



eProjectBuilder

User Guide:
Entering Federal
ESPC ESA
Projects into
eProject Builder

U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy



BERKELEY LAB

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Purpose of this Guide

A federal energy sales agreement (ESA) is an alternative financing mechanism, similar to a power purchase agreement (PPA), that uses the multi-year federal energy savings performance contract (ESPC) authority to implement distributed energy projects—referred to as ESA energy conservation measures (ECMs)—on federal buildings or land. The ESA ECM is initially privately owned for tax incentive purposes, and the federal agency purchases the electricity it produces with guaranteed cost savings (relative to the site’s current electricity costs). eProject Builder (ePB) is the DOE-funded secure, web-based tool that enables customers and their contractors to enter, manage, and track a variety of different energy project types.

This guide provides instruction for ePB users on how to enter an ESA project into ePB. More specifically, the guide covers:

- Software requirements
- ePB project role assignments for ESA projects
- Entering an ESA project in ePB via the online system and non-calculating data template
- ESA schedules in the ePB data template
- Fields found in the ESA data template and online system

It is recommended that users consult other training materials including the [Getting Started Guide](#) on the ePB Help & Documentation page prior to entering their ESA project in ePB.

Software Requirements




Software: Excel 2010 (Windows)/2011 (Mac) or newer.

Browser: Mozilla Firefox version 10.0.7 or higher, Google Chrome version 30 or higher, Internet Explorer 11, Microsoft Edge, and Safari 9

Entering ESA Projects in ePB

ePB Project Roles

Each project in ePB has a “Project Initiator” (who initiates, reviews, and approves projects in ePB), and a “Project Builder” (who enters and submits project data). For ESA projects, typically the customer assumes the “Project Initiator” role, and the contractor fills the “Project Builder” role. For some projects, the customer will fill both the Project Initiator and Project Builder roles. The table below summarizes the capabilities of the different project roles in ePB.

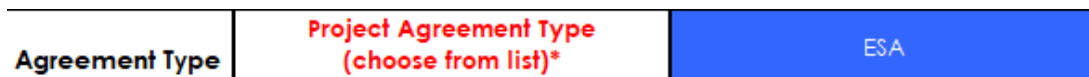
Project Initiator	Project Builder	Project Viewer
 <ul style="list-style-type: none"> Registers Initiates project Reviews project data Approves submitted project Unlocks project for revision, if necessary Invites Project Viewer(s) 	 <ul style="list-style-type: none"> Registers Enters project data Reviews project data with customer Submits project for approval Revises project data, if necessary Invites Project Viewer(s) 	 <ul style="list-style-type: none"> Registers Views project information once invited

Initiating an ESA Project in ePB

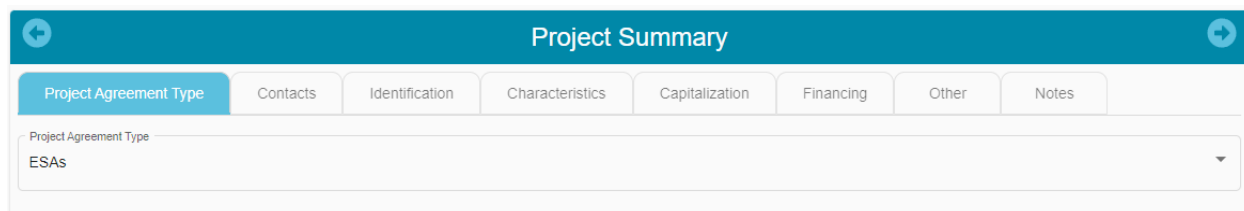
Users can choose to enter data for an ESA project by either entering data directly into the ePB online system or by uploading the ePB project data template. Users can choose to use either the calculating or non-calculating data template, or enter their project manually in the user interface. The calculating template performs amortization calculations for the performance period, whereas the non-calculating version does not, instead relying on the user to manually provide the data for all fields (except for simple summing of totals).

Once the Project Initiator has initiated a project, the Project Builder can navigate to the Project Dashboard from the Portfolio page. From the Project Dashboard, the Project Builder can either upload their data template or enter project data manually in the data fields in the online system. When entering an ESA project in ePB, the Project Builder must indicate the Project Agreement Type as "ESA." To designate a project as an ESA project:

- Entering data via the Project Data Template:** On the Summary Schedule of the ePB data template, navigate to the Project Agreement Type field (Cell C4). Choose "ESA" from the dropdown list (see screenshot below). Note: Users can access the most recent version of the data templates (calculating and non-calculating) on the [ePB Help & Documentation page](#).



- Entering data via the ePB online user interface:** Once on the Project Dashboard, click "Edit Project Details" and navigate to the "Summary" section. Click the "Project Agreement Type" tab. Choose "ESAs" from the dropdown list (see screenshot below).



The ePB data template and the online user interface both have a different “Schedule 1” for ESAs than for other project types, as well as differences in some of the other schedules. **For this reason, it is critical to first designate ESA as the project agreement type in the data template’s Summary Schedule or in the online user interface before completing any other data entry.**

ESA-Specific Schedules & Fields

ESAs have a specific set of fields in order to capture both the conventional ESPC and the ESA components of a project. First, ESAs contain a modified Schedule 1 (Schedule#1-(ee)) to capture both the ESPC and ESA annual payments. Additionally, there is a second Schedule 1 (Schedule#1-(esa)) that captures annual energy production from the ESA’s renewable asset along with the proposed ESA payment information. The data fields in these schedules specific to ESAs are summarized below.

Fields listed below that are marked with an asterisk (*) are calculated (assuming the user enters their project in the calculating template). Fields without an asterisk must be entered by the user. See Appendix A for screenshots of these schedule 1s, and Appendix B for more information on the details of each of these fields.

Schedule#1-(ee) – Costs Savings & Payments

- ESA Payments*
- ESPC Payments*

Schedule#1-(esa) – ESA Costs & Payments

- Year 1 ESA Price (\$/kWh)*
- Guarantee %*
- Energy Degradation*
- Estimated Fair Market Value (FMV) at end of term
- Annual ESA Price (\$/kWh)*
- Guaranteed Annual Production (kWh)
- ESA Payment
- Reserve Account for Fair Market Value Purchase

Designating an ECM as “ESA”

Users can designate which ECMs in their projects should be considered part of the “ESA” portion of the project (the renewable asset). To do this, navigate to Schedule 2a of the data template or to an individual ECM in the online system and choose “Yes” for the ESA dropdown field (see screenshot of user interface location below).

The screenshot shows a web interface for 'ECM - 1 - Renewable Energy Systems'. It has a teal header with a back arrow and the title. Below the header are five tabs: 'Basic Information' (selected), 'Implementation Price', 'Baseline', 'Savings', and 'Totals'. Under the 'Basic Information' tab, there are three input fields: 'ECM Number' with the value '1', 'Technology Type *' with a dropdown menu showing 'Renewable Energy Systems', and 'ESA' with a dropdown menu showing 'Yes'.

There are several changes that occur in the system when an ECM is designated as an “ESA”:

- The implementation price for an ESA ECM is *excluded* from the project-level implementation price on Schedule#2a
- Energy baseline and savings data is *excluded* from the project-level totals on Schedule#4.

- “Cost of Goods and Services” and “Project Implementation Delivery Charge” fields on Schedule#2a are no longer required for ESA ECMs (these two fields are typically required for ECMs if a project is in calculating mode/uses the calculating template).

Additionally, for projects in calculating mode, a minimum of one “ESA” ECM is required for project submittal. That means that at least one ECM must be designated as “Yes” in the “ESA” dropdown field in order for the project to be considered eligible for submission.



Submitting an ESA Project

Once all of the project data has been completed by the Project Builder (either by uploading the project data template, entering data into the user interface, or both), the project is ready to be submitted. To submit the project, go to the Dashboard, and click “Submit Project for Approval.”



Appendix A: Schedules

This appendix highlights data fields specific to ESA projects in the ePB project data template. Fields are shaded in blue and are numbered in red (see the corresponding number in the glossary table in Appendix B for field definition and other information). Consult the “eProject Builder 3.0 User Guide” on the [ePB Help & Documentation page](#) for information on *all* ePB data fields.

Schedule 1 – ESA & ESPC Cost Savings & Payments

 SCHEDULE #1(ee)-ESA & ESPC COST SAVINGS AND PAYMENTS 					
Implementation Period (Year 0)	(a)	(b)	(c)		
	Estimated Cost Savings	Guaranteed Cost Savings	Payments		
Performance Period (Year)	(d)	(e)	(f) = (g) + (h)	(g)	(h)
	Estimated Annual Cost Savings	Guaranteed Annual Cost Savings	Total Annual Payments	ESA Payments	ESPC Payments
1				1	3
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
Total Performance Period:				2	4
Total Implementation & Performance Period		Total Guaranteed Cost Savings (b+e)	Total Payments (c+f)		

Schedule 1 – ESA Cost Savings & Payments

 SCHEDULE #1 (esa)-ESA ESA COSTS AND PAYMENTS 				
Year 1 ESA Price (\$/kWh)*	5	Estimated FMV at end of term	8	
Guarantee %*	6			
Energy Degradation*	7			
Performance Period (Year)	(a)	(b)	(c)	(d)
	Annual ESA Price (\$/kWh)	Guaranteed Annual Production (kWh)	ESA Payment (a)*(b) (Guaranteed)	Reserve Account for Fair Market Value (FMV) Purchase
1	9	10	12	14
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
Total Performance Period:		11	13	15

Schedule 2a Implementation Price by ECM

SCHEDULE #2a IMPLEMENTATION PRICE BY ENERGY CONSERVATION MEASURE											
ECM - Technology Category	ECM No.	Energy Sales Agreement (ESA)?	ECM Description - Title	ECM Size	ECM Coverage (%)	Location	M&V Expense (\$)	(a)	(b)	(c)	(d)
								Cost of Goods and Services (Base Construction)*	Project Implementation Delivery Charge*	Applied Incentives	Implementation Price PDF + [a+b] - c
Project Development Price (PDF)-Technical Energy Audit and Project Proposal											
-		16									
-		-									
-		-									
-		-									
-		-									
-		-									
-		-									
-		-									
-		-									
TOTALS:											

Appendix B: Glossary of Fields

ID	Field Name	Description	Sheet	Cell	Notes
1	ESA Payments	Annual ESA Payments for each performance year (1-20).	Schedule 1 ee- Annual Cost Savings & Payments	E9-E33	
2	Total ESA Payments	Total ESA Payments for the project.	Schedule 1 ee - Annual Cost Savings & Payments	E34	
3	ESPC Payments	Total ESPC Payments for each performance year (1-25).	Schedule 1 ee - Annual Cost Savings & Payments	F9-F33	
4	Total ESPC Payments	Total ESPC Payments for the project.	Schedule 1 ee - Annual Cost Savings & Payments	F34	
5	Year 1 ESA Price (\$/kWh)		Schedule 1 ESA - ESA Costs & Payments	B4	
6	Guarantee %		Schedule 1 ESA - ESA Costs & Payments	B5	
7	Energy Degradation		Schedule 1 ESA - ESA Costs & Payments	B6	
8	Estimated FMV at end of term		Schedule 1 ESA - ESA Costs & Payments	D4	
9	Annual ESA Price (\$/kWh)	Annual ESA price for each performance year (1-20).	Schedule 1 ESA - ESA Costs & Payments	B9-B28	
10	Guaranteed Annual Production (kWh)	Annual guaranteed production for each performance year (1-20).	Schedule 1 ESA - ESA Costs & Payments	C9-C28	
11	Total Guaranteed Annual Production (kWh)	Total guaranteed production for the project.	Schedule 1 ESA - ESA Costs & Payments	C34	
12	ESA Payment (guaranteed)	Annual ESA Payments for each performance year (1-20).	Schedule 1 ESA - ESA Costs & Payments	D9-D28	

ID	Field Name	Description	Sheet	Cell	Notes
13	Total ESA Payment (guaranteed)	Total ESA payments for the project.	Schedule 1 ESA - ESA Costs & Payments	D34	
14	Reserve Account for Fair Market Value (FMV) Purchase	Annual reserve account for each performance year (1-20).	Schedule 1 ESA - ESA Costs & Payments	E9-E28	
15	Total Reserve Account for Fair Market Value (FMV) Purchase		Schedule 1 ESA - ESA Costs & Payments	E34	
16	ESA		Schedule 2a - Implementation Price by ECM	C9-C258	