

Welcome to Today's Training on Pricing and Financing ESPCs

Some Organizational Tips Before We Get Started...

- Session will be recorded
- All attendee phone lines will be muted
- Please submit your questions via the “Questions” window
- Questions will be answered at the end of the session
- Presentation slides along with the questions and answers summary will be sent to attendees after the training



ESPC Pricing & Financing for State and Local Grantees

December 16, 2010

ARRA EECBG Recipient
ESPC Webinar Series

What is TAP?

DOE's Technical Assistance Program (TAP) supports the Energy Efficiency and Conservation Block Grant Program (EECBG) and the State Energy Program (SEP) by providing state, local, and tribal officials the tools and resources needed to implement successful and sustainable clean energy programs.



TAP offers:

- One-on-one assistance
- Extensive online resource library, including:
 - Webinars
 - Events calendar
 - TAP Blog
 - Best practices and project resources
- Facilitation of peer exchange

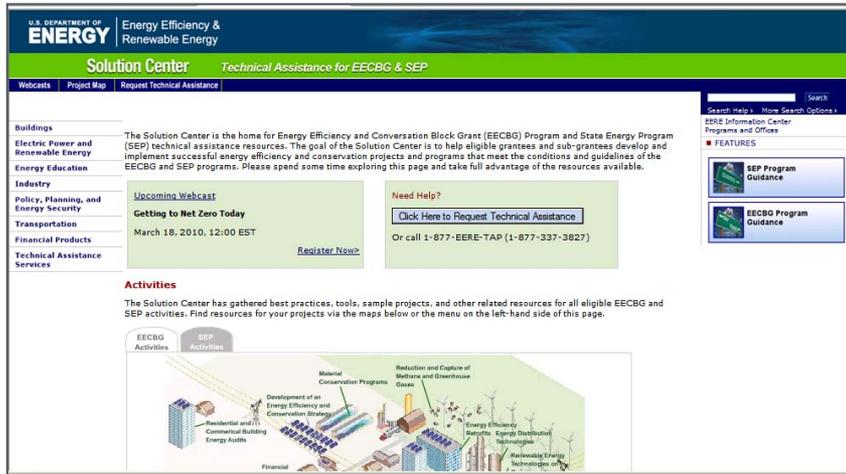
On topics including:

- Energy efficiency and renewable energy technologies
- Program design and implementation
- Financing
- Performance contracting
- State and local capacity building

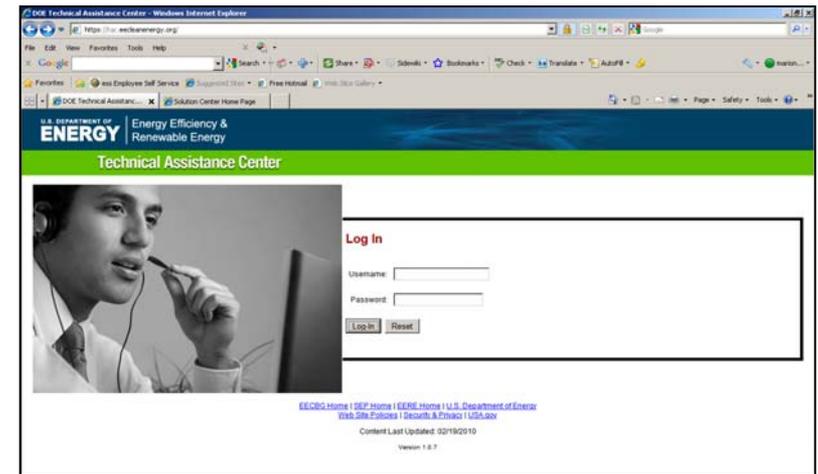
We encourage you to:

1) Explore our online resources via the [Solution Center](#)

2) Submit a request via the [Technical Assistance Center](#)



The screenshot shows the 'Solution Center' website for Energy Efficiency & Renewable Energy. The header includes the U.S. Department of Energy logo and the text 'Energy Efficiency & Renewable Energy'. Below the header, there are navigation tabs for 'Webcasts', 'Project Map', and 'Request Technical Assistance'. The main content area is titled 'Solution Center Technical Assistance for EECBG & SEP'. It features a search bar, a 'Need Help?' section with a 'Click Here to Request Technical Assistance' button, and a 'Get to Net Zero Today' section with a 'Register Now' button. There are also links for 'SEP Program Guidance' and 'EECBG Program Guidance'. The bottom section is titled 'Activities' and includes a diagram illustrating various energy efficiency and conservation strategies.



The screenshot shows the 'Technical Assistance Center' website for Energy Efficiency & Renewable Energy. The header includes the U.S. Department of Energy logo and the text 'Energy Efficiency & Renewable Energy'. Below the header, there are navigation tabs for 'U.S. Technical Assistance Center Home Page' and 'Solution Center Home Page'. The main content area is titled 'Technical Assistance Center' and features a 'Log In' section with 'Username' and 'Password' input fields, and 'Log In' and 'Reset' buttons. There is also a 'Need Help?' section with a 'Click Here to Request Technical Assistance' button. The bottom section includes links for 'EECBG Home', 'SEP Home', 'EERE Home', and 'U.S. Department of Energy Web Site Policies | Security & Privacy | USA.gov'. The footer indicates 'Content Last Updated: 02/19/2010' and 'Version: 1.8.7'.

3) Ask questions via our call center at 1-877-337-3827 or email us at solutioncenter@ee.doe.gov

Please join us again:

The DOE Technical Assistance teams will continue to provide webinars on various topics related to activities under ARRA funding that might be of interest to you.

For the most up-to-date information and registration links, please visit the Solution Center webcast page at www.wip.energy.gov/solutioncenter/webcasts



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- Briefly “What is an ESPC”
- Why do an ESPC
- How is an ESPC priced
- How is an ESPC financed



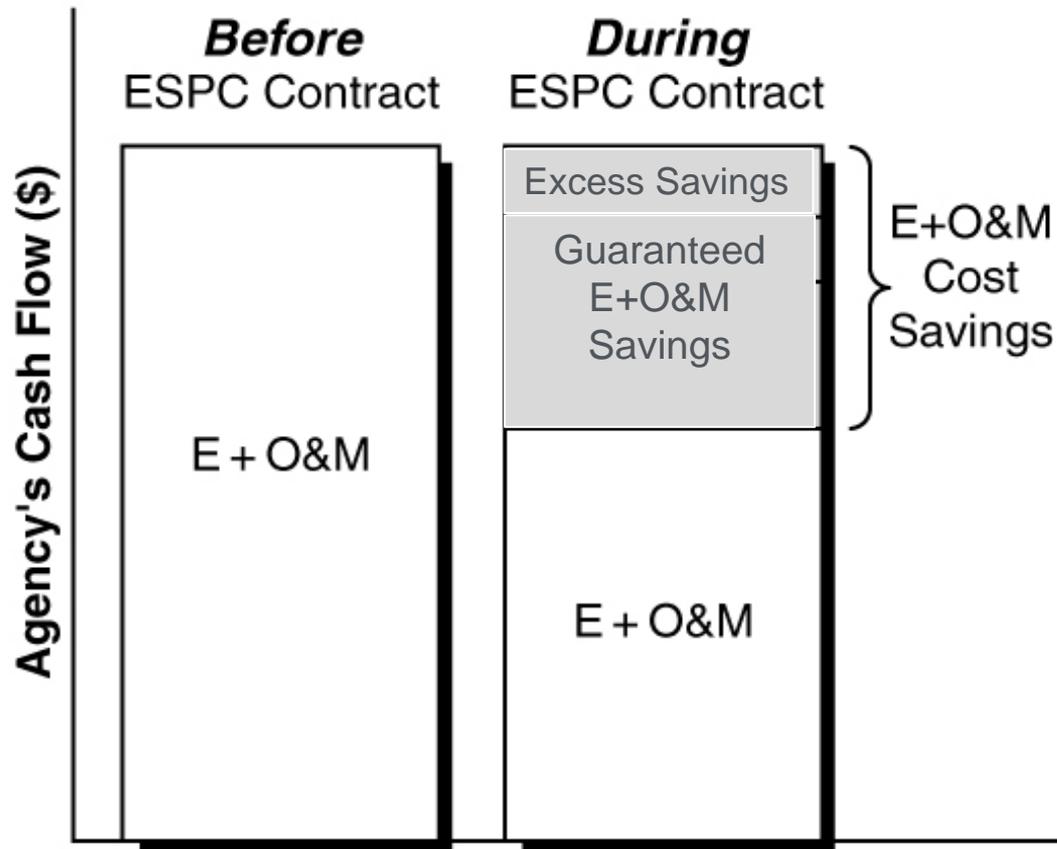
An ESPC

What Is an Energy Savings Performance Contract (ESPC)?

- Contract between an Agency and an Energy Service Company (ESCO)
- Method of paying for today's improvements with tomorrow's energy savings
- Mechanism where no up-front capital is required
- Separate financing contract (e.g., net-financing with an interest bearing escrow account)
- See Aug 5th webinar on the Solution Center



ESPC Project Cash Flow



Source: USDOE Federal Energy Management Program (FEMP) ESPC Training Program

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- Capital improvement without spending capital dollars
- Leverage EECBG funds
- Save energy, guaranteed
- Lower operating (utility) costs
- Handle deferred maintenance (finally)
- Improve indoor air quality, comfort, and productivity
- Reduce GHG
- Avoid the cost of delay

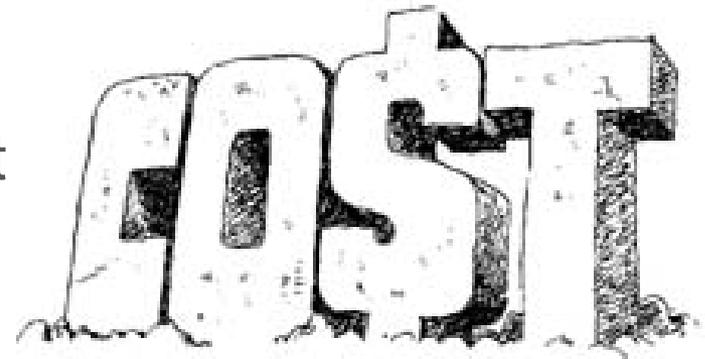


ESPC Pricing

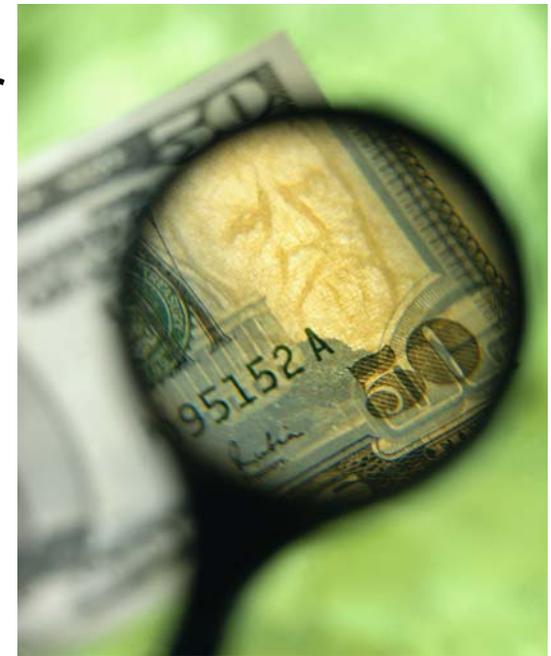
- Is the project tax exempt ?
- MBE participation requirements ?
- **Open book pricing applies**
- Any particular project phasing pros and cons?
- No Contingencies



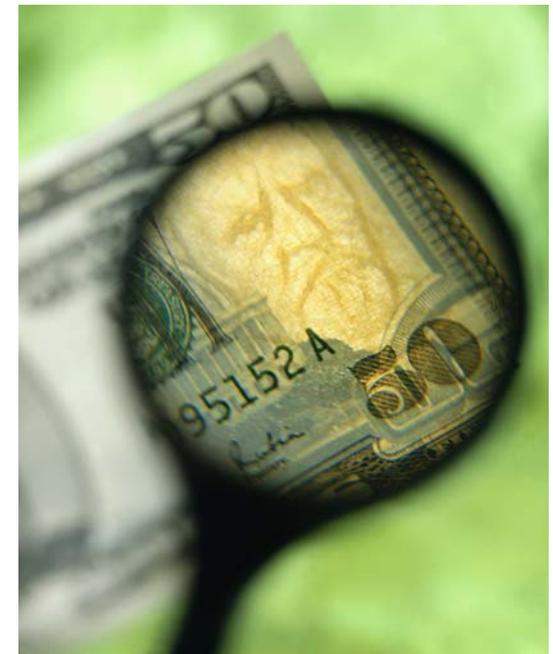
- ESCO develops cost for each ECM
- **ESCO overhead and profit rates will be pre-established, but subject to negotiations,**
- Method of applying overhead and profit to direct and indirect costs shall be specified
- ESCO develops total project cost



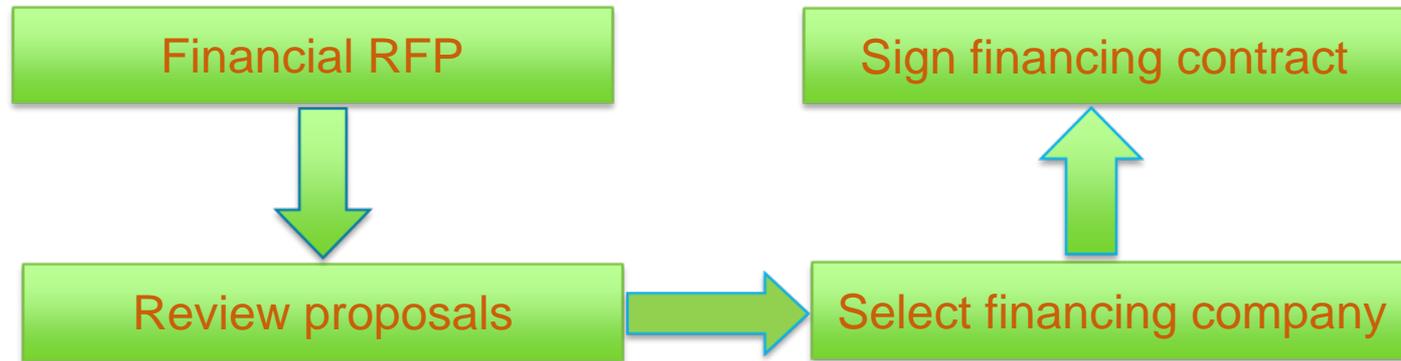
- Owner verifies that pricing is fair and reasonable
- Assure owner's complete understanding of ECMs
- Use RS Means construction cost data or similar resource to compare costs
- Get verification quotes from equipment suppliers



- Is engineering and design time and cost reasonable?
- Cost reduction without effecting quality or result?
- Is the installation schedule reasonable?
- Is Project Management time and cost reasonable?



ESPC Related Financing

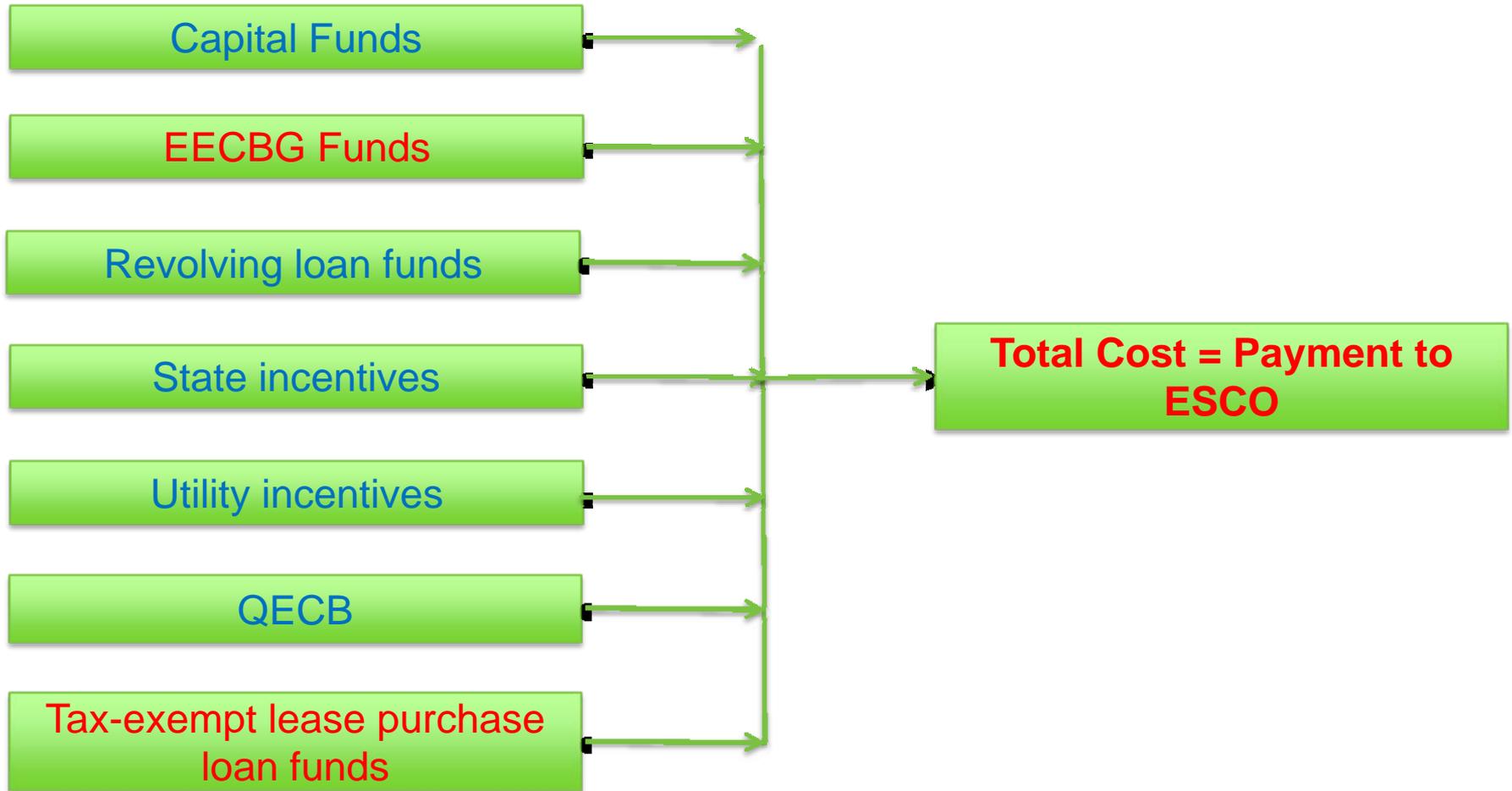


- Establish financing method
- Consider several sources of funds

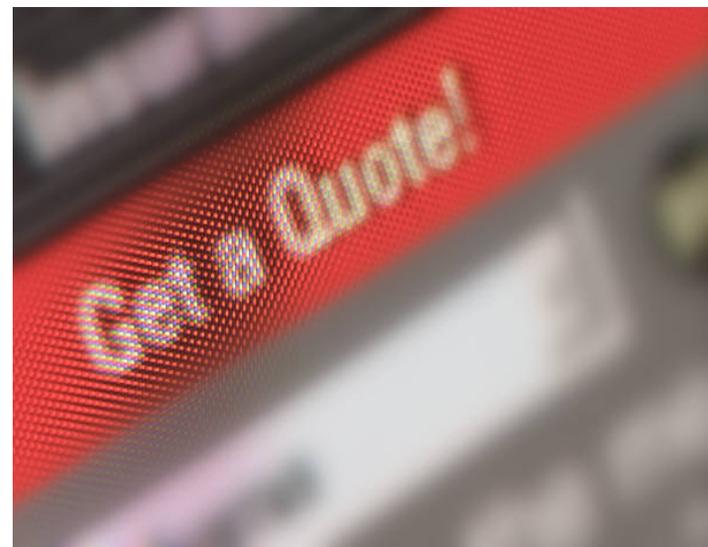
- Cash
- General Obligation Bonds
- Capital funds
- Incentives
- EECEBG funds
- TELP – Tax-Exempt Lease Purchase agreement (Typically not considered debt)



- Revolving loan fund
- To learn more about Revolving Loan Funds see 12/10/09 webcast at:
<http://www1.eere.energy.gov/wip/solutioncenter/webcasts/default.html>
- Capital lease
- Operating lease
- QECB – Qualifying Energy Conservation Bonds
- To learn more about QECB see 9/22/10 webcast at:
<http://www1.eere.energy.gov/wip/solutioncenter/webcasts/default.html>
- Master lease



- Ride State master lease financing contract if available
- Develop financing RFP
<http://www1.eere.energy.gov/wip/solutioncenter>
- Select financing company
- Select escrow institution (Typically the bank your institution uses)
- Establish interest rate on loan
- Establish interest rate on escrow



- ESCO provides accurate and realistic draw-down schedule



ESPC Financials Spreadsheet Generic 10-4-10 v1 [Compatibility Mode] - Microsoft Excel

Home Insert Page Layout Formulas Data Review View

Clipboard Font Alignment Number Styles Cells

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1			Escrow Account											
2			Escrow Int. Rate	3.50%										
3														
4			Starting Balance	Escrow interest	Payments to Contractor	Ending Balance								
5		12/15/2010	\$ 11,379,219.41			\$ -								
6						\$ 11,379,219.41								
7		1/1/2011	\$ 11,379,219.41	\$ 21,019.95	\$ 1,300,000.00	\$ 10,100,239.36								
8		2/1/2011	\$ 10,100,239.36	\$ 29,459.03	\$ 450,000.00	\$ 9,679,698.39								
9		3/1/2011	\$ 9,679,698.39	\$ 28,232.45	\$ 400,000.00	\$ 9,307,930.84								
10		4/1/2011	\$ 9,307,930.84	\$ 27,148.13	\$ 400,000.00	\$ 8,935,078.97								
11		5/1/2011	\$ 8,935,078.97	\$ 26,060.65	\$ 555,000.00	\$ 8,406,139.62								
12		6/1/2011	\$ 8,406,139.62	\$ 24,517.91	\$ 631,800.00	\$ 7,798,857.53								
13		7/1/2011	\$ 7,798,857.53	\$ 22,746.67	\$ 800,000.00	\$ 7,021,604.20								
14		8/1/2011	\$ 7,021,604.20	\$ 20,479.68	\$ 1,000,000.00	\$ 6,042,083.87								
15		9/1/2011	\$ 6,042,083.87	\$ 17,622.74	\$ 600,000.00	\$ 5,459,706.62								
16		10/1/2011	\$ 5,459,706.62	\$ 15,924.14	\$ 900,000.00	\$ 4,575,630.76								
17		11/1/2011	\$ 4,575,630.76	\$ 13,345.59	\$ 450,000.00	\$ 4,138,976.35								
18		12/1/2011	\$ 4,138,976.35	\$ 12,072.01	\$ 500,000.00	\$ 3,651,048.37								
19		1/1/2012	\$ 3,651,048.37	\$ 10,648.89	\$ 350,000.00	\$ 3,311,697.26								
20		2/1/2012	\$ 3,311,697.26	\$ 9,659.12	\$ 450,000.00	\$ 2,871,356.38								
21		3/1/2012	\$ 2,871,356.38	\$ 8,374.79	\$ 300,000.00	\$ 2,579,731.16								
22		4/1/2012	\$ 2,579,731.16	\$ 7,524.22	\$ 250,000.00	\$ 2,337,255.38								
23		5/1/2012	\$ 2,337,255.38	\$ 6,816.99	\$ 350,000.00	\$ 1,994,072.38								
24		6/1/2012	\$ 1,994,072.38	\$ 5,816.04	\$ 300,000.00	\$ 1,699,888.42								
25		7/1/2012	\$ 1,699,888.42	\$ 4,958.01	\$ 200,000.00	\$ 1,504,846.43								
26		8/1/2012	\$ 1,504,846.43	\$ 4,389.14	\$ 150,000.00	\$ 1,359,235.56								
27		9/1/2012	\$ 1,359,235.56	\$ 3,964.44	\$ 1,663,200.00	\$ 0.00								
28														
29		Total		\$ 320,780.59	\$ 12,000,000.00									
30														
31														

Payment to contractor is input

Amount is calculated to provide a zero balance at the end of construction

RLF funds are used to supplement payments to Contractor and SEO

sources and Uses | Tab 1 - STO pro-forma | Tab 2 - Cash Flow | Tab 3 - Escrow

Ready | ESPC Pricing & Financing for State and Local Grantees

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ESPC Cash Flow Analysis

ESPC Financials Spreadsheet Generic 10-4-10 v1 [Compatibility Mode] - Microsoft Excel

Home Insert Page Layout Formulas Data Review View

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Sample ESPC CASH FLOW ANALYSIS - NET FINANCING

Project Name:

ESPC with: (ESCO Name)

Project Number:

Updated: XXXX/XXXX

This Sample spreadsheet containing four Tabs depicts an ESPC project that is financed up front, the funds are put into an interest bearing Escrow account from which payments are made to the ESCO on a monthly basis during construction, based on work completed. The Lease-Purchase loan is less than what is owed to the ESCO because the interest earned on the Escrow account makes up the difference. This is referred to as NET-FINANCING

Finance Details		Remarks
Tax Exempt Lease Loan	\$ 11,379,219	Capital cost, plus SEO fee, less RLF loan
Interest accrued	\$ 602,238	before first payment (Capitalized Interest)
Escrow Interest Earned	\$ 320,781	
Payback Amount	\$ 11,981,455	
Interest Rate	3.406%	
ESCO Capital Cost	\$ 12,000,000	
Total ESCO award	\$ 15,748,360	Capital cost plus maintenance and monitoring for 13 yrs
Capital Funds	\$ -	from agency
RLF Loan	\$ 500,000	includes \$200,000 for SEO Project Management
Period (yrs.)	13	Payments due at the beginning of every 6 month period
Energy Cost Escalation (per yr)	0%	
Labor Cost Escalation (per yr)	2%	

Total Savings - Total Cost = Net Cash Flow

CASH FLOW ANALYSIS

Year	SAVINGS		Total Savings	COSTS							Total Agency Costs	Net Cash Flow Agency
	ESCO Guaranteed Energy Savings	Service & Contract/Repair Savings		Est. Loan Payment P & I	RLF Payment	ESCO Service Cost	ESCO M & V	SEO M & V	Guarantee Letter of Credit			
1	\$ 1,500,000	\$ 120,000	\$ 1,620,000	\$ 1,144,439	\$ 70,000	\$ 180,000	\$ 50,000	\$ 20,000	\$ 22,000	\$ 1,486,439	\$ 133,561	
2	\$ 1,500,000	\$ 122,400	\$ 1,622,400	\$ 1,144,439	\$ 65,000	\$ 183,600	\$ 51,000	\$ 20,400	\$ 29,157	\$ 1,493,596	\$ 128,804	
3	\$ 1,500,000	\$ 124,848	\$ 1,624,848	\$ 1,144,439	\$ 60,000	\$ 187,272	\$ 52,020	\$ 20,808	\$ 29,157	\$ 1,493,696	\$ 131,152	
4	\$ 1,500,000	\$ 127,345	\$ 1,627,345	\$ 1,144,439	\$ 55,000	\$ 191,017	\$ 53,060	\$ 21,224	\$ 29,157	\$ 1,493,898	\$ 133,447	
5	\$ 1,500,000	\$ 129,892	\$ 1,629,892	\$ 1,144,439	\$ 50,000	\$ 194,838	\$ 54,122	\$ 21,649	\$ 29,157	\$ 1,494,204	\$ 135,688	
6	\$ 1,500,000	\$ 132,490	\$ 1,632,490	\$ 1,144,439	\$ 50,000	\$ 198,735	\$ 55,204	\$ 22,082	\$ 29,157	\$ 1,499,616	\$ 132,874	
7	\$ 1,500,000	\$ 135,139	\$ 1,635,139	\$ 1,144,439	\$ 45,000	\$ 202,709	\$ 56,308	\$ 22,523	\$ 29,157	\$ 1,500,136	\$ 135,003	
8	\$ 1,500,000	\$ 137,842	\$ 1,637,842	\$ 1,144,439	\$ 40,000	\$ 206,763	\$ 57,434	\$ 22,974	\$ 29,157	\$ 1,500,767	\$ 137,075	
9	\$ 1,500,000	\$ 140,599	\$ 1,640,599	\$ 1,144,439	\$ 35,000	\$ 210,899	\$ 58,583	\$ 23,433	\$ 29,157	\$ 1,501,510	\$ 139,089	
10	\$ 1,500,000	\$ 140,599	\$ 1,640,599	\$ 1,144,439	\$ 35,000	\$ 215,117	\$ 59,755	\$ 23,902	\$ 29,157	\$ 1,507,369	\$ 133,230	
11	\$ 1,500,000	\$ 143,411	\$ 1,643,411	\$ 1,144,439	\$ -	\$ 219,419	\$ 60,950	\$ 24,380	\$ 29,157	\$ 1,478,344	\$ 165,067	
12	\$ 1,500,000	\$ 146,279	\$ 1,646,279	\$ 1,144,439	\$ -	\$ 223,807	\$ 62,169	\$ 24,867	\$ 29,157	\$ 1,484,439	\$ 161,840	
13	\$ 1,500,000	\$ 149,205	\$ 1,649,205	\$ 1,144,439	\$ -	\$ 228,284	\$ 63,412	\$ 25,365	\$ 29,157	\$ 1,490,656	\$ 158,549	
14											\$ -	
15												
Total	\$ 19,500,000	\$ 1,750,050	\$ 21,250,050	\$ 14,877,701	\$ 505,000	\$ 2,642,460	\$ 734,017	\$ 293,607	\$ 371,884	\$ 19,424,668	\$ 1,825,382	

sources and Uses Tab 1 - STO pro-forma Tab 2 - Cash Flow Tab 3 - Escrow

Ready ESPC Pricing & Financing for State and Local Grantees

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