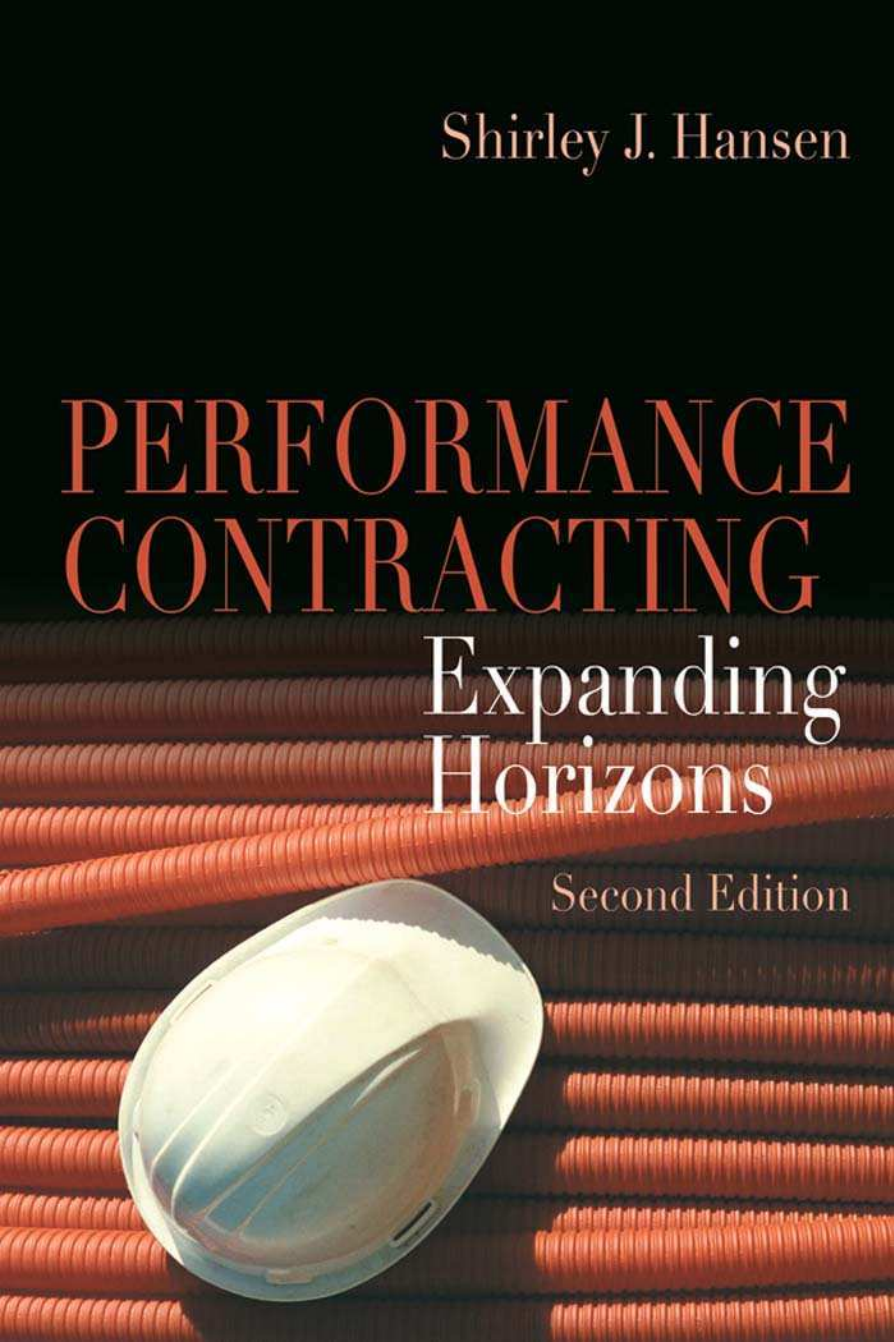
Shirley J. Hansen

PERFORMANCE CONTRACTING

Expanding Horizons

Second Edition



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2nd Edition

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Contents

Acknowledgements

In the years since I wrote *Performance Contracting for Energy and Environmental Systems,* the world of energy performance contracting has expanded and merged into the global economy. When The Fairmont Press asked that I provide a second edition of *Performance Contracting: Expanding Horizons*, I welcomed the challenge. It is an opportunity to address the constantly changing world in which energy service companies (ESCOs) ply their trade.

As the ESCO world expands, it takes on many new facets. This book, and the struggles performance contracting has had and continues to have today, would not have been possible without the devoted help of so many of our colleagues.

My sincere thanks, therefore, go to the contributing authors, who are introduced in each section where their work appears. My deep appreciation to each of them, as they took time from their very busy schedules to offer us some very valuable insights. As you will see, they are the "cream of the crop" and have given this book a much broader perspective.

To those we have worked with, such as the World Bank and the United Nations Development Program in Brazil and the Dutch government in Mongolia, and US Agency for International Development in many countries, thank you for expanding the scope of all our visions.

We have stated previously that we learn daily from our clients—from ESCOs to end users—we again offer our deep appreciation for the pleasure of working with you and learning from you. Our experiences with you in the US and 35 other countries around the world have provided the opportunity for us to gain greater knowledge about our industry and to continue our own growth.

A special thank you goes to Jeannie C. Weisman Douglas for her work on the first edition of this book. She has retired from the industry, but her inspiration and insights are still missed.

The contributing authors have brought new dimensions and exciting perspectives to the book. I am deeply indebted to Stephen A. Roosa, Brian

Todd, Michael Gibson, Paul Allen, Dave Green, Jim Lewis, Tom Dreessen, Jim Hansen and Bob Dixon. While the excellent chapters they have contributed speak for themselves, the introductions to sections where their chapters appear contain an introduction to their exceptional qualification.

Illustrations can help make a point, highlight an idea, or (gasp) break up page after page of tedious print. If you can find an illustrator who has work in the Smithsonian and major collections around the world, it's even better. Should take a lot of persuasion for someone of that caliber to do illustrations for a technical book, but the powers of a mother should never be underestimated. Once again, I am deeply indebted to our son, Stephen Hansen, for sharing his gift with us.

A very heartfelt acknowledgement goes to James C. Hansen, who not only shared some of his expertise in Chapter 17, but edited the entire book. His excellent assistance in this and all of my work at home and overseas makes it all possible.

Finally, to all of you, who continue to make our own horizons expand, we thank you.

Section I

Performance Contracting Today

The concept of performance contracting is based on the educated guess. Despite the huge environmental and economic benefits offered by energy efficiency through performance contracting, owners and potential energy service companies are often hesitant to enter into this no-man's-land. To overcome such hesitancy, this book is designed to expand on the education and lessen the guessing.

This section leads off with a totally new piece, which focuses on how we can make the business case for energy efficiency. Making the tough energy efficiency sell appears to be a problem around the world—certainly in all 35 countries where we have worked. As stated in the chapter, it is positioned first because making the sale is vital to making anything else happen. Without the revenues, the remainder of the book becomes an academic exercise.

While common threads remain in the fabric of performance contracting, the weave, color and texture are constantly changing. The first section of this book captures some of the threads of the first edition and even reaches back to the beginnings of performance contracting. Those threads, pulled together through more recent spinning, create the rich texture of what performance contracting is today.

In this second edition, "Performance Contracting Today" shifts its focus to more pragmatic aspects of performance contracting that energy service companies (ESCOs) and owners face today. In particular, we are indebted to Dr. Stephen A. Roosa for giving us a valuable view from the trenches of "An ESCO's Guide to Measurement and Verification." Dr. Roosa is an account executive for Energy Systems Group in Louisville, Kentucky, and draws on more than 25 years of experience in energy efficiency and performance contracting. He is a member of the Measurement and Verification Professionals Certification Board and a past president of

the Association of Energy Engineers.

Thoughts on "Communication Strategies" have also been drawn out of previous works and given their own chapter to highlight an area of great weakness in the ESCO industry. Effective communications and information management are consistently skills in which ESCOs fall short around the world.

The other sections of the book provide insights on the inevitable risks encountered in an industry that offers guarantees, and explores some intriguing ways to expand the ESCO offering. While it might be incredibly tempting to jump to some of the later chapters, the reader is strongly encouraged to first address Section I. It is the basis for the "education" so critical to performance contracting and the means to move closer to making guessing an art.

Chapter 1

Making the Business Case for Energy Efficiency

There is a line in the business world, "Nothing happens until somebody sells something." Taking this thought even further, one sale does not make a successful business any more than a grain of sand makes a beach.

The customers are as equally dependent on successful businesses as their energy service providers are. The energy service company (ESCO) must be there to back the guarantee and provide service and guidance through the life of the project. In fact, the expected longevity of the performance contractor is a critical criteria in ESCO selection.

Any business model, including the performance contracting model developed in this book, requires effective marketing strategies and sales techniques. Since "selling something" enables us to take the actions suggested throughout the book, it seems a good place to start.

Energy efficiency has many obvious benefits. In addition to preserving our limited fossil fuels, it reduces the client's operational costs as well as the organization's emission of pollutants. Even better, it can all be done through self-funded work. Energy efficiency (EE) offers a truly unique opportunity to make money while improving the environment. Consider it, "Doing well while doing good."

Money now paying the utility for wasted energy can be redirected into new equipment, facility / process modifications, lower operating costs, and a more competitive position in the market place. Non-profit organizations can have more money for their critical missions.

Simply put, "self-funded" means the needed investment capital comes from money already in the client's budget. It is hard to overstate to the client the benefits of using money already in the budget that is being wasted, to invest in a more efficient operation and reduce pollution at the same time. Don't let anyone compare this investment to those, which require new money to be allocated in the budget!

A major obstacle that frequently hinders the client's energy efficiency efforts is the lack of initial capital to do the EE work. Performance contracting provides that capital and expertise; and allows the customer to access future savings NOW for the immediate benefit of the client's operation.

With all this in mind, the question that inevitably emerges is: *If energy efficiency/performance contracting is such a win-win-win proposition, why is it such a tough sell?*

In countries around the world—transitional economies, industrial or developing countries—people in the energy efficiency field have trouble making the sale. Whether an energy policy maker in government, an energy manager in a corporation, or sales people of an ESCO, every energy professional shares the same frustrations. The sale to businesses, especially industry, has been particularly difficult. Since business is the backbone of the economy, the ultimate source of new revenue and a major consumer of energy, it is a sale that must be made. Further, if you can sell performance contracting to business management, chances are you can sell to anybody.

Zealous engineers, who eagerly try to sell energy efficiency and performance contracting (PC) to top management, typically find themselves relegated to the boiler room. Once the technical professional sees the exciting energy saving potential in a facility or process, he or she can get so caught up in all the technical benefits that the bigger picture sometimes escapes them.

The horrible truth is that top management is not interested in ENERGY! They don't want to hear about gigajoules or British thermal units. In fact, that stuff really turns them off. Try talking "energy" to a CEO or CFO and you are almost guaranteed a one-way ticket to the catacombs where the heating and cooling systems are housed.

To communicate effectively with management, three approaches structured to respond to the businessman's point of view are suggested: (1) viewing energy efficiency and conservation as a very cost-effective delivery system for meeting environmental mandates and/or social responsibility—a way to make money while reducing emissions; (2) positioning energy savings as a percentage of the bottom line; and (3) providing an effective cost/benefit analysis procedure, which compares the net benefits of energy efficiency and conservation to increased production.

Finally, we need to remind ourselves and top management as forcefully as possible that EE can be a self-funding endeavor. CEOs and CFOs

have a tendency to compare energy investments to other business investments and fail to appreciate that no new money is required to do this work. When CEOs and CFOs start talking IRRs, hurdle rates, and ROIs with a two-year ceiling, it's a cinch they are trying to fit the EE investment into their regular investment model. Then, it is time to remind them once again that the money needed for energy investments is already in the budget—and being spent on wasted energy.

The Tough Energy Efficiency Sell

A basic tenent of any EE sales message should be:

Energy efficiency is an investment; not an expense.

Moreover, energy efficiency is a *very sound* investment. In the ESCO industry, we talk rather glibly about 2-year paybacks, but it's hard to find another source that gives you a 50% interest rate. Imagine the stampede to a bank that offered a 50% interest rate! Yet, our potential clients walk right by the opportunity on a daily basis.

EE is an incredibly cost-effective way to cut operating costs; and, through performance contracting, those costs can be cut without any upfront capital expenditures. Reducing operating costs is good for the customer, the market, and the country's economy. Further, studies have shown that energy efficiency (EE) creates five times as many jobs per megawatt hour as does the creation of new power generation—and for about one-eighth the capital investment. At the same time, energy efficiency is also reducing pollution emissions. We hear so much about our environmental needs and global warming, but so very, very little about the most cost-effective way to meet such needs.

With so many benefits, people should be lined up at the door; eager to invest in energy efficiency. But ironically, convincing people they should reduce energy consumption and save money is hard work. Why is it such a struggle to make the case for energy efficiency? And what can we do about it?

Several years ago, a dear friend who was in top management of a major corporation, gave me some sage advice, fundamental to our problem. He said, "Shirley, you folks must learn to fish from the fish's point of view." Good idea, but first we must consider the fish we are trying to catch.

The Anatomy of a Customer

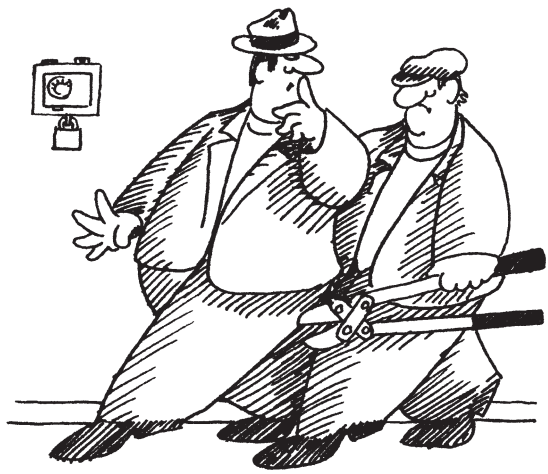
We have two body parts in our customer that need unique and special attention. The same sell will not work for both. Facility people, including O&M personnel, need special consideration. Then, we need to consider how we can sell effectively at the management level.

THE FACILITY PERSPECTIVE

In the eyes of facility managers and O&M personnel, you, as an EE vendor are usually not part of the solution. YOU ARE A BIG PART OF THE PROBLEM. A major task for every seller, who has contact with the customer, is to turn that around.

Against a backdrop of management that doesn't care and facility people who have every reason to resent you, we begin to get a picture of why energy efficiency is a tough sell.

Before we get to selling anything, we must first get the "fish's" attention. To do so, we must talk *their* language and make the case in *their* terms. Once we have their attention, we must learn to bait the hook with a particularly juicy morsel. What is attractive to our facility managers or O&M personnel "fish?"



Fishing in the Facility Pond

"Catching" the facility people is critical for two reasons. They may not be the ones who say "Yes" to a deal, but their "No" can kill it. If you get the deal and you have not won over the people in the trenches, they can make your life miserable.

If, on the other hand, the deal is structured to get them something *they* believe they need, it's amazing what can happen. A program that meets some key O&M needs can make an incredible difference. In addition to tools or specific O&M measures, the often unvoiced "need" is simply for a bit of the recognition that most facility people hunger for. For example, as a 'thank you' from one energy service company (ESCO), the firm took the facility people from the more successful project sites to a football game. The future savings more than paid for the tickets! A certificate can be less expensive, but can often do the job just as effectively if it is awarded to plant engineers, building custodians, etc. before their boss or their board. That piece of paper, often posted on the boiler room wall, can go a long way toward cementing a partnership. Furthermore, these people talk to their friends in other organizations and the word spreads. Some of an organization's best selling takes place after the contract is signed!!

But we are talking about getting the sale, so we need to get to them up front. The first law of effective selling is: LISTEN. Look around, the best salesmen are good listeners. A key part of the sale is finding out what the O&M folks want and finding a way for them to get it. Contracts make an excellent vehicle for earmarking some of the savings for O&M needs.

For many years, many of us, trying to sell energy efficiency to the CEO, thought we were turned away due to the discomfort top management felt when the subject of "energy" was introduced. It certainly played a part, but in retrospect we now realize that other concerns, often more important concerns, were at play.

As Management Sees It

The horrible truth is that top management is just not interested in *ENERGY!* They don't want to hear about Btu or kWh. Finally, we have figured it out: CEOs and CFOs DO NOT BUY ENERGY; *they buy what it can do.* They buy lighting, running motors, and processing. It's only when the switch is flipped and nothing happens that management becomes aware of the critical role energy plays in its operation.

We simply cannot get them to worry about using something more efficiently, which is basically non-existent in their lives. Whether the blackouts are in Italy or California, in an incredibly short time, it's back to business as usual while costly downtimes seem to be forgotten.

To fish from the fish's point of view, we must first realize that top management is interested in delivering promised results—be it student achievement, patient care, or selling widgets. Of these, the hardest sell around the world seems to be industry. A good place for us to concentrate our thoughts at this point.

Such details as "energy" are just noise to management—a small irritating noise for someone else to deal with. This noise factor is part of a much bigger problem: management is "facility blind." Managers can walk the corridors, but they seldom see the facility itself until something goes wrong.

The problem is further exacerbated by the facility people themselves. When the operations and maintenance (O&M) budget is cut, facility people look for ways to stretch what they've got. From the management point of view, things still look good; so the logical conclusion is that it was a good place to cut the budget. The better the facility people do their jobs the more invisible they become. And the more frustrated.

Then, someone selling energy efficiency wanders in with the resources facility people covet and proceeds to tell the boss about ways it could be done better. Does it come as any a surprise that some facility managers resent those EE salesmen? If we were to walk in their shoes for a while, we'd become more sensitive to their needs and in a better position to get their attention.

BAITING MANAGEMENT'S HOOK

No matter how enticing the bait, it doesn't do any good unless you first bring it to the fish's attention. So rule #1: GET MANAGEMENT'S ATTENTION.

When we go after the really big fish, we must listen very carefully and address their concerns. Listen to the folks who sell to management regularly, they will tell you that management is interested in money, being competitive, the budget, money, reducing operating costs, money, environment, and *money*.

If we carefully analyze what they are telling us, "money" would seem to be the key. Since the money for wasted energy goes up in smoke, one way to get their attention is to literally burn money. Pile some dollars/euros (on a fireproof tray of course) on the desk and put a match to it. If that is not legal, burn another country's money. Then, remind them that THEIR

money, which is being paid for wasted energy, is currently going up the smokestack. *NEVER TO BE RECOVERED.*

Or, throw money around on the floor—all around the room. If you make the denominations big enough, someone is going to go pick up a few bills. Then you can start talking about the money per square foot/meter that are just laying around in their facilities. Money that will disappear if they don't get busy and do something about it.

SETTING THE HOOK

Once we have their attention, we need to back it up with something substantive. Consider: (1) energy efficiency and conservation are very attractive ways to help the client **meet environmental mandates** and/or be socially responsible making money while reducing emissions; (2) the client can be provided a new perspective of energy savings as a **percentage of the bottom line**; or (3) we can provide them an effective **cost/benefit analysis** procedure, which compares the net benefits of energy efficiency to increased production.

Environmental Benefits

It goes without saying that a good marketing strategy is to study the market and the individual customer before you try to make the sale. Part of that research should check if there are environmental mandates, or if there is pressure to meet social responsibility. If either situation exists, demonstrating how they can make money through energy efficiency while improving the environment can be very attractive.

Consider giving them a worksheet, which will help them calculate