X Performance Contracts

Participating Countries

Finland
France
Italy
Japan
Netherlands
Norway
Sweden
United States

The IEA DSM Programme is adding a unique international dimension to the development of performance contracts and other Energy Service Company (ESCO) contracts. Although the main objective of this work is to facilitate the greater use of such contracts in the participating countries—Finland, France, Italy, Japan, the Netherlands, Norway, Sweden and the United States. The collaborating countries are sharing lessons learned and measures to further develop performance contract mechanisms and are contributing to an expanding international market for performance contracting.

As part of DSM Task X, *Performance Contracting,* each participating country has summarized the present situation in their country and either has identified the lessons learned, if they have a long experience with such contracts, or has identified specific needs and barriers for the introduction and development of such contracts. In addition, each country has suggested actions and prepared a country plan or "toolbox for national activities." For each country report, three fundamental services were included 1) technical aspects, such as the installation of more effective air distribution systems, boilers and chillers, better control systems, lighting, and HVAC products and services; 2) guarantee of performance; and 3) measuring and monitoring of energy during short or long periods before and after upgrading.

The material collected in the country reports shows a range of services that can be included in Energy Performance Contracts. And, many of the examples show energy savings of 20-40%. A U.S. NAESCO report shows a median savings of 23% of the total electric bills for many of the projects studied.

The advantages of Energy Performance Contracts are numerous. They include:

- For ESCOs
  - Profit
  - Growth and diversification
  - Synergy with others activities
  - Legal incentives
- For End Users (private and public service organizations, such as banks, shopping and sports centers, and industries)
  - Savings
  - More rapid implementation
  - Transfer of management responsibility to the ESCO
  - Better quality and reliability of the service received
  - Improvement of indoor conditions
  - Updating of plants to the standard
- From an Administrative Viewpoint
  - Provides a single procurement procedure performed against a number of different procurements (e.g., design, installation, fuel supply, management, maintenance)
  - Allows resources for an energy efficiency investment plan to be derived from the ordinary energy budget for costs (which is generally beyond dispute)
  - Simplifies administrative resposibilities by outsourcing energy services and passing on relevant responsibilities to the ESCO
- From a Technical Viewpoint
  - Helps to overcome possible technical/management shortcomings of the Public Administration (e.g., schools, hospitals and office buildings) in the energy field
  - Transfers technical risks relevant to interventions and management of the energy services from the Public Administration (PA) to the ESCO
  - Provides a warranty on the quality of service based on the efficiency conditions the ESCO is bound to offer as part of its services.

Models for Contracts & Financing

Examples with large variations

Contract	Years	Profit Sharing		Financing Responsibility	
		Owner	ESCO	Owner	ESCO
Shared savings First Out	Year 1-4 Year 5-8	0% 100%	100% 0%	0%	100%
Shared savings	Year 1-8 Year 9-	50% 100%	50% 0%	0%	100%
Guaranteed savings	Variable 4-15 years	80% 50%	20% 50%	100%	0% only advice
Mixed	Variable over years and type of project	70% 30%	30% 70%	50%	50%

continued on page 2

Performance Contracts *from page 1*

■ From a Financial Viewpoint
- – Overcomes the problem of chronic lack of budget for project financing, which is typical for PAs
- – Allows the PA to route financial resources towards other kinds of investments more relevant to their corporate calling
- – Allows the PA to implement their plan of refurbishment at a lower cost, owing to the stronger bargaining power of ESCOs in the market of energy technologies and products
- – Allows the PA to gain immediate economic savings with respect to the historical costs, against no direct investment
- – Grants the PA the right to take over the energy efficient devices and plants included in the ESCO supply service, upon expiration of the contract

Based on the country reports, a number of actions, such as government policy initiatives, clarifications of the legal framework and information dissemination, have been identified to build trust in Energy Performance Contracts.

The next step in this Task is to discuss procurement guidelines in order to determine how the Energy Performance Contract model can fit into existing public procurement regulations, such as the World Trade Organization Agreement on Government Procurement, the European Procurement Directives or the existing rules in Japan and the United States. All the participating countries see the role of a large government or public organization taking the initiative to further the use of performance contracting arrangements as critical. It is the hope, as the Task X Operating Agent notes, " that this Task will contribute to major energy savings in buildings, the substantial creation of important new business activities, and a more efficient use of limited investment capital."

For more information contact the Task X Operating Agent, Hans Westling of Promandat AB, Sweden, e-mail: hans.westling@promandat.se (see the IEA DSM web site for Task description and contact address)

EPC PROCESS – PROBLEMS – ACTIONS – RESULTS

Problems	Short Term Actions	Long Term Results
1. Credibility & Trust	Information SAVE, Best Practice Creation of networks Demo Projects World EPC Conference Success stories	World EPC Network established "ISO 18000" Energy management Accreditation
2. Process & Procurement	Network of skills created Energy Agency, FEMP Clarification of Rules Guidelines Alt. with energy Audits and Feasibility study Two-stage, prequalification Conditional Award of Contract	Different alternatives for initiation of EPC-projects accepted by all stakeholders Both Owner, Energy Agency and EPC-initiated
3. Contracts	Public Property Owners establish national Standards As FEMP, States EC, WTO	A "FIDIC" Energy Perform. Contract Conditions finalised Manuals (web & printed) for EPC-projects generally available
4. Financing	Banks awareness Local government allowed to enter multiyear-contracts EBRB & World Bank National Economic incentives Government guarantees Warrantee formulations Insurance arrangements	White and Green Certificates Trading an accepted mechanism for Climate Actions EPC Performance Bonds established
5. Measurement & Verification	Analysis of existing Protocols Pilot Projects Simple benchmark-alternatives Yearly measuring	Simplified benchmarking and repeated measuring routines established
6. Market *Only limited in most countries but increased interest*	Start of breakthrough for EPC in many OECD countries Public bodies launch EPC comp. – both large projects & parts of smaller	EPC-solutions have penetrated OECD-countries and is increasing in transition & developing countries

http://dsm.iea.org

Visit the IEA DSM web site for more information on Programme activities, publications and contact names.

The DSM Spotlight is published four times a year to keep readers abreast of recent results of the IEA Demand-Side Management Programme and of related DSM issues. The viewpoints or policies expressed in this newsletter do not necessarily reflect those of the International Energy Agency, the IEA Demand-Side Management Programme member countries, or the participating researchers.

For more information on the Programme, its work and contact addresses, please visit our website at ***http://dsm.iea.org***

No. 18, November 2002

Prepared for the IEA Demand-Side Management Executive Committee by
Morse Associates, Inc.
1808 Corcoran Street, NW
Washington, DC 20009 U.S.A.
Editor:
Pamela Murphy