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INTERVIEW

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Even if energy prices are currently low, it is nevertheless clear: they will not remain that way. Slowed growth in energy production and an ever declining reserve capacity will continue to lead to high energy prices. Rising environmental consciousness will make the call for greater energy efficiency even louder. At the European level this change is perceptible and the legislative context for new possibilities for energy savings is created with various directives. An important instrument for this is EPC, Energy Performance Contracting. The benefits of Energy Performance Contracting are promoted by the European Association of Energy Services Companies (eu.ESCO). Its head, Stephane Le Gentil, Johnson Controls France, spoke with us about the need for new EPC impetus.
Stéphane Le Gentil was the Chairman of the Working Group and participated in the founding of the eu.ESCO group under the eu.bac umbrella. In this interview he presents the potential of energy performance contracting and calls on involved parties to take more advantage of contracting as an effective instrument for modernizing home and building automation.
The first EPC conference for public building solutions was held in The Hague in the Netherlands in October 2009.

Energy Performance Contracting for Public Buildings

The key to cost-effective energy efficiency in Europe

1. What is EPC – Energy Performance Contracting?

Energy Performance Contracting is a practical tool for improving energy efficiency in existing buildings. EPC is a long-term partnership between a customer and an energy services company (ESCO). The ESCO makes a detailed audit of customer buildings and defines the facility improvement measures (FIMs) along with the savings these will generate.

EPC is an agreement made between the ESCO and the customer who selects the FIMs that will be implemented. The ESCO implements the FIMs and guarantees the results as per the contract. EPC allows the customer to improve the energy efficiency of its facilities without any up-front capital cost. The ESCO guarantees that the improvements will generate sufficient savings to pay for the project over the term of the contract.

2. What is the legislative context for EPC?

The following EU directives form the basis for EPC: the Energy Performance of Buildings Directive, the Energy End-use and Energy Services Directive, and the Energy Efficiency Action Plan.

The Energy Performance of Buildings Directive (Directive 2002/91 and its soon-to-be-pulished revision) promotes improvements in the energy performance of buildings. The Energy End-use and Energy Services Directive (Directive 2006/32) stipulates that as of January 2008, Member States are to draw up national action plans to achieve 1% yearly savings in the use of energy when sold to the end user. The Energy Efficiency Action Plan aims to achieve a 20% reduction in energy consumption by 2020.

3. Why do we need EPC?

When one analyzes energy use by sector, it is clear that buildings are the largest users of end-use energy. They consume 40% of all energy used. Thus, buildings offer the largest single-sector potential for energy savings. Furthermore, global energy consumption for buildings is expected to grow by 45% between 2002 and 2025. EPC fits in as a tool tailored to retrofitting buildings in order to provide energy & operational savings. It should be made clear that EPC avoids the use of public money to retrofit buildings.

4. How does EPC work?

EPC is designed to provide funds for a variety of building-related purposes encompassing all aspects of energy efficiency improvements. For example, EPC could finance plant upgrades and refurbishment, general facility modernization, building repairs and improvements, equipment replacements and staff training in handling the new equipment.

Each EPC is a customized solution designed to deliver results specifically desired by a client. The results of EPC are guaranteed contractually by the ESCO that implements it.

5. How is EPC financed?

EPC is a comprehensive, self-funded program with no required capital costs. The equipment and technologies to be installed are paid for by the guaranteed energy and operational

savings. The financing itself is tailored to the individual contract.

6. Please explain more about the EPC process. How is EPC set up?

EPC replaces all the solicitations and agreements of a conventional contract with one single proposal. It begins with a preliminary evaluation of the potential for efficiency improvements in a facility. The customer awards a contract to a single ESCO which performs a detailed study of the energy and operational efficiency opportunities for the customer's facility. Once the study is complete the customer approves the ESCO's final list of efficiency improvements. Then the ESCO prepares plans and specifications, and implements the agreed-upon efficiency improvements.

When commissioned, the energy improvements are then verified throughout the life of the contract using a standard proven method, such as IPMVP (International Performance Measurement & Verification Protocol).

7. What are the benefits of EPC and who can use it?

There are a number of benefits to EPC, not least of which is the fact that it is a solid investment in the future. It also allows for budget-neutral upgrades and clarity in budgeting. A further benefit is guaranteed energy savings results since the ESCO pays the difference if the savings fall short of guaranteed projections.

Because improvements are paid for from money realized through energy savings, EPCs are more convenient when compared to conventional building modernization contracts. Additionally, EPC provides benefits for local public authorities in that it is completely self-funded, there is no risk, and it creates job opportunities in local communities. EPC also resolves short term problems such as budget shortfalls due to high energy prices and provides for immediate improvement in productivity without disrupting operations.

Since national and EU-level energy mandates such as reductions in CO_2 emissions or energy savings targets are fulfilled, EPC provides a benefit to national governments. Long-term challenges and goals related to sustainable development and environmental protection can thus be met.

8. Is EPC a proven model? Where has it been implemented?

EPC has been used by public authorities for more than 20 years in North America in order to retrofit and modernize public buildings. Thousands of public buildings, such as universities, community buildings, schools, etc. have been refurbished and modernized using EPC.

EPC also exists in Europe, mostly in Germany and Austria. For example, hundreds of buildings in the city of Berlin have been refurbished using EPC for more than 10 years.

Thank you Mr. Le Gentil for the interview.

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