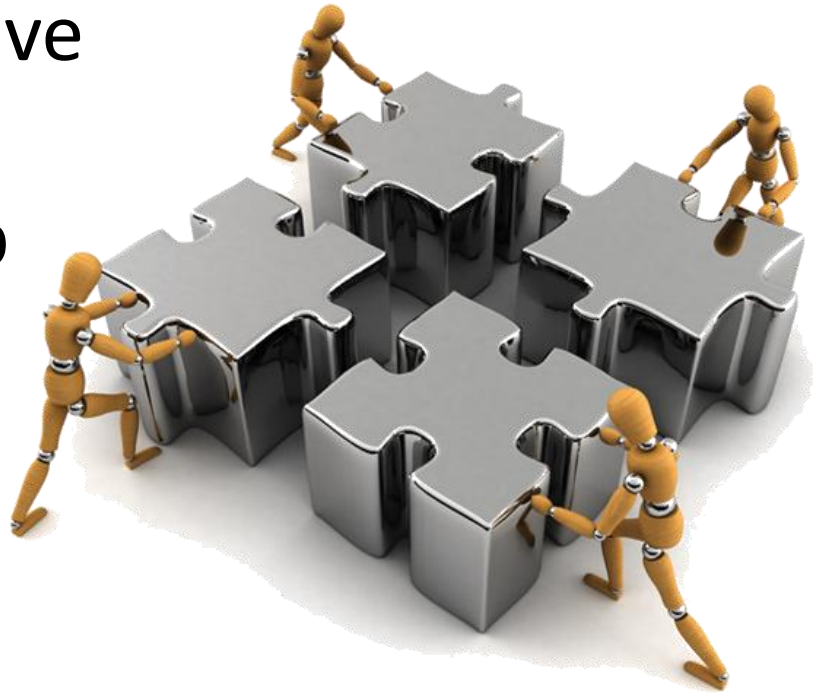
Risk Area	Contractor Risk	Owner Risk	Shared Risk	Schedule Relief	Comp. ($)
Material Prices / Availability					
Material prices	X				
Material availability	X				
Construction					
Force majeure during construction		X		X	
Coordination with contractors for other projects listed in RFP documents	X				

Remember Clear & Concise?

They will keep you and your energy project out of trouble

Communication is Key

- Partnering on the project
- Get ahead of potential problems
- Use the partnership to find solutions that are more timely and innovative
- Set clear lines of communication and keep them open at all times
- Be responsive and responsible to the team



Questions?

Discussion

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