EPC CoC 10th Newsletter

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EDITORIAL

Simone Alessandri (eu.esco)

Eline Blanchard (EFIEES)

European co-administrators of the EPC CoC

Dear readers,

Welcome to the 10th edition of the EPC CoC newsletter. This is an important achievement for the EPC CoC and we would like to celebrate it with all of you, readers and contributors.

Through these 10 editions of the newsletter, we provided you with several articles focused on different ESCO markets in the EU. Each of these contributions, written by the national administrators of the EPC CoC, is unique and precious. We all see reports each year on the ESCO markets but none of these is able to go so much into the details as the articles written by our national administrators. We would like to thank all of them who contributed and we hope we can count on many other national administrators for the future. In this number, you will find an article written by Mr. Marcel Lauko on Maastricht-neutral EPCs following the Eurostat rules in Slovakia, we are sure you will enjoy reading it!

Another section we developed and improved through the years is, without any doubt, the one related to the "news from the EU". In this number you will find very important news on the EED and the EPBD. The first one is getting very close to the end of the EU legislative process, while the second one was approved by the European Parliament plenary in Strasbourg.

As a final suggestion, take a close look at the section "Events" on the right side of this page. With the summer season approaching, more and more events will be organized in Brussels and around Europe.

As eu.esco and EFIEES we will be present at EUSEW 2023, in Brussels, we hope we'll be able to see you there!

Simone Alessandri, eu.ESCO, simone.alessandri@eubac.org;

Eline Blanchard, EFIEES, eline.blanchard@efiees.eu

EVENTS

Upcoming

EU Green Week (6 – 7th June)

IEA 8th annual global conference on Energy Efficiency (6th – 8th June)

EFIEES/eu.ESCO Roundtable on EED (10th June)

European Sustainable Energy Week (EUSEW) (20 – 22 June)

Past

Energy Efficiency Day (13 October, online)

World Sustainable Energy Days 2023 (28 February – 3 March, Wels, Austria)

Super ESCOs Webinar by Global ESCO Network (22nd February)

Development of Slovak energy services market towards Maastricht-neutral EnPC

Marcel Lauko, Energy Centre Bratislava Ltd. lauko@ecb.sk

Despite its history of almost 30 years, the Slovak energy services market has still not reached its full potential. The market is characterized as “moderately developed” , but the number of implemented projects is significantly limited by several economic, regulatory and policy factors. Unfortunately, this situation is repetitive within the development of the market. This article describes the development of the Slovak energy services market including identification of relevant impact factors. Special attention is paid to the practical experiences with utilization of the Maastricht-neutral Energy Performance Contracting (EnPC) projects.

1. History of Slovak EnPC market

The development of the Slovak energy services market – especially as regards the EnPC projects in public sector – may be divided into several periods that will be described in more details. As details on projects in the private sector are not publicly available, the following descriptions will be mostly focused on the public sector.

Start of the market (late 90’s – 2006)

The development of the Slovak energy services market started in late 90’s, with Energy Supply Contracting (ESC) projects in district heating systems oriented on fuel-switch measures. First EnPC projects followed and were focused on building technologies in public sector and on industrial technologies in private sector.

Consecutive development of the public EnPC projects within this period defined the general approach to the EnPC utilization in Slovakia. Majority of the public EnPC projects were implemented as guaranteed savings models on a base of contract for works with extended guarantees. Assets installed within the projects were immediately transferred into the ownership of the clients together with their responsibility for operation and maintenance. The guarantees provided by the EnPC providers were focused especially on energy consumption savings, but savings of other operational costs and guarantees for meeting various operational parameters were guaranteed as well. The guarantees together with transfer of all technical risks to the EnPC providers were the dominating factors influencing interest of clients in the EnPC concept. Another added value of the approach consisted in financing of investment costs by the EnPC providers. This aspect of the projects developed in time, from minor partial co-financing of the projects (from 10% to 25% of the investment costs) to full financing of the investments by the EnPC providers. Complete financing of the investment costs by EnPC providers and its consecutive repayment from the guaranteed costs savings became a requirement of potential public clients after 2004.

As regards the extent and structure of the public sector market within this period, more than 20 projects in public buildings were implemented. The clients originated mostly from local authorities, but also several state universities and hospitals used EnPC for energy efficiency improvements.

Market shut-down (2006 – 2012)

The development of the EnPC market in public sector after 2006 did not follow the dynamic from the previous period. This was caused by competition of the EU structural funds which provided support for modernization of public buildings in form of non-recurring grants with intensity of 95% from the eligible investment costs. These conditions made it impossible to use recoverable commercial resources for financing of energy efficiency investments and thus crowded out the EnPC projects financed from private resources.

The above-mentioned situation resulted in zero volume of the EnPC market in the public sector – i.e., not one EnPC project was implemented in public sector in the period 2006 – 2012. As regards the private sector, implementation of EnPC projects continued in a moderate extent, with mostly simple projects focused on single technologies in industries with repayment up to two years.

Restart and stabilization of the market (2012 – 2019)

Support of refurbishment of public buildings through grants from EU structural funds from programming period 2007 – 2013 ended in 2012 due to allocation of all available resources. Additional support from other resources or the following programming period was not available at that time, but demand for refurbishment of the public buildings persisted together with lack of capital resources in public budgets. This resurrected the interest of potential public project owners in alternative (compared to the grants) concepts of financing of the investment, where EnPC presented an attractive option.

The emerging public market opportunities reactivated the EnPC providers present at the market and their activities focused on promotion and awareness rising on the EnPC concept. This resulted in preparation and consecutive implementation of first projects in public buildings in 2013-2014. These were consequently followed by an intensive market restart between years 2014 and 2016, when almost 80 projects in the public sector were implemented. Majority of these projects was focused on modernization of street lighting systems. Several new contractual frameworks – such as concession or build and rent – were developed for EnPC implementation within this specific market segment. A substantial number of projects was focused on public buildings in local and regional self-administration and in universities and hospitals. These projects were implemented in line with the concept developed and tested before 2006.

The restart of the market within this period was supported also by new legislation (Act No. 321/2014 Coll. on energy efficiency) that substantially improved the regulatory framework for EnPC. Preparation of this new legislation was supported by the newly established Association of Energy Services Providers consisting of all relevant EnPC providers and facilitators. The new regulatory framework reflected in full extent the principles of the approach developed before year 2006.

The intensive increase of the public EnPC market volume was slowed down in 2016/2017 by announcement of grant support (again with intensity of 95% from eligible investment costs) from European Structural and Investment Funds (ESIF) for programming period 2014 – 2020. The expected availability of grant support caused a decrease of demand for EnPC (or for commercial financing in general) but did not crowd-out the EnPC completely at this time. As the public project owners gained experiences with the support schemes in previous period, substantial part of them was aware that the grant support will not satisfy all their needs and thus still considered EnPC as a valid option for implementation of their projects.

The number of projects implemented in the 2016 – 2018 period stabilized at the level of approximately 20 projects (in public and private sectors) per year. Almost all public projects from this period used the same approach as developed before 2006.

As regards the development in the private sector, this part of the market was quite stabilized within this period. The prevailing type of project in this field was a guaranteed savings model in industries, but also few shared savings projects in optimization of operation of commercial buildings were implemented.

Introduction of the Maastricht-neutral EnPC (since 2019)

The public EnPC market in Slovakia entered a completely new phase in February 2019. Since then, only EnPC projects without impact on public debt have been allowed for subjects of public sector in Slovakia. This setup was the result of a series of previous steps from Slovak institutions, implemented with the aim to enable the use of private commercial financial resources for financing of refurbishment of public buildings, without negative impact on public debt.

The process started in 2016 when the Slovak Ministry of finance identified a problem with financing of refurbishment of public buildings, due to lack of capital resources in public budgets for this purpose. The Ministry considered EnPC with its guarantees, and third-party financing as a solution for increasing of the pace of public buildings refurbishment through higher private sector participation in its financing. Identification of the solution was connected with the identification of its bottlenecks. The most important one was the increase of public indebtedness as a result of EnPCs projects. The Ministry, in cooperation with partners from other EU countries, initiated technical negotiations with the European Commission. This activity was part of a broader international initiative, that resulted in the definition of a task for Eurostat, to find a way to exclude private financing of EnPC projects in public sector from reporting on public sector's balance sheets. This task was introduced within the EU Clean Energy Package, proposed by the European Commission in November 2016[1].

Eurostat explored possibilities how to address the impact of energy efficiency-related investments on the debt and deficit of governments, and consequently published the Eurostat Guidance Note on The recording of energy performance contracts in government accounts[2] in September 2017. The guidance note set a basic framework for off-balance reporting of EnPCs. Following this first step, Eurostat in cooperation with European Investment Bank started the preparation of the Guide to the Statistical Treatment of Energy Performance Contracts (the Guide)[3], which was published in May 2018. The Guide presents detailed guidance for the public sector stakeholders and helps them to understand how the statistical treatment of EnPCs should be assessed.

The Slovak Ministry of finance actively participated in the process on European level, and at the same time started preparation for practical exploitation of the new concept in Slovakia. It started with the approval of Concept of development of guaranteed energy services[4] in public administration of Slovak Republic, by the

[1] https://energy.ec.europa.eu/news/commission-proposes-new-rules-consumer-centred-clean-energy-transition-2016-11-30_en

[2] https://ec.europa.eu/eurostat/documents/1015035/7959867/Eurostat-Guidance-Note-Recording-Energy-Perform-Contracts-Gov-Accounts.pdf/

[3] https://ec.europa.eu/eurostat/documents/1015035/8885635/guide_to_statistical_treatment_of_epcs_en.p%20df/f74b474b-8778-41a9-9978-8f4fe8548ab1

[4] The term "guaranteed energy services" presents an equivalent of the term "energy performance contracting" used in Slovak legislation. It is a shorter version of its full name "energy services with guaranteed energy savings".

Government of Slovak Republic in July 2018. The document described in detail the practical aspects (including accounting and tax points of view) of preparation and implementation of EnPC projects, and outlined legislative changes necessary for full exploitation of the potential of the newly offered opportunity.

The Concept was followed by the amendment of the Energy efficiency law, prepared by the Ministry of economy in cooperation with the Ministry of finance, and approved by the parliament in November 2018. The amended regulatory framework has been in force since February 1st, 2019.

The most important change implemented by the amendment consisted of introduction of obligation for subjects of public sector to implement only EnPC projects without impact on public debt in terms of unified methodology valid for European union[5]. This means, that all EnPC projects implemented within Slovak public sector must be in line with conditions for reporting outside of public sector balance described within the Guide to the Statistical Treatment of Energy Performance Contracts. Additionally, as a support for the public sector in fulfilling the new obligation, a template of Contract on energy efficiency for public sector was introduced. The Ministry of economy published the first version of the template validated by Eurostat in May 2019.

The contract template[6] was the last document necessary for the start of implementation of public EnPC projects without impact on public debt (i.e. Maastricht-neutral EnPC). Although, high interest of public building administrators was expected, followed by substantial increase of the public EnPC projects volume, the first project was procured almost one year later, in March 2020. The delay was mostly caused by the need of the market players to adapt to the new conditions and to define adequate economic parameters of the projects.

The process of adaptation and gaining knowledge on details of the new approach resulted in definition of such economic requirements by the EnPC providers, that significantly scaled down the market potential for EnPC in public sector. Following this, only a few projects were implemented in 2020 – 2022. The market players started the development of new approaches that could overcome the identified bottleneck of the Maastricht-neutral EnPC. This led to implementation of several projects realized through alternative approaches – combination of the Maastricht-neutral EnPC with Contract on works and implementation of performance based project completely outside the framework of the Act on energy efficiency. This approach prevails also at present, when the number of general performance-based contracts exceeds the number of Maastricht-neutral EnPCs.

2. Practical experiences and lessons learned from utilization the Maastricht-neutral EnPCs

As mentioned above, the Maastricht-neutral EnPC was considered an important tool for increasing the rate of public buildings' refurbishment, with financial participation of the private sector. But, as the results from the period after the year 2019 show, the expectations have not been met and on the contrary, the public EnPC market has experienced a significant slow-down.

Following the expectations and with the EnPC friendly regulatory framework developed, intensive preparation of EnPC projects started in the public sector. This allowed detailed assessment of the impact of individual

[5] Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union

[6] https://www.mhsr.sk/uploads/files/aXuQRGI2.docx?csrt=6535997778058598981

provisions of the Guide on implementation of real-life projects. It was found that while most of the provisions do not limit implementation of the projects, some of them cause complications that can be eliminated, and a few ones significantly limit the market potential for the use of the Maastricht-neutral EnPCs (in particular for projects aimed at the complex renovation of public buildings).

This part will identify and describe the reasons that led to a development, when even the best intentions yielded negative results.

Subject-matter of Contract on energy efficiency for public sector

Following the provisions of the Guide and their incorporation into the contract template, only implementation of measures focused on energy efficiency is allowed within the Maastricht-neutral EnPC projects. This prevents implementation of comprehensive refurbishments of buildings that include – beside the energy efficiency improvements – also measures not related to energy consumption (i.e., removal of construction faults, elimination of statical problems, disabled facilities, or various climate adaptation measures) through one simple contract.

Such limitation does not reflect the situation of the public buildings stock (as more than 50% of the buildings require comprehensive refurbishment) but can be overcome through combination of the Maastricht-neutral EnPC with Contract on works into one project.

Potential reduction in future operational payments

The real operational payments under a Maastricht-neutral EnPC must be fully covered by energy costs savings. In case of a savings shortfall, the responsibility lies with the EnPC provider. The liability of the provider for a savings shortfall may be structured either as a payment due by the provider, or as a reduction in operational payment. In any case the Maastricht neutral EnPC must allow the client to set-off the provider's liability for a savings shortfall against future operational payments.

The banks identified this requirement as a significant problem within the process of refinancing the projects through sales of receivables. The reason was that banks may buy only receivables with fixed amounts and the possibility to reduce the operational payments can change this amount in future.

This problem was solved by the Ministry of finance in cooperation with banks. Both parties agreed on a payment mechanism, where the banks will buy only up to 80% of receivables from the project. This solution enables the providers and banks to use sales of receivables for refinancing of the projects in quite high extent but on other hand the impossibility to use the refinancing for 100% increases the costs of financing (and thus the overall price of the projects) on the side of providers.

Discordance between project costs and revenues

The most important finding is that combination of specific requirements of the Guide makes economic parameters of projects significantly worse, and thus significantly limits the market potential for the use of EnPCs in the implementation of energy efficiency improvement projects.

The problematic requirements of the guide are:

- All operational payments (consisting of repayments of investment and payments for services) must be covered only by cost savings directly related to energy consumption.

- The EnPC provider must be obliged to maintain (and, as necessary, replace) the EnPC assets for the duration of the contract, and to ensure their ongoing ability to deliver the energy consumption and/or cost savings required under the EnPC.

The second requirement means that – although the EnPC assets are owned by the client and fulfill their basic functions besides the energy savings generation – the costs of maintenance, revisions, and possible replacement must be covered in whole by the EnPC provider.

Mutual influence of the two requirements means that the EnPC provider generates for the client financial savings on maintenance costs, but these are not eligible for repayment of maintenance costs (as part of services within the operation payments) on the side of the EnPC provider. As a result, a feasible EnPC project then needs to generate significantly higher energy savings to cover all payments, which is possible only in limited number of cases.

A similar situation arises in the case of savings in personnel costs. Due to the use of modern technologies, continuous operation is often replaced by intermittent supervision, thus reducing the need for jobs and, consequently, the associated personnel costs, which represents a significant saving for the client (often more than the energy cost savings). However, despite the clear economic benefits for the client it is not possible to use this saving to repay the project, due to the provisions of the Guide.

There is not a simple solution to this problem. One possible way of approach is the implementation of only a limited number of Maastricht-neutral EnPC projects that will meet the economic requirements. Other option – often used in Slovakia at present – is avoiding the EnPC regulation for public sector (the Law on energy efficiency) and implementing of performance-based projects (focused on increasing of the operational efficiency in general) through Contract on works with extended guarantees. These performance-based projects respect all the principles and guarantees of an EnPC, but report on balance sheets of the public sector and thus have a negative impact on the public debt.

The most promising approach consists of combination of the Maastricht-neutral EnPC with Contract on works in one project. This setup allows utilization of the future energy saving for financing of measures with adequate repayment period within the Maastricht-neutral EnPC and at the same time to implement less productive measures and/or non-energy measures within the contract on works. Investment costs within the EnPC part are financed by the provider and investment costs under the contract on works are (usually) financed by the client. Both contracts are procured within one public procurement process and awarded to one contractor (to ensure coordinated implementation of all measures from both contracts). Implementation of this approach was tested in practice already on project in prison (Remand Prison and Prison Prešov – prison department in Sabinov).

It is necessary to mention that this issue is a country specific problem in Slovakia as only the Maastricht-neutral EnPCs are allowed for the Slovak public sector and should not present significant problem for EnPC market development in other countries.

Conclusion

Based on the above, it can be stated that the Slovak EnPC market in public sector was significantly hindered by availability of grant-based support schemes with high intensity from EU structural and investment funds. Availability of the support – and especially expected availability of any support of this kind – substantially decreased interest and demand of public sector for energy efficiency projects financed commercially or from own budgetary resources (including the EnPC).

Another negative impact on the market development was caused by the good intentions of national authorities to support faster and sizable refurbishment of public buildings stock through the Maastricht-neutral EnPC. Failure of this approach in practice shows that the EnPC market needs a substantial flexibility to comply with variable conditions of different projects. Allowing only one possible solution with strict conditions brings a risk that it will fit only a limited number of projects and will prevent implementation of the rest of potential projects.

Despite the problems caused, the support and development of the framework for Maastricht-neutral EnPC and especially all the related communication helped to increase the awareness and interest of potential clients from public as well as private sector in EnPC and performance-based projects in general. At the same time the market actors – EnPC providers and facilitators – showed their high ability to adapt to the changing conditions and to develop alternative business models with a promising market potential.

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NEWS FROM THE EU LEVEL

EPBD revision

On Tuesday 14th March, the European Parliament adopted its final position on the EPBD, ahead of the upcoming trilogues. 343 MEPs voted in favor of the proposal, with 216 votes against and 78 abstentions. The most controversial measures were certainly the ones related to the MEPS (Minimum Energy Performance Standards). According to the EP position, residential buildings would have to achieve, at a minimum, energy performance class E by 2030, and D by 2033 - on a scale going from A to G, the latter corresponding to the 15% worst-performing buildings in the national stock of a member state. Non-residential and public buildings would have to achieve the same ratings by 2027 and 2030 respectively. While these measures are fundamental, there are many other measures included in this revision, such as: new indicators in the EPCs, mandatory SRI for large non-residential buildings, hydronic balancing requirements, extension of the BACS requirements in the non-residential buildings (from 290kW to 70kW) and new BACS requirements for the new residential buildings, new IEQ requirements.. and so much more. Furthermore, all new buildings should be zero-emission from 2028, with the deadline for new buildings occupied, operated or owned by public authorities in 2026. All new buildings should be equipped with solar technologies by 2028, where technically suitable and economically feasible, while residential buildings undergoing major renovation have until 2032.

The rapporteur, MEP Cuffe, will now have to go into negotiations with the Commission and the Council, led by the Swedish presidency, to agree on the final text of the EPBD. The Directive should be approved and published in the Official Journal by this summer.

EED revision

In July 2021, the European Commission had published a proposal to recast the Energy Efficiency Directive (EED), as part of the Fit for 55 Package. After several months of negotiations and a 16 hours final trilogue, the Council and the Parliaments reached an agreement on this recast, on the 10th of March.

The co-legislators agreed on a **2030 target of 11,7% reduction of EU final energy consumption** (compared to the 2020 PRIMES). Unfortunately, if this EU wide target for final energy consumption will be binding, the EU primary energy consumption target will be indicative. Moreover, these targets are below what the Commission had proposed within the REPower EU plan. All Member States will contribute to achieving the overall EU target through **indicative national contributions and trajectories, to be set in their NECPs**. The co-legislators agreed to a gradual increase of the annual energy savings target for final energy consumption from 2024 to 2030. Member states will have to ensure new annual savings of 1.49% of final energy consumption on average during this period (halfway between the Parliament's and the Council's positions), gradually reaching 1.9% on 31 December 2030. The Council and the Parliament agreed to a specific obligation for the **public sector to achieve an annual energy consumption reduction of 1.9%.** The details of the deal are still being finalised in technical meeting and the final text is expected to be published in the coming weeks.

Timeline of selected Fit for 55 files

	EED	RED	EPBD	ETS	ESR
Commission's Proposal	14/07/2021	14/07/2021	13/12/2021	14/07/2021	14/07/2021
Council's General Approach	27/06/2022	27/06/2022	25/10/2022	29/06/2022	29/06/2022
Parliament's Report	14/09/2022	14/09/2022	14/03/2023	22/06/2022	08/06/2022
Trilogues	Final Trilogue: 9/03/2023	Final trilogue: 29/03/2023	?	Final trilogue: 18/12/2022	Final Trilogue: 08/11/2022

PUBLICATIONS

- Series of reports and documents published by the European Commission to accompany the 7th State of the Energy Union report (November 2022)
  - Link to the report on the achievement of 2020 energy efficiency targets
- Cambridge Econometrics Study: "2030 EU energy efficiency target: The multiple benefits of higher ambition" (November 2022)
  - Link to the study
- IEA Energy Efficiency 2022 report (December 2022)
  - Link to the report
- BPIE study on "How to stay warm and save energy: Insulation opportunities in European homes" (January 2023)
  - Link to the study