



Western Oil & Gas Company: Strategic Financing for Energy Efficiency *(ABSTRACT)*

For more than a decade, WRI's Sustainable Enterprise Program (SEP) has harnessed the power of business to create profitable solutions to environment and development challenges. BELL, a project of SEP, is focused on working with managers and academics to make companies more competitive by approaching social and environmental challenges as unmet market needs that provide business growth opportunities through entrepreneurship, innovation, and organizational change.

Permission to reprint this case is available at the BELL case store. Additional information on the Case Series, BELL, and WRI is available at: www.BELLinnovation.org.

Abstract

Western Oil & Gas Company Corporation was considering a \$2 million capital improvement project to upgrade motor systems at its Richmond, California oil refinery. In its original incarnation, Western engineers deemed the upgrade unwise due to operational limitations. Although it would increase energy efficiency and improve equipment reliability, the diversion of resources to implement the upgrade would risk disrupting 24-hour plant operations for a project that would not compete favorably with other potential capital expenditures.

Summary: A complex system of actors and interests

Western is a *Fortune 50* company focused on oil and gas production. In 1997, Western's net income exceeded \$3 billion from revenues of over \$40 billion. The company produced over 1.5 million barrels of oil and gas each day; 250,000 barrels were processed at the Richmond refinery. The Richmond refinery's output was almost entirely gasoline; a small remainder was made into other petroleum products.

In May 1997, Western was considering a \$2 million capital improvement project to upgrade motor systems at its Richmond, California oil refinery. The motor system upgrades that Western was considering were not crucial from an operational standpoint. Their most obvious benefits to the refinery would be improved energy efficiency and process reliability. When compared to other capital projects at Western, these benefits were not viewed as a high strategic priority.

To investigate ways to balance the risks of the project with its true benefits, Western retained an energy services company (ESCO) named Energy Services and a specialized financing company named ABB Energy Capital. With the expertise of these partners, the Western plant manager was able to explore a set of financing options with differing implications for the project's costs, benefits, and risks.

Appendix 1

The lender will make a thorough analysis of the projected savings in order to determine the likelihood that actual savings will be sufficient to cover the loan payments. The lender also will want to evaluate the esco in terms of project experience, as well as evaluate the energy savings agreement as a document that can withstand the test of time. The agreement should set forth procedures in case of any material changes that could possibly occur in the future. Termination clauses or changes in customer operating hours are just some of the conditions that should be addressed. In addition to reviewing projected revenues and expenses pertaining to the project, the lender will want to review two or more years of audited financial statements from the esco and the customer

Since the lender is primarily relying upon the strength of the project, the credit strength of the customer is not the only factor in developing an interest rate for the loan to the esco. Usually the rates are 9-14 percent, but these figures will vary. If a default occurs between the esco and the customer and the customer has the right to reduce or cease its payment obligation, it is the lender who is most at risk of suffering a loss.

The esco should involve the customer's financial executives early in the process of developing a project, since they will be making the ultimate capital investment decision. The lender should bring value to the transaction by offering a variety of financing choices and a commitment to work as part of the team. All parties involved should aim to achieve a mutually beneficial project structure that will ultimately exceed the customer's expectations.

Judging from the requests for proposals recently issued by the U.S. Departments of Energy and Defense for performance contracts that exceed \$ 1 billion in value, federal projects clearly represent a major opportunity for escos. As the federal government consumes nearly \$ 8 billion per year in utility bills, the goal by 2005 is to produce a 30 percent reduction in these bills compared to 1985 levels, which represents approximately \$ 5 billion in energy efficiency projects.

It is crucial that federal contracting officers, escos, and financiers understand the importance of working together as a team. Together they can build successful, long-term projects that will save tremendous amounts of energy, natural resources, and dollars.

Fred Wainwright is vice-president of marketing for Energy Capital Partners, a company that provides financing for energy-efficiency projects.