

Ukraine

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ACTIVITIES

The word "ESCO" was mentioned in Ukraine, Kiev, for the II time in 1996 during USAID lectures delivered by Shirley Hansen for Ukrainian experts and leaders. This program was designed to transfer the energy saving experience from the United States to Ukraine, which is still one of the most successful initiatives to date in the country. Its echo stills sounds today.

In 1997, more than ten ESCOs were established in Ukraine. Namely the USAID program and Shirley Hansen's charisma served as catalyst for the birth of the energy service market in Ukraine. It consisted of small enthusiastic regional companies focused on energy savings. These companies were typically small engineering firms. However, the lack of working capital, a sustained demand for energy efficiency and potential customers' confidence did not even provide for medium-sized businesses. All of these companies had an annual turnover lower than USD 200,000. Their main market was the Ukrainian industry, which needed professional advice to reduce energy costs during this transition period.

In 1998, UkrESCO, the state ESCO, was founded. It was established as part of the implementation of the Credit Agreement between Ukraine and the European Bank for Reconstruction and Development (EBRD). Special Ukrainian law was adopted to create UkrESCO. According to the Credit Agreement, UkrESCO received a EUR 20 million (USD 26 million) loan under the government guarantee, which was successfully implemented over six years.

In 1999, the first five ESCOs established the Association of Energy Service Companies in Ukraine. It was the first attempt to establish cooperation between private ESCOs, the state, the banking community and businesses. Despite a good start and a few successful joint projects, the rapid expansion of AESKO members to 37 companies caused a loss of control. In five years, the Association of Ukrainian ESCOs ceased to exist and, by common consent, was eliminated.

From 2000 to 2005, the industry and energy sectors were privatized, which renewed the interest in energy efficiency projects on the part of owners and investors, and led to the new ESCO business development cycle.

Although the actual business volume increased only slightly, the quality of the projects changed. More capital-intensive medium-term projects replaced low-cost energy efficiency initiatives. ESCO contracts grew in value and their number increased. This period can be called the birth of the real energy-saving market.

Customers' pragmatism and exactingness to operation results were increased over that period. During that period, the natural selection process for the ESCO market began. A number of companies went bankrupt and small ESCOs merged into larger companies. Competition among ESCOs increased and small/weak companies lost their independence or left the market. The total number of such ESCOs in the country had risen to about 30-40 by 2005.

From 2005 to 2008, the Ukrainian ESCO business initiated the road to recovery, which resulted from increased natural gas prices and a rapid growth of overall rates for all energy types. The low-cost classic approach to energy saving lost its attractiveness with average tariffs increasing by 25 to 45 percent per year. In this period, there was a clear need for significant energy-saving projects geared toward growing gas prices. New methods, financing schemes and technologies contributed to increased requirements for ESCOs, with their number rising to 70- 80 companies. Energy efficiency projects worth millions of dollars in investments were implemented during this period in Ukraine.

Furthermore, the energy efficiency scale-up was the most rapid in energy-intensive sectors (metallurgy and mining industry, food and chemical industries, building and public sectors).

The atmosphere of the industrial growth and the investment inflow fixed into the modernization of main industrial funds on the background of increasing energy prices brought about new quality standards in the management of capital-intensive energy efficiency projects. The Institute for Energy Saving and Environment, led by the former Ukrainian Energy Minister, established a new type of ESCO, financial-industrial group, Donbas's Industrial Union, which developed energy efficiency projects for its plants. The institute was functionally similar to an ESCO and implemented large projects for more energy-efficient metallurgical plants.

The global financial crisis of 2008-2010 destroyed the growing energy service market in Ukraine. Almost all large and medium projects were interrupted, investors' money went out of the country, the construction of thousands of buildings stopped and energy efficiency projects were frozen or eliminated. As a result, many companies including

ESCOs went bankrupt. In 2010, the number of ESCOs, which prevailed after the crisis, did not exceed 20 companies.

The ESCO market underwent a transformation and the focus shifted from the industrial sector to the municipal energy sector and public construction. Due to the six-fold increase in natural gas prices and the rise in heating tariffs over the previous five years, the demand for ESCO services grew significantly and continues to escalate.

LEGAL FRAMEWORK

The post-crisis period in 2011 saw economic growth as well as a stronger demand for energy-efficient upgrades in the industry and energy sectors of Ukraine. However, nowadays, the highest expectations in energy efficiency are related to heating, water supply and public construction. The situation is becoming more and more critical in this sphere and low energy efficiency levels in these sectors has transformed it into a political issue for the government.

In 2009, another attempt to unite ESCOs under the Association of Ukrainian energy auditing companies proved unsuccessful and, today, only two companies and a handful of individual members remain.

However, in 2011, the Ukrainian energy service market started to blossom along with the number of energy-saving companies. The industrial sector has continued to recover, and the introduction of a "green tariff" for electricity is contributing to the rapid growth of the renewable energy and biofuel markets.

Today, the greatest expectations are in the termomodernization market of residential and public buildings. A directive from the EPBD was observed in Ukraine and the Parliament is preparing the new Ukrainian Law on "energy efficiency of buildings." The new USAID project entitled "Reform of Municipal Heat Supply" could be a strong catalyst for change in the way power is supplied to Ukrainian cities. This could mark the beginning of the era of municipal energy planning. In essence, this project provides the basis for new ESCO markets (heating and water supply for residential and public sector buildings for hundreds of Ukrainian cities). Ukrainian ESCOs are involved in this project and are looking into the international energy-efficient modernization experience of urban households. They have already trained several dozen members of Ukrainian city authorities in energy planning.

The coming into force of the international standard for energy management (ISO 50001) should contribute to the development of the ESCO market in Ukraine. The standard will significantly change the quality of control systems for thousands of Ukrainian enterprises and

hundreds of cities over the coming five years. The ESCO market could drive these changes.

Significant positive changes have taken place in the education sector. Several Ukrainian institutions of higher education have been producing energy managers and energy auditors since 2006. This profession has become popular in the labor market and the demand for skilled professionals continues to go up.

MARKETS

Ukraine is still among the most energy-inefficient countries in the world. Millions of old engines as well as hundreds of thousands of energy-inefficient pumps, boilers and compressors are still in operation in industry today. As almost all residential and public buildings are cold, termomodernization could be a great way to address this issue. Only seven percent of industrial assets were impacted by energy-efficient modernization over the last 15 years. Only three percent of utility assets had been upgraded by 2011. The Ukrainian energy service market is much less developed in contrast with the EU and US markets, especially in qualitative terms.

Energy audits constitute the basic service provided by Ukrainian ESCOs. There is a great demand for express and demonstration audits in Ukraine. Their cost is low but they describe energy losses as a system and objectively assess the whole in money terms. Over 120 companies, which offer these types of energy audits, have already been registered. These companies are small. In fact, often only one employee works in these companies.

Today, comprehensive or full energy audits are also developing, which is more useful for customers. Typically, this type of audit is implemented when ownership changes. There are about 30 companies able to carry out full energy audits professionally.

A more complex investment grade energy audit is performed before the modernization starts. This type of audit requires a team of highly qualified specialists and sometimes special, expensive equipment. Investment projects and programs, business plans and technical specifications for detailed design are the results of investment audits. Energy modernization strategies for industry and municipalities, municipal energy plans, and heat and water supply schemes for cities and regions have also appeared in recent years. There are less than ten ESCOs in Ukraine which can carry out all these new projects. The industrial and municipal heating system sectors are the dominant market for ESCOs.

ESCO municipalities have started to emerge in Dnipropetrovsk, Rivne and Kherson.

Third-party financing still represents a new type of service, which is yet to be mastered by Ukrainian ESCOs. Furthermore, to date, the EPC approach still has not settled in the Ukrainian reality. Today, existing Ukrainian economic and contractual rights reject energy performance contracts. Bank rates are escalating and risks are high - it is currently impossible to get a return on investment costs in energy efficiency projects.

Direct service contracts, more rarely trade credit or leasing, are the most common type of ESCO contracts today. Risk insurance is never used and insurance companies know very little about ESCOs. Guaranteed savings contracts are extremely unpopular.

The legal basis for promoting energy efficiency in the country is taking shape very slowly. Frequent government changes in Ukraine have significantly reduced municipal and public management qualifications. The fierce political environment in force is not conducive to a successful power relay. The strategic planning has not developed completely. The annual budgeting and planning system does not contribute to the development of the ESCO market. The most critical sectors are municipal services and public buildings.

The legal and regulatory framework, which has been inherited from the centrally planned economy period, has not changed over the last 15 years. These old economic relations represent the major barrier to attracting investments in these sectors, despite the ever-increasing efficiency of termomodernization projects.

FACILITATORS

The development of the Ukrainian energy service market lags behind that of markets in Eastern Europe as a consequence of the long-term public policy stagnation in energy efficiency. In the Ukrainian energy service market, there are no intermediaries such as organizations, associations or regional and sectorial energy agencies, which are all characteristic of the markets in developed countries. Furthermore, there is neither long-term partnership nor support, which reduces the efficiency and effectiveness of the ESCO market in Ukraine.

The change is coming slowly but inexorably. Today, the Ukrainian ESCOs form the face of the business of energy efficiency in Ukraine as well as determine the professionalism and competence level that defines the industry. The future belongs to them.