


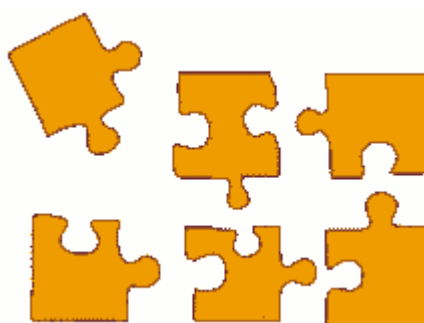
Energy Performance Contracting

You enter into an agreement with a private energy service company (ESCO). The ESCO will identify and evaluate energy-saving opportunities and then recommend a package of improvements to be paid for through savings. The ESCO will guarantee that savings meet or exceed annual payments to cover all project costs—usually over a contract term of seven to 10 years. If savings don't materialize, the ESCO pays the difference, not you. To ensure savings, the ESCO offers staff training and long-term maintenance services.

Many types of building improvements can be funded through your existing budgets— new lighting technologies, boilers and chillers, energy management controls, etc.

A qualified ESCO can help you put the pieces together:

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- Identify and evaluate energy-saving opportunities;
 - Develop engineering designs and specifications;
 - Manage the project from design to installation to monitoring;
 - Arrange for financing;
 - Train your staff and provide ongoing maintenance services; and
 - Guarantee that savings will cover all project costs.



The Many Benefits

Better Buildings

By updating or replacing equipment that is old and obsolete with newer, more efficient technologies, you will have higher-quality systems, fewer breakdowns and reduced maintenance. When building occupants experience improved lighting, better air quality and more comfortable room temperatures, they are likely to be happier and more productive.

A Wise Investment

Energy performance contracting allows you to divert funds that would be spent on energy bills into investments in your buildings. For governments, this means limited budgets can stretch further, putting taxpayers' money where it really counts. For all building owners, more modern, efficient energy systems can increase your property value and improve marketability of your buildings.

Improvements Without Sacrifice

Energy performance contracting allows you to tackle energy efficiency projects now even if no funds are available. This means you can still afford improvements when faced with budget cuts or competing priorities. And, with energy performance contracting, you can take a comprehensive approach that will optimize your benefits.

Cost Savings

New systems and equipment can lower your energy costs. Many building owners see energy savings of 15 to 35 percent and also reduce their long-term maintenance costs. You keep all the savings once the equipment is paid off, plus any excess savings during the contract term.

Proven Technology and Expertise

Since the late 1970s, performance contracting has become a widely accepted and reliable way to make energy improvements. Today's ESCOs use industry-standard practices and proven energy-saving technologies and have excellent track records for satisfying their customers. ESCOs have a financial incentive to make sure savings are achieved throughout the contract term.

One-Stop Shopping

Performance contracting offers a streamlined approach to making facility improvements because, with a single contract, you can tackle multiple energy-efficient projects throughout your facility, rather than doing one project at a time. Your ESCO can provide a full range of services and continue working with you once the projects are complete to ensure that you get optimal long-term energy performance.

Frequently Asked Questions

How do I find those energy savings?

By working in partnership with a professional energy service company (ESCO), you can tap its expertise to determine what building improvements make the most sense for improved comfort, easier maintenance and your budget. An ESCO's recommendations might include replacing lighting equipment, modifying or replacing boilers and chillers, installing modern energy management control systems, replacing motors etc.

Can't I do this myself?

Sure, if you have the time, money and expertise. But an ESCO can work with you to put together a complete package of services that meets your needs and saves you time and money. An ESCO can identify and evaluate energy-saving opportunities, provide engineering services, order and install equipment, and manage all phases of construction. To complete the package, the ESCO can guarantee the savings and even arrange financing.

How risky is this for me?

ESCOs typically work under a performance guarantee that shifts the risk to the ESCO. Your guaranteed energy savings pay for the upgrades, so you have no up-front costs. If energy savings don't materialize, the ESCO pays the difference, not you.

Suggested Questions to Ask ESCOs

One size does not fit all. Pick and choose the questions that seem the most useful to your organization or project. The point is to create a list of questions that allow you to better discern the relative strengths of each proposal and proposing ESCO. These questions are just as important in assessing which ESCO your group finds best to work with over the long term. The sample questions are:

1. HISTORY: How long has your organization been operating in the area?
2. CORPORATE AFFILIATIONS: Explain the affiliation of your company to a larger company, subsidiary, independent arm of utility company, etc.
3. CHANGES IN OWNERSHIP AND BUSINESS STABILITY: Has the company been bought/sold over that last year, five years, ten years, etc.?

4. **POST PROJECT SUPPORT:** What type of post project support does your company usually provide once a guarantee begins? Do you provide local or remote support? How are project support fees included into the overall project cost?
5. **LOCATION OF NEAREST OFFICE:** How close or far is the nearest support/service office for your firm?
6. **PROPOSED ENERGY SAVINGS:** What is the estimated range of energy and demand savings achievable for projects similar to ours and how are estimates derived? What is the estimated range of gross annual utility cost savings achievable for projects similar to ours, and the basis for those estimates?
7. **PRE AND POST DEREGULATION SERVICES:** What can your company do to assist us as utility deregulation arrives in the area? Do you offer independent consulting and negotiating services for acquiring electricity, natural gas and other energy requirements? What consulting and negotiating services do you offer for reducing utility service costs in a regulated utility environment? How can you help make our energy supplies more reliable?
8. **COMMUNICATION:** Describe the communication channels that will exist during the project. Is there a key point person involved throughout the process or are there different people who we will be contacting for each process (processes include audit, contract negotiations, installation, monitoring)?
9. **SCHEDULE:** Can you meet the proposed project deadlines? What is the current workload of those staff identified to work on this project? How well has the company done on completing past projects on schedule including both development and construction
10. **SUBCONTRACTORS:** How do you select subcontractors? How are you willing to work with us in selecting subcontractors?
11. **AUDIT:** Explain your process for conducting the energy audits? What is the process? Who is completing the audits? Explain your firm's creativity in developing a list of energy efficiency recommendations.
12. **GUARANTEE:** Describe your views on savings guarantees and the terms of your standard guarantee. Is it required? When do you recommend it? Is there a cost associated with it?
13. **MAINTENANCE AGREEMENT:** What is involved in a maintenance agreement? Is it required? How does it relate to the guarantee? What site specific operational and maintenance changes does your firm usually propose for similar projects?
14. **MONITORING & VERIFICATION:** What is involved in monitoring & verification? What methodology will be used? How does this account for changing variables such as utility rate increases, occupancy changes, climate changes, and additional energy using equipment such as computers? How are costs assigned to energy savings? How does it relate to the guarantee? How accurate have you predicted energy performance on past projects?
15. **TRAINING:** What training is provided for building operators? Who will conduct the training and how frequently? Is there an additional cost?
16. **COST:** What is the estimated cost-range for our project? Describe your approach to ensuring we get good value at a reasonable cost for this project? How will costs be reported for this project? Are you prepared to provide markup and overhead breakouts? Describe your process for project invoicing?
17. **PROBLEMS/SOLUTIONS:** What problems have you had in other performance contracting projects. What process do you propose for resolving issues and problems with us throughout this process? How will you accommodate site inspectors and their findings?
18. **FINAL OPEN-ENDED QUESTION:** Why should we select you?
19. **FINANCING:** Describe your firm's preferred approach to project financing. What financing rates are currently being accessed by your company? Who are your financial partners?
20. **LEGAL AGREEMENT:** What are key provisions and flexibility of your standard legal agreements/contracts.

Five Steps to Successful Energy Performance Contracting

Step 1.

Decide if energy performance contracting is a good solution for you.

Your first step is to consider how a performance contract would work for you. You will want to look at your facility needs, current staff capabilities and your potential to make improvements.

Find out if your facility is a good candidate for a performance contract. Your ability to use energy performance contracting depends on whether there are significant energy-saving opportunities to interest an ESCO. See the Mini-Audit below.

Assemble a team. Put together a team within your organization. They should work together to explore the possibility of a performance contract. Include maintenance staff as well as financial, legal and procurement staff at the onset.

Assess ESCO services and benefits. ESCOs offer a wide variety of services including, financing, construction management, staff training and long-term maintenance services. Decide what is important for you.

Mini-Audit

Does your facility have more than 40,000 square feet of floor area?

Do you spend more than \$40,000 a year on energy bills?

If so, an energy performance contract may work for you. It is likely to benefit you even more if you have ...

- Aging buildings or equipment;
- Recurring maintenance problems or high maintenance costs;
- Comfort complaints;
- Scarce budget resources;
- Too little energy management expertise;
- Too many demands on your maintenance staff;
- No recent upgrades of your lighting or controls systems; and Energy-using equipment that is ready for replacement.

Step 2.

Select an energy service company (ESCO).

The ESCO will be your partner for a long time, so it is important to select one that shares your vision and is able to meet your needs. A request for proposals (RFP) is an excellent way to identify interested ESCOs and compare approaches.

Develop a facility profile. Describe your facility's energy use, equipment, operating schedule, maintenance problems, and planned equipment replacement or renovation plans. Also include the utility bill history for the past three years, if available. See the sample RFP for helpful guidelines.

Develop an RFP. Customize the sample RFP to set the ground rules for your project, then invite ESCOs to respond. A list of ESCOs serving each state is available.

Invite ESCOs to tour the facility. Interested ESCOs will need to visit your facility and interview facility staff before submitting their responses.

Evaluate the proposals. Evaluate the qualifications of each ESCO for the skills, expertise and experience you need. Interview the top contenders to better evaluate their approach to the project and ability to work with you. Keep in mind that it is too early to request cost estimates. Refer to the evaluation tips in the sample RFP.

What can an ESCO do for me?

- Identify and evaluate energy saving opportunities;
- Provide engineering services from design to equipment specifications;
- Order and install equipment;
- Manage construction of a wide variety of projects;
- Provide long-term energy management and maintenance services;
- Guarantee performance and savings; and Arrange financing (if needed).

Step 3.

Contract with your ESCO to identify energy-saving opportunities.

Your ESCO will perform an investment-grade energy audit that identifies energy-saving opportunities and evaluates their potential. This provides you with critical information to later negotiate your performance contract. The ESCO will then prepare a project development agreement proposing a package of projects to include in the performance contract. See the Sample Energy Audit and Project Development Agreement with negotiating tips.

Negotiate an energy audit and project development agreement with your ESCO. Establish criteria for the audit. The cost of the energy audit can be rolled into your performance contract. It must be paid in full if you do not sign a performance contract, so you need to have funds set aside. If your criteria are not met, you do not pay for the audit.

Review the energy audit. Review the technical and cost details presented in the audit and discuss the suggested improvements with your ESCO. Your ESCO will recommend a group of retrofits that optimizes cost-effectiveness and benefits.

Projects that pay for themselves in less than 10 years are ideal

- Heating: Replace aging boilers, steam traps and pumps.
- Cooling: Replace aging chillers, cooling towers or pumps.
- Ventilation and Distribution: Install variable speed fans or replace fan or pump motors.
- Controls: Install a new energy management control system or improve operational strategies.
- Lighting: Replace lamps and ballasts or entire fixtures.

Step 4.

Negotiate an energy performance contract with your ESCO.

An energy performance contract is your road map for implementing and tracking the project over the term of the agreement. It should clearly define roles and responsibilities and explicitly state how savings are determined and how the guarantee will function.

Negotiate the scope and terms of the contract. Get input from your engineering, financial and legal staff. Negotiate costs and ask for open-book pricing to ensure that you receive good value.

Negotiate a guarantee to meet your needs. The guarantee is often the cornerstone of an energy performance contract. It usually covers the annual debt service and requires the ESCO to pay any remaining balance if expected annual savings are not reached.

Arrange financing. Your ESCO will help you secure financing unless you have your own financing source. The most attractive option for governments is usually tax-exempt financing with an annually renewable lease-purchase agreement.

Review maintenance requirements and services. In order to guarantee performance or savings, an ESCO often requires maintenance on new equipment. Additional services can include reviewing operation strategies, reporting on equipment operating problems, and repairing and replacing equipment.

Step 5.

Verify savings and enjoy the benefits.

Follow-up monitoring helps ensure that you are getting full value from your energy performance contract. The success of the monitoring effort depends on the level of detail provided in the energy performance contract.

Approve the installation. Review the requirements detailed in the contract and check that all equipment was installed as specified. Also confirm that standards of comfort such as temperature and light levels were achieved.

Operate the building as agreed in the contract. The ESCO will maintain, monitor and verify the installation as specified.

Maximize benefits through trained staff. Your ESCO will train your facility staff in optimal operation of equipment and systems. This will help ensure savings and minimize future maintenance, while maximizing the life of the equipment.

Review the quarterly reports. Meet with your ESCO regularly to monitor your success.

Reference:

<http://www.energyservicescoalition.org>