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ESCO FINANCING MODEL AS A MEAN OF ENERGY EFFICIENCY IMPROVEMENT WITHIN PUBLIC SECTOR

Abstract

Paper presents the possibilities of investments financing scheme within energy efficiency using ESCO financing model, in the context of obligations related with Directive 2006/32/EC. The purpose of this paper is to analyze ESCO model as a part of public-private partnership (PPP). Article discusses benefits and potential risks associated with ESCO model investments. Cited are also good practices.

Keywords

ESCO, energy efficiency, Directive 2006/32/EC, public-private partnerships, energy savings

Introduction

Issues related to the economy, energy, resources and the environment are nowadays combined with one another. A low carbon economy is in line with issues related to the concept of sustainable development. Sustainable development has been defined in many ways, but the most frequently quoted definition can be found in *Our Common Future*, also known as the Brundtland Report:

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

-) the concept of needs, in particular the essential needs of the world's poor, to which overriding priority should be given; and
-) the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs." [1]

21st century has brought a number of global challenges, which impact on regional and local level is and will be still increasing. Continuing the functioning of economies, in line with model of exponential growth - developed in the last century, can lead to instability of global economy. The answer to these challenges is the concept of low-carbon and resource-efficient economy, developed by the European Union.

A low carbon economy is a human activity that brings profit to investors and domestic economic growth, while minimizing the negative impact on the environment. This growth – here understood as an aspect of sustainable development - should be implemented by the most effective use of available resources, while ensuring minimization of negative environmental impact. The European Union defines 'low-carbon economy' through the target, agreed at international level, in the form of maintaining atmospheric warming below 2°C, as a contribution to the sustainable development of the EU member states. To achieve this goal, greenhouse gas emissions must be reduced by 80-95% till 2050, compared to 1990, which means that there is a need to reduce current emissions by 40% till 2030. [2] Reducing emissions is not only a huge social benefit - after all less amount and intensity of weather extremes is less human tragedies, incidentally cleaner air is billions saved on health care - but also tangible economic benefits: increased employment, innovation and improvement of the competitiveness of the EU within the global market. Suffice it to say that the market for low-carbon products and services is estimated at more than \$ 3 trillion. At the same time among the five countries with the highest number of patents for "clean" technologies, there is only one from EU member area.

The main objective of the strategy for smart, sustainable and inclusive growth, "Europe 2020", adopted by the European Council in June 2010, is the reduction by EU Member States, primary energy consumption by the year 2020 by 20% in comparison with consumption from 2010. Extremely highlighted, except the shift from fossil fuels to renewable energy sources, is the aim to increase the efficiency of energy use, reduce energy demand and attempt to decouple it from economic growth. [3].

Given that buildings absorb about 40% of final energy, significant savings in this field can bring investment in energy efficiency of buildings. In the opinion of the European Commission (EC), the widespread use of energy

efficient equipment and technologies, combined with the use of renewable energy is a cost-effective way of strengthening the security of energy supply. Despite significant progress in reducing the energy use, recent EC research suggests that without further action, EU will be able to achieve its energy efficiency target only half. The Commission paid attention to the fact that public-private partnership is one way aiming at increasing energy efficiency. [4]

In October 2014, the provisions related to the new climate and energy package – 2030, were adopted. The European Commission proposed two main objectives: the reduction of greenhouse gas emissions by 40% compared to 1990 and increase the share of renewables to 27% of the total electricity consumption. It also established 27% improvement in energy efficiency, but adopted as an indicative target, not a binding one. Reducing greenhouse gas emissions in 2030, has already been identified as a target for the implementation within the document Energy Roadmap 2050. It is not a document formally adopted, but sets the direction of EU action [5].

Over the last 10 years Poland has made a huge progress within energy efficiency issues. According to the Ministry of Economy the energy intensity of GDP fell by 1/3 [6]. Still, the energy efficiency of the Polish economy is about three times lower than in most developed European countries and about two times lower than the average efficiency in the EU. Additionally, primary energy consumption in Poland, related to population, is almost 40% higher than in the EU-15. This dependence indicates the great potential for energy savings in Poland, characteristic for intensive growing economy [6].

The huge potential for energy savings lies in the resources of municipal economy. In particular, these resources should be attributed to public buildings and public lighting. According to the authors of the report, McKinsey & Company, eight of the eleven most important methods of reducing CO₂ emissions is attributable to the building sector. These include the most basic one that improve the tightness of buildings, insulation of attics and spaces in walls, to more advanced one, designed to equip existing buildings with installations, leading them to the low-energy consumption standards or even passive one. The authors estimate that full implementation of the above parameters will reduce energy consumption for heating/air conditioning systems to ~30 kWh per m² per year, which will translate into a reduction in emissions by ~15MtCO_{2e} to the year 2030 [7]. In most cases, the reduction of energy consumption in the public sphere, and hence its cost, is associated with high investment. These expenditures will be difficult to bear by the local government units (LGU) in Poland, because they are in difficult financial condition. Debt of local government units in 2014 amounted to PLN 72.1 billion. Nationally, their debt is just over 37% of their income [8]. On the other hand, there is a marked increase within investment spent in the sector of local government units - 19.2% y / y in 2014. against (-2.6%) y / y in 2013.

Given the limits of permissible debt of local government units, their income and planned level of service and repayment obligations, the ability of credit investments related to energy efficiency is unrealistic. Particularly important in this situation is to create appropriate institutional and regulatory tools, which will enable the implementation of investments aimed at energy efficiency of local government. The European Commission puts the emphasis on the ESCOs. According to Directive 2006/32/EC of 5th April 2006 on energy end-use efficiency and energy services, ESCO is entity that delivers energy services and/or other energy efficiency improvement measures in a user's facility or premises, and accepts some degree of financial risk in so doing. The payment for the services delivered is based (either wholly or in part) on the achievement of energy efficiency improvements and on the meeting of the other agreed performance criteria of energy service companies, or provide other energy efficiency improvement measures in the plant or in the premises of a user [9]. These services, however, are rendered in an innovative way. The company ESCO dedicates its financial resources for the implementation for the customer, i.e. energy consumer, modernization project. All the costs spent on investment by ESCO (including salary) is recovered by payments spread over time, which source are savings related to the implementation of measures to increase energy efficiency.

These services, however, are provided in a different way from the traditional form. Company ESCO commits its financial resources to carry out the client undertaking modernization and recover outlays (including remuneration) by payments spread over time. Payments made by the customer come from the generated savings in energy costs. [6]. This model is often called 'financing by a third party'. In the case of the budget deficit and growing public debt savings can bring real benefits to public finances and taxpayers, leading to a reduction in expenditure. ESCO model supports significantly the implementation of obligations of the state in terms of energy efficiency, taking advantage of the private capital. In general, ESCOs act as project developers

for a comprehensive range of energy conservation measures and assume the technical and performance risks associated with a project. When an ESCO implements a project, the company's compensation is directly linked to the actual energy cost savings.

Why ESCO model?

ESCO model first appeared in the US in the seventies of the twentieth century. In the United States, this model suffered with the rest of the world's biggest successes. The emergence of ESCOs was related to the global energy crisis. Due to the enormous increase in energy prices, entrepreneurs were wondering how they can reduce their energy consumption. The first company, which proposed solution was a company from Texas - Time Energy. They introduced a device, which automatized turning on and off lights and other appliances, which aim was to help generating significant savings in energy costs (for large-scale production). However, the market did not accept this offer promising. Customers doubted that the cost savings that they will make by purchasing the device, actually materialize and will have a significant impact on reducing energy bills. Time Energy Company, however, did not give up and decided to meet the expectations of potential customers. They offered the device and its installation without incurring upfront costs, and wished only a percentage of the savings that the device generated within company. With this move the company achieved higher sales and a higher return on capital, as the savings proved to be very large [10].

A significant part of the investments related to energy efficiency is associated with high economic attractiveness, both for the potential recipient of the ESCOs, as well as for the companies providing the service. Due to the fact of quite a large diversity of potential investment prospects and the multiplicity of concepts and methods of their implementation (depending on customer requirements), one should think carefully about the concept most appropriate for use in a particular case. ESCO method must not only relate to the financing of investments. This model is often characterized also by managing the investment during its operation (the duration of the PPP contract). This is primarily for further energy efficiency optimization. Another essential advantage of the method is to ensure that ESCO achieve energy and cost savings.

Customers of ESCOs can be either public sector, commercial or households (to a lesser extent). Each sector has different characteristics and has a different development potential. The aim of this article is to explain the issues related to the ESCO model, applicable primarily in the public sector. The reason for this is that within this sector lies a very large potential for energy efficiency, which however, still remains untapped. In the public sector we are dealing mainly with two types of investments. The first type are investments related to modernization of public lighting. They are characterized by relatively short periods of return and are relatively easy to perform and contracting. They are the most popular ESCO investments type among local governments [11]. The second type of investments are the modernization of the energy utilities. These projects are more complex and require more thorough preparation and knowledge, both from the potential customer and ESCO. Above all, these projects are characterized by long periods of recovery, which is connected with the necessity of signing a PPP contract for more than 10 or even 15 or 20 years. A promising prospect for the ESCO market in Poland is, in that case, grouping of tenders for the purchase of electricity (increasingly used by the public sector) and investments in improving energy efficiency.

The tendering and types of ESCO contracts

The investment in ESCO model each time is associated with signing the relevant agreement between the parties - the client and Energy Service Company (ESCO). Until then it is necessary to make preparations, which should include (in the case of a public entity) [12]:

- inventory of existing equipment and costs analysis associated with its operation
- estimation of energy consumption and its costs
- preparation the specification of contract basic terms and conditions and proposals for tender conditions

At each of these stages, both during the inventory, estimation of energy consumption and preparation of tender documents, it is highly recommended to consult with qualified specialists in data fields (respectively: economists, engineers, auditors, lawyers) to adequately determine the current status and the savings that are possible to generate. This is the starting point for the proper preparation of tender and related documents. Then it is recommended to consult on possible technology and the scope of their implementation, and to

conduct a preliminary analysis costs of reaching them. Only after such a procedure can a potential local government unit, prepare for tender announcement. Due to the fact that the potential investment is cost intensive, and the agreement signed with ESCO, which wins the tender, long-term (10, 15 years or more), it is recommended that qualified companies/experienced individuals should supervise the legal proceedings and agreements in the field of PPP (public private partnership).

The agreement, which is signed between the public partner (in our case), and the ESCO company is called the energy performance contracting (EPC).

Within ESCO model one can distinguish between five basic types of agreements (contracts):

First, The contract supply of electricity/heat (delivery contracting). In this model, ESCO is committed to both energy supply (electricity/heat), as well as infrastructure investments in equipment in order to contribute to increase energy efficiency. This service usually includes the maintenance service of systems. In this case, the settlement between the ESCO and the customer is based on payment which covers 2 factors:

- the fixed component (which includes the cost of repayment of the investment and other fixed costs)
- the fee for a variable amount of energy delivered

The diagram below shows the main assumptions of described concept.

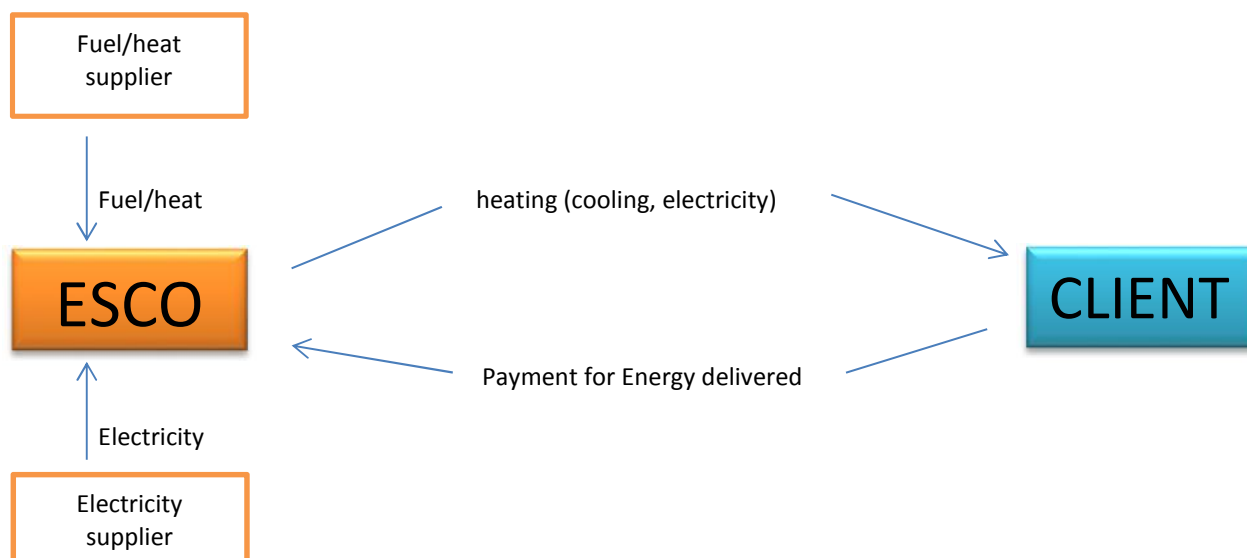


Fig. 1. Diagram of the investment on the basis of delivery contracting

Source: Author's

Second, Guaranteed Savings Agreement. Within this agreement, concluded between the customer and the ESCO, technical and financial conditions and the method of measurement of energy savings, as well as the warranty of savings are covered. In the agreement, the emphasis is on reducing the demand for energy (improving energy efficiency). Remuneration of ESCO is based on savings achieved. Within the duration of the contract, cost payback for ESCO includes savings achieved increased by financial costs. One can also encounter contracts where cost savings are to cover management costs, plus financial costs. This type of contract is particularly advantageous from the point of view of a potential customer. It provides guarantees on a certain level of "energy performance", parallel with the transfer of risk to ESCO. Obtaining adequate energy yield guarantees the repayment of the investment costs. This agreement precisely defines the rules of settlement between the ESCO and the owner of the object. The diagram below shows the main assumptions of described concept.

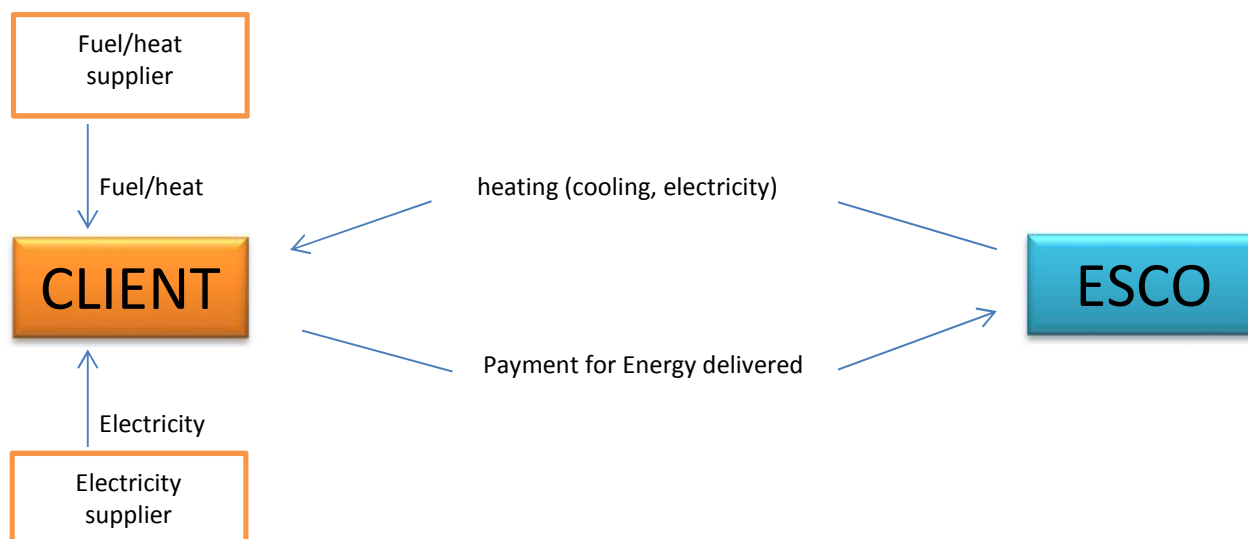


Fig. 2. Diagram of the investment on the basis of energy performance contracting

Source: Author's

Third, Shared Savings Agreement. These are contracts in which the ESCO assumes the risk related to energy saving and the financing is the responsibility of the customer.

Fourth, First Out Contracts Agreement. These agreements provide the total assignment of savings on ESCO for a specified period of time (First Out Contracts), in which all the savings on energy costs are used to pay interest and amortization of debt until full repayment.

Fifth, *Chauffage* Agreement [13]. Agreements on energy management, under which the ESCO is paid for the provision of energy services, e.g. the so-called *Chauffage* Agreement in terms of heating or lighting of given space. Within the *chauffage* contract type, ESCO guarantees that energy costs borne by the public partner will be reduced by a certain percentage. During the period of the contract, the ESCO assumes responsibility for paying the owner's bill for the use of media, and the owner agrees to pay the ESCO certain percentage of the historical cost of energy. ESCO usually uses discounts of around 15%. Periods of the contracts vary between 7 and 10 years, and the ESCO is supposed to receive payments to recover costs of investment and pay the bills of the owner for the use of the media. ESCO generates a return through the provision of sufficient savings to compensate for the discount given to the customer. Within the *chauffage* contract type, performer - ESCO becomes the owner of the power processing system located on the premises belonging to the customer. Cooling and hot water supply are considered to be flows of processed energy (e.g. Electricity can be used in the cooling system and the boiler fuel can be used for heating water). After signing the contract, the contractor uses and maintains the installations belonging to the client, it pays the bills for the energy consumed by the power processing system and makes investments in premises to increase their efficiency. Within the term of contract validation, the contractor sells the "processed" energy, giving the customer a predetermined "discount", obeying the previously agreed minimum level of quality of "processed" energy supply. The diagram below shows the main assumptions of described concept.



Fig. 3. Diagram of the investment on the basis of *chauffage* agreement
Source: [14]

The above described agreements may be concluded in different variants. If the customer expects rapid obligations repayment to the ESCO, and then self-management of infrastructure, he can allocate for this purpose all the cost savings achieved as a result of modernization. The customer may, however, wish from the beginning to participate in cost savings. In this case, the repayment period will be extended accordingly. These aspects, in detail, should be governed by public-partnership agreement. There are also situations in which a client from the beginning of the contract recovers part of the guaranteed energy cost savings (e.g. 30%) and participation (e.g. 50%) part of the larger savings guaranteed (if any). This situation is shown in the following figure.

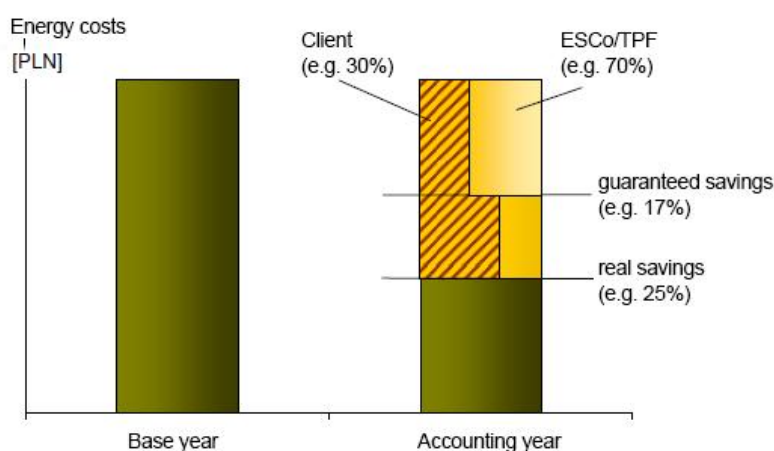


Fig. 4. Distribution of the savings associated with the increase in energy efficiency
Source: [15]

Barriers for ESCO market development within the public sector in Poland

In accordance with art. 6 Directive 2006/32/EC on end-use of energy and energy services, member states should ensure that "there are sufficient incentives, equal competition and level playing fields for market actors other than energy distributors, distribution system operators and retail energy sales companies, such as ESCOs, installers, energy advisors and energy consultants, to independently offer and implement the energy services, energy audits and energy efficiency improvement measures..." [16]. The quoted provision in the Directive means that each Member State should create the right conditions and, above all, incentives for the development of the energy services market (including ESCOs) in Poland.

Currently any system for permanent monitoring and obtaining precise statistical data on the ESCO market in Poland does not exist. With high probability it can be found that monitoring process is carried out by leading companies that are present on the Polish market and provide the above mentioned services. According to estimates cited by the Institute of Environmental Economics, turnover in this market in the year 2011 in Poland

was closing with the minimum value PLN 40 million, while the top was estimated on PLN 100 million. The report's authors agreed that the value of PLN 40 million is probably an underestimate therefore it should be assumed value of PLN 100 million, as the real defining the upper limits of the size of the market in 2011 [11].

The following table presents the assessment of the implementation of the European Directive 2006/32/EC in the context of the development of the ESCO market in Poland.

Table 1: The evaluation of the implementation of recommendations resulting from the Directive 2006/32/EC, in the context of the development of the ESCO market in Poland

Provisions of Directive 2006/32/EC in the context of development of the ESCO market	The level of recommendation implementation in Poland
Creating a fund and appropriate programs directed to support and promote the development of energy services market (including the creation of new start-ups)	Insufficient
Exchange of information and best practice among other member states	Insufficient
Ensuring the availability of high quality energy audits	Insufficient
Stimulating investment agreements in the formula of "third party financing" - TPF	Insufficient
Providing access to skills acquisition systems, accreditation and certification schemes for providers of energy services, energy audits and energy efficiency improvement measures	Insufficient
Providing space on the market and fair competition for market actors (except for energy distributors, distribution system operators), for example ESCOs, so that they can offer energy services, audits and measures to improve energy efficiency	Insufficient
Elimination of instruments (national legislation), that unnecessarily or disproportionately inhibit or restrict the use of financial instruments for energy savings in the market for energy services or other energy efficiency improvement measures	Insufficient

Source: Author's, on the basis of the Directive 2006/32/EC ... [16]

From the above table it can be inferred that in Poland the ESCO sector does not develop in accordance with the provisions of the aforementioned directive. The main barriers to ESCO market development in Poland are [11] [17]:

- Lack of legislation - concerns of the officials, related to the legality of the use of this formula. Projects implemented in the formula of PPP are very often checked and reviewed by institutions such as: RIO, NIK, OPP, ABW, CBA, CBS. In 2014, 41% of the units carrying out projects in PPP formula, were subject to one of these institutions [18]
- Unacquaintance of ESCO mechanism - in the opinion of representatives of ESCO, contracts formula with guaranteed savings is very poorly recognized among the public administration
- ownership issues - applies to lighting. In a large part of the country, owners of lighting systems are distribution network operators (OSD). At the same time they sell energy and conserve installations. Therefore, replacement of lighting (LED), and thus - reducing the bills of customer, is for them quite inconvenient
- Competition from grants - most of the available grants excluded the possibility of co-financing from ESCO model
- Lack of ESCO mechanism understanding by public sector
- The issue of "energy effect ownership" - it often happens that generated savings do not remain in the budget of the unit, but it causes that in subsequent years the amount allocated for energy are reduced

Recommendations for the development of the ESCO model in Poland [17] [19]:

- Striving for maximum simplification and transparency of legislation
- Definitely more activities should be taken by the government administration in popularizing knowledge about the ESCO model
- Clarification of issues related to the impact of the obligations arising from PPP contracts on national debt level
- Reclassification of remuneration for the private partner to - respectively - categories of current expenditures and property (for public entities)
- Creation and implementation the standards related to the organization of the process of project preparation and chart the desired "access track" (scenario, necessary next steps of procedure) or the necessary provisions of the agreement. In many countries, standards developed by the public authorities are mandatory
- Establishment of an intersectional ESCO panel - the development of institutional, legal, administrative solutions, facilitating the functioning of this sector
- Allowing co-financing ESCO energy efficiency projects funded with grant money form EU
- Establishment of a Strategic Coordination Center within the PPP formula for public sector (including ESCO)
- Creation within the Ministry of Economy organizational unit, responsible for the implementation of PPP in Poland (including the department responsible for ESCO services sector). Unit shall perform the functions of: programming, coordination, monitoring, analysis, legislative
- Introduction of the provisions promoting ESCO services in the regulations to the Public Finance Act
- Creation of a National Contact Point for ESCO, as an institution providing know-how of both - ESCO and beneficiaries of investments in improving energy efficiency. The activities of the Contact Point should include, among others, support for public finance sector units, local government units, which intend to save energy in the ESCO formula
- Development by the government framework agreements for ESCO contracts and contracts for energy efficiency (Energy Performance Contracts), related instructions and materials procurement. Such agreements would significantly facilitate the use of ESCO contracting by the public finance sector entities, showing ESCO contract model in the meaning of a public institution, enabling the use of incentives and privileges.

Adoption of a national campaign for energy efficiency. Such campaign is necessary to effectively stimulate actions on energy efficiency in society. It is necessary to allocate budget funds for campaigns. A national campaign should also include information about the ESCO Contact Point.

Good practice in the field of energy services in Poland

Energy services provision history in Poland has its roots back in the 90's. It is related to the democratic changes that enabled companies and public institutions to establish international contacts with entities that have successfully implemented the ESCO model in other countries in Europe and in the United States. The first completed projects were small in size and have a rather demonstrative character. As one of the pioneers of the market in the early 90s was considered the Municipal Heat Supply Company from Krakow. It was involved in two international projects. The first - carried out under the supervision of the World Bank - concerned the modernization and replacement of a thermal system. The second - implemented jointly with the Department of Energy of the United States - Energy Efficiency Program and Clean Fossil Fuels for Krakow. Then, the first commercial company - ECOGY Sp. z. o.o. aimed at modernization of coal-fired boilers, based on the fundamentals of the model ESCO. The founders of the company was Japanese – American – Polish consortium. The end of the 90's is associated with entering in to the polish market of large international players specialized in the ESCO model, who decided to open their branches in Poland. Companies as: Dalkia, MVV, Landis & Gyr (later in the group Siemens), Ineo or Auxima Services should be mentioned [20].

Table 2: Thermomodernization of public buildings in Radzionków municipality

Thermomodernization of public buildings in Radzionków municipality		
Main targets	Modernization scope	Results
<ul style="list-style-type: none"> ▪ <u>savings on the expenditure incurred for heat and electricity</u> ▪ maintenance the premises for 10 years - from 2010 to 2020 ▪ reduction of CO2 emissions ▪ upgrade the standard of premises 	<ul style="list-style-type: none"> ▪ thermo-modernization of central heating and heat sources ▪ modernization of the lighting sources ▪ implementation of a system thermal management and lighting 	<ul style="list-style-type: none"> ▪ replacement of 762 pieces of windows ▪ modernization of 3 boilers ▪ exchange 1 179 lighting points ▪ improving the aesthetics of the city ▪ positive impact on the environment - the expected reduction in CO2 emissions by 2020 - 4 550 tons ▪ thermal energy savings - 54% ▪ electricity savings – 40%

Source: [21]

The thermomodernization investment in Radzionków municipality can be recognized as one of the best examples of public-private partnership in Poland. Private partner of municipality was a company - Siemens sp. z. o.o. The main task of the private partner within the project was to create, finance and manage thermal energy services. Company also gave a full guarantee that the established economic effect will be achieved. The agreement covers a period of 10 years - from 2010 to 2020. During this period, the Contractor has to maintain investment in working order to ensure the level of guaranteed savings of thermal energy and electricity. Siemens took it upon themselves to maintain the facilities in proper technical and aesthetic condition, in full scope of design and material realization of the investment. The amount of estimated savings thanks to the modernization equals PLN 3 417 000,00. Annual maintenance costs of modernized buildings is 79 570 PLN/year.

Table 3: Comprehensive thermomodernization of public buildings in Karczew municipality in the formula of public-private partnership

Comprehensive thermomodernization of public buildings in Karczew municipality in the formula of public-private partnership		
Main targets	Modernization scope	Results
<ul style="list-style-type: none"> ▪ reduce the cost of heat and electricity in buildings ▪ maintenance and management of heat sources to the extent necessary to maintain the specified environmental effects throughout the duration of the PPP contract ▪ preservation of the ecological effect 	<ul style="list-style-type: none"> ▪ thermo-modernization of central heating and heat sources ▪ thermomodernization and maintenance of public buildings (maintenance, repair, overhaul) ▪ modernization of the electrical installation ▪ implementation of thermal management and lighting system 	<ul style="list-style-type: none"> ▪ projected savings of thermal energy - 56% ▪ projected savings of electricity - 21% ▪ Improving the functioning and the aesthetics of public buildings

Source: Elaboration based on presentation given at the conference: "Comprehensive thermal utilities in the Karczew municipality in the form of a public-private partnership, involving the National Fund for Environmental Protection and Water Management grants"

Karczew municipality received a funding from the National Fund for Environmental Protection and Water Management (NFOŚiGW) in the form of grant for thermomodernization of buildings within the Green

Investment Scheme (GIS). Two contracts (agreements) for subsidies were signed. The total value of subsidies amounted to PLN 1 434 180,00. The first agreement was implemented in the form of grant - except for the PPP formula. It concerned the thermomodernization of Municipal Office in Karczew. The second one concerned the thermomodernization of six educational buildings in the municipality of Karczew and it was implemented within PPP formula. On the 2nd of January, 2013, the municipality Karczew signed the first agreement in Mazovia, regulated under public-private partnership. Private partner, as in the case considered above was the company Siemens sp. z o.o. The value of contracts under the PPP is PLN 10 489 341,00. Modernization formula, which was chosen by Karczew municipality is particularly interesting not only because of the PPP, but also because it is combined with the grant from the National Fund.

Summary

Buildings are responsible for 40% of energy consumption and 36% of CO₂ emissions in the European Union. Energy efficiency in buildings is key to achieve EU objectives, namely reducing greenhouse gas emissions by 80-95% by 2050 (relative to 1990 years). However, for this to happen the energy services market in Europe should be strengthened. Legal uncertainty, lack of knowledge and awareness of environmental attitudes are the biggest barriers for further development of the ESCO market, including in Poland.

The European Court of Auditors draws attention to the mismanagement of money spent at national level, related to the efforts to increase energy efficiency. According to the Court the money in individual member states have been spent improperly, because it does not provide a return on investment in the form of future energy savings. According to the former President of the European ESCO Association, Stéphane Le Gentil, energy efficiency was clearly secondary. If used EPC contracts, the situation would be quite different, as within the EPC system, energy saving is guaranteed, because it is the basis for the reimbursement of investment costs for ESCOs. [22]

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