2024/2476

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COMMISSION RECOMMENDATION (EU) 2024/2476

of 13 September 2024

setting out guidelines for the interpretation of Article 29 of Directive (EU) 2023/1791 of the European Parliament and of the Council as regards energy services

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 292 thereof,

Whereas:

(1) Directive 2012/27/EU of the European Parliament and of the Council ([1]) introduced a requirement to achieve the headline target of at least 32,5 % energy savings at Union level by 2030.

(2) Directive (EU) 2023/1791 of the European Parliament and of the Council ([2]) was adopted on 13 September 2023. It recast Directive 2012/27/EU, keeping some of its provisions unchanged while, at the same time, introducing some new requirements. In particular, it significantly raised the level of ambition for 2030 in terms of energy efficiency, including as regards energy services.

(3) Directive (EU) 2023/1791 fosters the development of energy services and specifically the uptake of energy performance contracts. In an energy performance contract, the service provider guarantees the energy savings to be achieved within the contractual period, while the beneficiary of the energy service avoids investment costs by using part of the financial value of energy savings to fully or partially repay the investment. Such contracts thereby build market trust in energy efficiency investments by ensuring their effectiveness. This can help attract private capital, which is key for increasing buildings renovation rates, driving energy efficiency in industry, bringing expertise into the market and creating innovative business models.

(4) Member States are to bring into force the laws, regulations and administrative provisions transposing Article 29 of Directive (EU) 2023/1791 by 11 October 2025. The full transposition and effective implementation of the EED recast is necessary if the EU is to achieve its 2030 energy efficiency targets.

(5) Member States can choose at their discretion the way of transposing and implementing the requirements regarding energy services, that is best suited to their national circumstances. In this context, it would be recommended to interpret the relevant provisions of Directive (EU) 2023/1791 in a consistent way which would contribute to a coherent understanding of Directive (EU) 2023/1791 across Member States as they prepare their transposition measures.

HAS ADOPTED THIS RECOMMENDATION:

Member States should follow the interpretative guidelines in the Annex to this Recommendation when transposing [the requirements introduced by] Article 29 of Directive (EU) 2023/1791 in their national law.

([1]) Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1, ELI: http://data.europa.eu/eli/dir/2012/27/oj).

([2]) Directive (EU) 2023/1791 of the European Parliament and of the Council of 13 September 2023 on energy efficiency and amending Regulation (EU) 2023/955 (OJ L 231, 20.9.2023, p. 1, ELI: http://data.europa.eu/eli/dir/2023/1791/oj).

Done at Brussels, 13 September 2024.

For the Commission
Kadri SIMSON
Member of the Commission

ANNEX

1. INTRODUCTION

These guidelines provide guidance to Member States on how to interpret Article 29 of Directive (EU) 2023/1791 when transposing it into national legislation. In comparison to Directive 2012/27/EU, Directive (EU) 2023/1791 enhances the measures relating to support for the development of market for energy services in Member States.

Nonetheless, the binding interpretation of Union legislation is the exclusive competence of the Court of Justice of the European Union.

2. LEGAL AND POLICY CONTEXT

Directive (EU) 2023/1791 acknowledges the important role that energy services can play for improving energy efficiency and driving decarbonisation. Energy services can mobilise the technical and financial capacities of third parties, typically specialised energy service providers, to attain energy and financial savings in a cost-efficient manner through energy performance improvements at the premises of the energy consumer. Energy services could be particularly useful when in-house implementation of energy efficiency measures by the consumer itself is difficult or even impossible, for whatever reason.

Over the last decades a vast heterogeneity of different forms of energy services has emerged in the Member States ([1]). The definition of energy services in Directive (EU) 2023/1791 is very broad, covering all the different forms. Energy performance contracting can be seen as a specific and particularly comprehensive form of energy service. There are three main advantages of using energy performance contracting as an effective way to achieve energy efficiency improvements: energy efficiency improvement investments are financed directly from energy cost savings;

— energy and cost savings are guaranteed, under certain conditions, by the service provider, who takes on the performance risks of the works and technology;

— the service provider brings a comprehensive expertise for an optimal choice of technical and/or financing solutions.

The objective of Article 29 is twofold: facilitating energy services' market development by setting the enabling conditions for market operators (1) and promoting the uptake of energy services by the public sector. The latter focus follows the logic of the Directive (EU) 2023/1791, giving the leading role in energy efficiency to the public sector. The requirement of using the energy performance contracting for the renovations of public bodies' buildings aims at creating synergies with the relevant provisions under Article 6 and enabling their fulfilment on the ground.

Article 29 is to be read in conjunction with the following Articles of Directive (EU) 2023/1791:

— Articles 5, 6, and 7: energy services and energy performance contracting are particularly suitable for carrying out energy efficiency improvements in the public sector. The comprehensive expertise and guaranteed performance brought by the service providers ensure the effectiveness of the investments. The possibility of third-party financing with the repayment of the upfront investment cost by energy costs savings enables projects to take place even if public funds are insufficient, while the possibility of off-balance sheet treatment of the energy performance contracts makes it possible to keep public accounts in equilibrium. For those reasons, Directive (EU) 2023/1791creates synergies among the relevant provisions related to energy services and the leading role played by the public sector in energy efficiency. In particular, Article 29(4) and (5) focus on enhancing the uptake of energy performance contracting by public bodies for the renovation of large buildings, which is linked to the obligations laid down in Articles 5 and 6. Moreover, Article 7(7) and (8) require that public procurement procedures make it possible to use energy performance contracting and third-party financing mechanisms and that regulatory and non-regulatory barriers, which might hamper such a use are removed. Finally, Member States are to ensure that contracting authorities and contracting entities assess the feasibility of using energy performance contracting for procuring service contracts with significant energy content;

([1]) Some more information is available at https://e3p.jrc.ec.europa.eu/node/190 and in the report: https://publications.jrc.ec.europa.eu/repository/handle/JRC118815

— Articles 8, 9 and 10: in connection with the energy efficiency obligation scheme (EEOS), energy service providers can effectively drive the development of energy efficiency markets by ensuring the supply of white certificates in exchange for energy efficiency improvements. Such white certificates can be purchased by the obliged parties under the EEOS to fulfil their obligation to deliver yearly end-use energy savings;

— Article 11: Article 11(10) exempts enterprises which have in place a long-term energy performance contract from the obligation to undergo energy audits or establish energy management system, provided that the energy performance contract covers the necessary elements of the energy management system and that the contract complies with the requirements set out in Annex XV. Moreover, the provisions targeting implementation of energy audits recommendations and disclosure of energy audits data, contribute to the development of energy services. Specifically, Article 11 (5) states that energy audits are not to include clauses preventing the findings of the audit from being transferred to any qualified or accredited energy service provider, provided that the customer does not object.

3. **DEFINITIONS IN DIRECTIVE (EU) 2023/1791**

The definitions of the following terms set out in Article 2, points 11, 29, 33 of Directive (EU) 2023/1791 are the most relevant in the interpretation of Article 29:

Energy Service

'Energy service' means the physical benefit, utility or good derived from a combination of energy with energy-efficient technology or with action, which may include the operations, maintenance and control necessary to deliver the service, which is delivered on the basis of a contract and in normal circumstances has proven to result in verifiable and measurable or estimable energy efficiency improvement or primary energy savings.

Energy service provider

'Energy service provider' means a natural or legal person who delivers energy services or other energy efficiency improvement measures in a final customer's facility or premises.

Energy performance contracting

'Energy performance contracting' means a contractual arrangement between the beneficiary and the provider of an energy efficiency improvement measure, verified and monitored during the whole term of the contract, where investments (work, supply or service) in that measure are paid for in relation to a contractually agreed level of energy efficiency improvement or other agreed energy performance criterion, such as financial savings.

The term 'ESCO' is not defined in Article 2, however Directive (EU) 2023/1791 makes references to ESCOs in several provisions and recitals, 'ESCO' being understood as a common abbreviation of energy service company. Recital 46 supports such an understanding by spelling out the full term and including its abbreviation into parenthesis: 'energy service companies (ESCOs)'.

4. **OBLIGATIONS UNDER ARTICLE 29**

Article 29 requires Member States to implement a selected number of policy measures that enhance the use of energy services by energy consumers from all sectors.

As the definition of energy services in Directive (EU) 2023/1791 is broad, it covers all the different forms of energy services in the European market.

The provisions of Article 29 to be implemented by Member States are listed in Table 1.

Table 1

Overview of the provisions of Article 29 to be implemented by Member States.

	Purpose of provision		
Member States…	Setting an enabling framework for energy services markets	Increased and improved use of energy services by public bodies	Removal of barriers for access to energy services
…shall promote / support / inform about…	Energy service contracts with performance guarantee clauses [paragraph 1, point (a)]. Financial instruments to support energy service projects [paragraph 1, point (b)]. List of qualified and/or certified energy service providers [paragraph 1, point (c) and paragraph 3]. Measurement and verification (M&V) methodologies and quality assurance schemes [paragraph 1, point (d)]. Points of contact [paragraph 6, point (a)].	Model contracts compliant with Eurostat guide [paragraph 5, point (a)]. Best practices for energy performance contracting [paragraph 5, point (b)]. Database on implemented and ongoing energy performance contracting projects [paragraph 5, point (c)].	Removing the regulatory and non-regulatory barriers [paragraph 6, point (b)].
…shall encourage…	Development of quality labels [paragraph 2].		
…shall ensure…	Setting up advisory bodies and independent market intermediaries [paragraph 6, point (c)].	The use of energy performance contracting for renovation of large buildings, where technically and economically feasible [paragraph 4] Feasibility assessments using performance-based energy services for renovation of non-residential buildings [paragraph 4]	Preventing impeding activities of energy distributors, distribution system operators and retail energy companies [paragraph 8].
…may…		Encourage to combine energy performance contracting with expanded energy services [paragraph 4].	Establish an individual mechanisms or designate an ombudsperson for efficient out-of-court settlements of disputes [paragraph 7].

4.1. **Obligations related to the setting of an enabling framework for energy services markets**

Most requirements in Article 29 refer to policy measures that have the purpose to improve market transparency and to facilitate potential energy consumers' access to energy services, while removing barriers to energy services market development ([2]). Paragraph 1 highlights that improved access to market information is particularly important for small and medium-sized enterprises (SMEs) to take up energy service offers ([3]). In addition, Article 29(5) requires further measures specifically for the public sector (see chapter 4.2. of these guidelines).

4.1.1. *Effective information and dissemination measures*

4.1.1.1. Legal framework

Article 29(1), (3) and (6) require Member States to make public information on energy service contracts, financial instruments, qualified or certified energy service providers, measurement and verification methodologies, advisory bodies and quality labels easily accessible through dedicated websites, guidelines, or handbooks.

4.1.1.2. Guidelines

To strengthen the effectiveness of those provisions, additional policy measures could be envisaged that facilitate access to that information for target groups, when they are actually deciding on the implementation of energy saving investments. Such measures could include, for example:

— measures that directly link **information on energy services with energy audits.** Such information could be included in the template of the audit report. Moreover, it is useful if the audit report contains information on qualified or certified energy service providers and on advisory services;

— similarly, public support schemes for energy audits in sectors not covered by the obligation in Article 11 may require **mandatory information about the option of energy services** as a funding condition;

— in the **residential building sector**, energy advice centres, such as one-stop-shops, could increasingly integrate information on energy services into their advisory services.

4.1.2. *Dedicated facilitation and advisory services*

4.1.2.1. Legal framework

Compared to Directive 2012/27/EU, Article 29(6), point(c), of Directive (EU) 2023/1791 strengthens the requirement for Member States to set up and promote advisory bodies and independent market intermediaries to stimulate the development of energy service markets.

Advisory bodies and independent intermediaries can facilitate the use of energy services, for example by developing implementation models or by providing assistance in preparing and implementing procurement processes. ([4])

([2]) The list of examples of barriers can be consulted here: https://doi.org/10.1016/j.enpol.2017.04.023

([3]) A lack of market transparency is generally seen as one of the main barriers for the development of energy services across Member States. In a survey conducted as part of the EU-project QualitEE in 2019, 55 % of the respondents identified the complexity of the concept, as well as the lack of information, as main barriers preventing clients from using energy performance contracting. The results are similar for the energy supply market, where 52 % of respondents stated that lack of information is the main barrier for market enhancement (QualitEE-Project, Driving Investment in Energy Efficiency Services Through Quality Assurance, Final Report, December 2020). The survey includes results from the following countries: Austria, Belgium, Bulgaria, Czech Republic, France, Germany, Greece, Italy, Latvia, the Netherlands, Portugal, Slovakia, Slovenia, Spain and the UK.

([4]) Bleyl J. W. et al., 2014a: ESCo Project and Market Development: A Role for 'Facilitators' to Play, Including national perspectives of Task 16 experts, IEA DSM Task 16.

The requirement in Article 29(6), point (c) is based on the observation confirmed by the JRC latest report ([5]) that those Member States or market segments where facilitation services are well established and easily accessible show a better development of energy service markets. ([6])

4.1.2.2. Guidelines

The following are examples of how Member States could fulfil the requirement to set up and promote advisory bodies and independent market intermediaries:

— establishing advisory hubs for energy services by extending **the tasks of existing energy agencies or one-stop shops** ([7]);

— **providing project development assistance grants for intermediary services** that support the development of specific energy service projects, including for developing procurement documents, supervising the award procedure or monitoring project implementation ([8]), in accordance with the applicable State aid rules;

— **setting up specific advisory programmes for the public sector:** These programmes can be very effective, especially for the municipal sector, where many decision makers have insufficient knowledge about developing and implementing energy service projects. Also, in most regional administrations and central governments targeted advice on the practical application of energy services is greatly needed ([9]).

4.1.3. *Qualification, quality assurance and certification*

4.1.3.1. Legal framework

Article 29(2) states that Member States are to encourage the development of quality labels, based on European or international standards where relevant ([10]).

Furthermore, pursuant to Article 29(3), Member States are to disseminate information on qualified energy service providers by making publicly available, and regularly updating, a list of available energy service providers including their qualifications or certifications in accordance with Article 28 of Directive (EU) 2023/1791. Alternatively, Member States may provide an interface where energy service providers can provide such information themselves.

([5]) https://publications.jrc.ec.europa.eu/repository/handle/JRC133984

([6]) The importance of easy access to facilitation services for the development of ES markets is confirmed by the experience of several EU-countries (e.g., Austria, the Czech Republic, Germany Slovenia, and, Spain). Currently, it is mainly energy agencies on a regional, local and national level who act as facilitators, alongside small energy efficiency advisories, energy audit companies, or some legal advisors, who offer parts of their services in cooperation with experienced energy services consultants.

([7]) see for more information: https://publications.jrc.ec.europa.eu/repository/handle/JRC124675

([8]) The ELENA programme has demonstrated that technical assistance grants for facilitation services are a good means to overcome project development obstacles that are particularly critical in the pre-investment phase. The replication of the approach of the ELENA-programme by Member States is thus recommended. A detailed guidance related to financing instruments and technical assistance to be ensured by Member States is included in the Recommendation on Article 30 (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32023H01553)

([9]) and (5) on the role of public bodies related to the stimulation of the energy service markets in Member States.

([10]) The most relevant standards related to quality assurance and qualification of energy services and energy service providers are the following: EN 17669:2022 (Energy Performance Contracts - Minimum requirements); IPMVP (International Performance Measurement and Verification Protocol) and ISO 50046 (measurement and verification of energy savings); EN 16247-1 and ISO 50002 (quality standards for energy auditing);

Those provisions address the observed barrier of lack of trust in the effectiveness of energy services. ([11]) Many energy consumers still do not trust the promises of energy services, while at the same time being unwilling or unable to implement economically feasible energy efficiency measures with their own investments.

4.1.3.2. Guidelines

Although the requirements of Article 29(2) and (3) were already in Article 18 of Directive 2012/27/EU, there are almost no quality labels on energy services. Furthermore, where quality labels do already exist, awareness of them among energy consumers and providers is low. ([12])

To ensure the development and successful use of quality labels on the market, Member States could consider implementing a range of measures, containing in particular the following elements:

— **setting up a national platform** where all relevant stakeholder groups can collaborate to establish a national quality assurance scheme or 'quality label' for energy services. Since in many Member States energy service providers are not sufficiently prepared and organised to develop effective quality assurance schemes for energy services by themselves, public authorities should consider taking the lead, for example through energy agencies. Whether the schemes are established by the sector itself or created by the public authorities, to achieve reliability and market trust they should in any case be verified, recognised, and promoted by the relevant authorities;

— supporting the development of **technical quality criteria for energy services**. Although there exists a common understanding among experts of the main elements that define quality in energy service projects, obviously not all these elements are equally important for each market segment in all Member States. Therefore, each Member State could define a set of quality criteria for energy services, involving all the relevant market stakeholders and taking reference to the applicable European or international standards, such as EN 17669:2022 (Energy Performance Contracts - Minimum requirements); IPMVP (International Performance Measurement and Verification Protocol) and ISO 50046 (measurement and verification of energy savings). Member States can cooperate and get support from dedicated EU-funded projects to exchange good practice and define common quality criteria ([13]). The quality criteria help to shape the relationship between the energy service provider and the energy consumer, thus reducing the transaction cost and the risk of project failure;

— **improving services quality.** In principle, a quality label can refer to energy services or to energy service providers. The technical capacity of the energy service provider can be demonstrated by a sufficient number of high-quality reference projects, evaluated according to the defined technical quality criteria. It is important however that the national labelling schemes do not create an entry barrier for the services providers from other Member States. For this reason, in case a quality label becomes a condition to provide a service, labels issued in another Member State should be recognised, where relevant in accordance with applicable Union law related to services, if they are based on equivalent or common quality criteria, including those stemming from the European standards listed in point (b);

([11]) A survey implemented under the framework of the QualitEE-project in 2019, indicates that 55 % of stakeholders consider a lack of trust in the EES provider industry to be a major barrier for the practical application of energy performance contracting. According to the same survey a majority of respondents express the opinion that more information and a higher quality of services would potentially increase the client's trust and consequently increase demand. Altogether the interviewed stakeholders supported the idea of developing and implementing quality assurance systems to overcome the apparent lack of trust in service providers coupled with low customer demand. (QualitEE-Project, Driving Investment in Energy Efficiency Services Through Quality Assurance, Final Report, December 2020.) The survey includes results from the following countries: Austria, Belgium, Bulgaria, Czech Republic, France, Germany, Greece, Italy, Latvia, the Netherlands, Portugal, Slovakia, Slovenia, Spain and the UK.

([12]) There exists very little empirical experience on the impact of quality labels on energy service markets. An overview on the attempts in various countries to introduce quality labels either for energy services or for energy service providers can be found in country reports from the QualitEE-project: https://qualitee.eu/publications/business-cases-for-national-quality-assurance-schemes-for-energy-efficiency-services/.

([13]) The development of quality criteria for energy services may be based on the extensive related groundwork that has already been developed in various EU-projects, such as QualitEE-project, Guidelines for European Technical Quality Criteria for Energy Efficiency Services, March 2020, https://qualitee.eu/publications/guidelines-of-european-quality-criteria/.

— **supporting a cost-efficient quality assurance process:** In immature markets, the costs of a quality assurance process can be a barrier for market participants. It is therefore recommended that some of these costs be borne by public funds, in accordance with the applicable State aid rules, or that a public institution takes care of quality assurance;

— providing public support for the market penetration of the quality assurance scheme, using the following set of measures:

(i) implementing awareness raising activities in conjunction with the dissemination activities that are required under Article 29(1)

(ii) using quality criteria related to energy service providers in public subsidy schemes.

(iii) applying quality assurance schemes in public tenders and providing training to public bodies on how to integrate technical quality criteria into procurement specifications, also in the context of the implementation of Article 29(4) and (5), as described in section 4.2. of these guidelines.

4.2. **Obligations related to increased and better use of energy services by public bodies**

4.2.1. *Legal framework*

Pursuant to Article 29(4), Member States are to promote and ensure, where technically and economically feasible, the use of energy performance contracting or other performance-based energy services for renovations of large buildings (over 750 sqm) owned by public bodies ([14]). Therefore, Member States are to ensure that the feasibility of performance-based energy services for intended renovation projects for non-residential buildings is assessed by public bodies. Additionally, Member States may encourage public bodies to combine energy performance contracting with expanded energy services, including demand response and storage.

Furthermore Article 29(5), the content of which was already part of Directive 2012/27/EU, requires Member States to support the public sector in taking up energy service offers by providing model contracts compliant with the Eurostat Guide ([15]), and by sharing information on implemented and ongoing good practice energy service projects in the public sector.

4.2.2. *Assessing the feasibility of using performance-based energy services*

The implementation of Article 29(4) will help with the achievement of public bodies' final energy consumption reduction target in Article 5 and with the achievement of the obligation of renovation to NZEB level of public bodies' buildings in Article 6 of Directive (EU) 2023/1791. However, this will require going beyond the current business operation to the field where there is little experience of the use of ESCO model (deep renovation, building envelop type of works). Therefore, the provisions of Article 29, if implemented effectively on the ground, should facilitate this more risky and more complex business development. If technically and economically feasible, performance-based energy services, such as energy performance contracting (EnPC), should be used to realise renovations across the entirety of the public building stock. The feasibility study required under Article 29(4) for non-residential buildings would be the preferred instrument to select the viable from the non-viable cases. Making non-residential buildings subject to the mandatory EnPC feasibility assessment is justified by the fact that such buildings prevail in the building stock owned by public bodies, while the possibility of excluding social housing from the scope of the renovation obligation under Article 6 would make the mandatory assessment de facto non-applicable to public social housing.

([14]) A detailed description of the term of public bodies is included in the Guidance Note on Article 5.

([15]) Eurostat Guidance Note, The recording of energy performance contracts in government accounts: https://ec.europa.eu/eurostat/documents/1015035/7959867/Eurostat-Guidance-Note-Recording-Energy-Perform-Contracts-Gov-Accounts.pdf/.

4.2.3. *Guidelines*

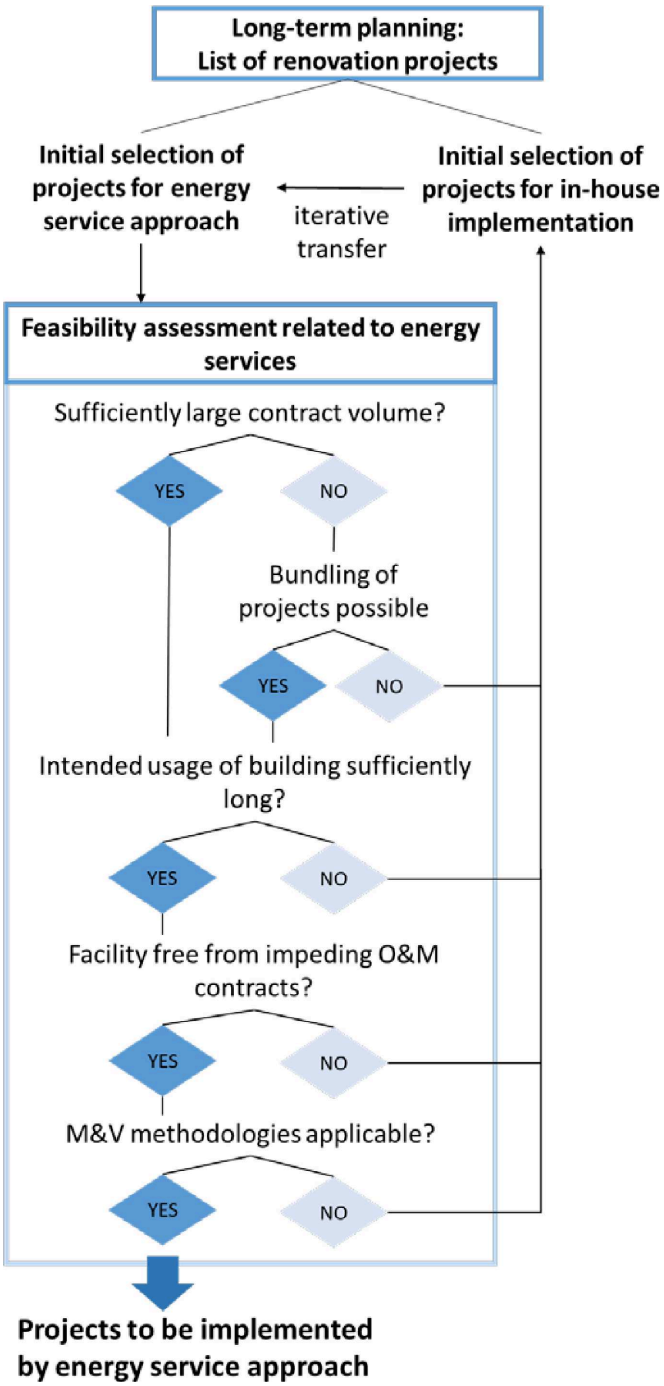
The feasibility assessment for performance-based energy services could be incorporated into long-term planning tools, such as decarbonisation or sustainable energy plans that have to be elaborated by regional and local authorities in accordance with Article 5(6) of Directive (EU) 2023/1791. Such plans should include a portfolio analysis and a renovation roadmap for the public building stock, covering not just deep renovation but also continuous repair and improvement investments, as necessary for the individual buildings. The scope of the renovation roadmap should of course aim at achieving policy targets in terms of energy savings (Article 5 of Directive (EU) 2023/1791), rate of renovations (Article 6 of Directive (EU) 2023/1791) and emission reductions. This should be also integrated within the National Building Renovation Plans, as set out in Article 3 of and Annex II to Directive (EU) 2024/1275 ([16]).

Figure 1 shows how a renovation roadmap could serve as a basis for the feasibility assessment for performance-based energy services. In a first step, the public body may wish to apply in-house implementation through a conventional contract service and works, which requires sufficient financial and inhouse staff resources. However, many public bodies suffer from a lack of human resources, organisational bottlenecks and financial constraints, which generally make it difficult (or even impossible) for them to implement the entire list of renovation projects with their own resources. In this context, personnel resources are not only experts in the planning department, but also experts for the optimal operation and maintenance of buildings in view of realising the intended energy savings in practice.

([16]) Directive (EU) 2024/1275 of the European Parliament and of the Council of 24 April 2024 on the energy performance of buildings (OJ L, 2024/1275, 8.5.2024, ELI: http://data.europa.eu/eli/dir/2024/1275/oj).

Figure 1

Feasibility assessment for performance-based energy services projects based on long-term renovation planning



The following aspects should be considered in the EnPC feasibility assessment:

— the building's characteristics and especially its energy consumption (and GHG emissions levels if the EnPC should cover those) and energy supply conditions (such as power purchase agreement, if any). The potential energy savings should be sufficient to make the contract economically viable and justify the investments;

— the characteristics of a renovation (objectives, needs, budget constraints, timeframe) and specifically if the envisaged renovation is initially without energy conservation measures (for instance, re-painting the façade), as such renovations are an opportunity to improve the energy performance of a building (for example, improve insulation);

— appointment of the relevant party (external or internal) to carry out the feasibility assessment.

Overall, the situations that would completely exclude the use of EnPC are rare, mainly caused by procedural barriers, for instance, in tendering procedures (however, such barriers should be progressively removed on the basis of Article 29(6), point (b), of Directive (EU) 2023/1791) or market immaturity making a tender or call for projects unsuccessful due to lack of EnPC providers on the market. However, complexity of the project and a long payback period (for example, in the case of deep renovation to NZEB level) can also be a barrier for EnPC use.

The deterrence in tendering procedures for EnPC services providers, which has been frequently reported by market participants, consists in insufficient information included in tender specifications that would allow the tenderers to submit offers. Indeed, the development of an energy performance contract requires an in-depth analysis of the building concerned and its energy uses. Thus, there should be sufficient time and expert manpower envisaged for the preparation of the procurement documents, resorting to external experts or joint purchasing (for instance, use of Central Purchasing Bodies) when needed.

Even though there are no strict technical or economic exclusion criteria for using EnPC for the renovation of public buildings, the feasibility assessment could include the following guiding questions in particular:

— **is the renovation project sufficiently large?** Performance-based energy services require a certain minimum contractual value or large absolute energy savings so that cost saving could cover all costs including the transaction costs. ([17]), because energy service providers need to cover not just project cost, but also tendering cost and other transaction cost from the expected revenues;

— **is it possible to bundle renovation projects that are initially assessed as too small-scale?** If small, stand-alone renovations are bundled, they may become attractive for performance-based energy service projects. Bundling of projects is generally easier if the buildings or facilities belong to the same owner if they are in close vicinity, and if the usage structure is similar (for instance, schools);

— **is the building or facility expected to be used by the public body for the entire intended duration of the contract?** An energy performance contract constitutes a service over several years ([18]) by the energy service provider related to one or more buildings or facilities, and it is often disadvantageous for the customer to terminate the contract prematurely;

— **does an impeding operation and maintenance contract exist for the building?** In energy performance contracts, operation and maintenance of building systems is usually part of the service package and under the responsibility of energy service providers. If there exists a long-term operation and maintenance contract with another service provider that cannot be terminated, experience has shown that it would be very difficult to define clear boundaries between the two service providers, which could greatly complicate the implementation of the energy service project;

([17]) There is not a precise minimum contractual value for performance-based energy services. Specifically for energy performance contracts, sometimes a minimum range of 300 000 to 500 000 EUR is reported. The contractual value is the overall sum of remuneration payments to the energy service provider over the whole contract period, and thus depends on the amount of yearly payment on the one hand, and the length of the contract on the other. To a certain extent, the minimum contract value can be derived from the current total energy bill of the client, for which amounts of at least 200 000 to 300 000 EUR are repeatedly quoted.

([18]) Typical contract terms range from 7 to 15 years. In individual cases, however, projects with significantly longer contract terms of up to 30 years have already been implemented, particularly in connection with deep renovation projects.

— **are measurement and verification methodologies available and could they be applied at reasonable cost?** Performance-based energy services require considerable effort to measure or evaluate the performance ([19]) through measurement and verification methodologies, since the remuneration is dependent on the measured performance. The cost for measurement and verification should be reasonably in proportion to the achievable cost savings or other revenues of the project. ([20])

In addition to the feasibility questions mentioned above in points (a) to (e), which in most cases are essential for the implementation of a performance-based energy service, a few other **constraining factors** exist. Those factors do not fundamentally make the implementation of a performance-based energy service project impossible but have to be taken into account. They should not be used as exclusion criteria in the feasibility assessment, but they may be applied as supplementary parameters to realistically assess the overall situation. The most important constraining factors are:

— **deep renovation:** only in a few projects to date has deep renovation been implemented as part of a performance-based energy service. This can be explained by the fact that the higher investment costs generally require contract periods of more than 15 years. In addition, deep renovation projects are often combined with investment subsidies, and access to investment subsidies may be more complicated for performance-based energy service projects than for in-house implementation. ([21]) To overcome this barrier, the financing mechanisms that allow blending public subsidies with private financing could be an interesting option, especially to cover the additional risk of the long-term performance guarantee contract that the private sector may not be willing to cover. Cohesion Policy funding can combine grants and financial instruments to support the use of EnPC for deep renovation. The fi-compass factsheet on implementing energy efficiency projects via Energy Performance Contracting with ERDF Financial Instruments in Poland ([22]) is largely applicable also in other Member States and relevant for different building types, including public, commercially used or multi-apartment residential buildings;

— **compliance with the Eurostat Guidance Note** ([23])**:** if a performance-based energy service project does not meet the requirements in the Eurostat Guidance Note on the recording of energy performance contracts in government accounts, the project may still be suitable, but the advantage that the investment is not or not fully accountable to government debt and deficit is lost. ([24])

Altogether, the feasibility assessment should serve to filter out those cases in which the initial technical conditions or the institutional set-up make the implementation of a performance-based energy service project economically disadvantageous. Renovation projects that do not pass the feasibility assessment would have to be realised by in-house implementation, namely by using a traditional procurement of construction contract or renovation works. In turn, projects that were initially intended for in-house implementation may now be reassigned to implementation using performance-based energy services. For renovation projects that pass the feasibility assessment – namely, projects that are sufficiently large, either as stand-alone or as a bundle of projects, have sufficient intended usage periods, no impeding ongoing operation and maintenance contracts, and for which well-established measurement and verification methods can be applied – the public body should prepare an appropriate energy service project and procure it in accordance with the

([19]) In energy performance contracts the most important performance criterion is the energy saving achieved.

([20]) There exist several examples where available M&V methodologies may be difficult to apply or very costly compared to the overall contractual amount, such renovation projects in very complex buildings (e.g., hospitals) or in projects where the usage after renovation differs a lot from the one before renovation. However, a general rule for this assessment does not exist, so a case-by-case assessment should be performed by a qualified expert.

([21]) There exist, however, several examples where performance-based energy-services has been applied for deep renovation, with investment subsidies also being involved in some cases (cf. REFINE-project, Final Report, June 2023, p. 29 ff, https://refineproject.eu/refine-publications/).

([22]) Implementing Energy Efficiency projects via Energy Performance Contracting with support from ERDF financial instruments in Poland, https://www.fi-compass.eu/sites/default/files/publications/EPC_ERDF_Factsheet_RTW.pdf/.

([23]) The Eurostat Guidance Note, http://ec.europa.eu/eurostat/documents/1015035/7959867/Eurostat-Guidance-Note-Recording-Energy-Perform-Contracts-Gov-Accounts.pdf/.

([24]) A more detailed presentation of the relevance of the Eurostat Guidance Note is included in section 4.2.3., where the most important sources are also referred to.

applicable public procurement rules ([25]). If the procurement does not receive satisfactory offers from energy service providers, it may be that the energy service is technically and economically unfeasible. However, the reason for not receiving satisfactory offers could also be that the scope of the energy service project was designed in an inappropriate way, or that potential energy service providers did not have sufficient capacities in the given region or at a given time. To mitigate this risk, Member States are to propose model contracts pursuant to Article 295, point (a), and they are recommended to adapt the procurement procedures to increase the success of tendering processes.

4.3. **Model contracts on energy performance contracting**

4.3.1. *Legal framework*

Article 29 (5), point (a), requires Member States to provide model contracts for energy performance contracting in the public sector. In addition to relevant standards and available tendering guidelines, the model contracts are to take into account the Eurostat Guidance Note on the recording of energy performance contracts in government accounts in particular ([26]).

4.3.2. *Guidelines*

The Eurostat Guidance Note on the recording of Energy Performance Contracts in government accounts explains how the rules of the European System of National and Regional Accounts (ESA 2010 ([27])) should apply to energy performance contracts. It offers public authorities an opportunity to carry out energy efficiency investments using private sector technology, know-how and finance without a negative impact on public accounts, For this purpose, it lists the conditions under which energy performance contracts can be recorded off government balance sheets. The most important conditions are:

— the energy service provider should bear the majority of the risks and receive rewards related to the use of the energy performance contracting assets and in particular, the performance, the maintenance and the refurbishment risks, so that the economic ownership of the underlying assets is to be considered remaining with the energy service provider;

— only capital investment leading to energy savings and to a limited extend renewable energy generation is eligible to be recorded off government balance sheets.

— the capital investment should be fully offset by savings strictly related to energy efficiency improvements, whereas other savings (for instance, personnel cost savings) should not be taken into account.

In general, the Eurostat guidance note has a positive impact on the EnPC update in the public sector, because it allows to have some ESCO projects registered off-balance sheet in public accounts. However, some conditions listed above can limit the possibility to get public investments recorded off government balance sheets. In particular for deep renovation projects, the conditions are not easy to fulfil because of the need for the rather long duration of the energy performance contract. Financing from European programmes and investments, such as ERDF or RRF may be deducted from the capital investment when calculating the capital investment against savings. Development of model contracts for the use of EnPC in the public sector ensuring compliance with the Eurostat guidance could help overcome this barrier.

When developing and providing the model contracts compliant with the Eurostat Guidance Note, it is recommended that Member States pay particular attention to the following aspects as set out in the Eurostat-EIB Guide ([28]):

([25]) Guidelines for the public procurement of energy service projects have been prepared in a number of EU projects, for example QualitEE-project, Procurement handbook for energy efficiency services, November 2019: https://qualitee.eu/publications/procurement-handbook-for-energy-efficiency-services/.

([26]) The Eurostat Guidance Note, http://ec.europa.eu/eurostat/documents/1015035/7959867/Eurostat-Guidance-Note-Recording-Energy-Perform-Contracts-Gov-Accounts.pdf/.

([27]) European system of accounts - ESA 2010: https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/ks-02-13-269

([28]) European Investment Advisory Hub (in collaboration with Eurostat), A Guide to the Statistical Treatment of Energy Performance Contracts, May 2018.

— the **national statistical offices** should be directly involved in the development of model contracts, since they are the ones that are responsible for the reporting of public accounts to Eurostat. It is important that those responsible at the national statistical offices are well informed about the main characteristics and practical applications of energy performance contracting and other performance-based energy services;

— the model contract should **make optimal use of the flexibility offered by the Eurostat Guidance Note**, to enable its practical application on as large a scale as possible. The following issues should be addressed in particular: elaboration of contractual conditions for maintenance and repair, which transfer the investment risk to the energy service provider but do not unduly affect the economic viability of the project by imposing additional costs; enabling long-term contract durations for the refinancing of deep renovations from energy savings; possibility of blending of the energy service project with public subsidies for example in the form of grants or financial instruments ([29]), in accordance with the applicable State aid rules;

— a **model contract should not necessarily be a fully drafted contract**; rather, it should cover the formulation of those elements of the contract that are critical in the context of off- or on-balance accounting of an energy performance contracting investment, while other parts can remain flexible.

4.4. **Combining energy performance contracting with expanded energy services**

4.4.1. *Legal framework*

Article 29(4), second subparagraph, provides that Member States may encourage public bodies to combine energy performance contracting with expanded energy services, including demand response and storage.

That provision invites Member States to encourage the public bodies to trigger market development towards the combination of demand-side flexibility elements, such as demand-response services with energy service projects.

4.4.2. *Guidelines*

To implement Article 29(4), second subparagraph, one option would be to create the possibility of optional bid items in public energy service tenders, thus giving bidders the opportunity to integrate demand response services into their offers.

In this way, energy service projects would not only contribute to improved energy efficiency, but to also to a more efficient electricity system allowing for a better integration of electricity production from renewables by increasing demand-side flexibility. This would also bring additional revenue streams to service providers, develop demand-side flexibility markets and provide wider benefits to the public sector and to society at large, including to local communities ([30]).Various Union funded projects have explored this direction of business development, and their results and findings could be considered when addressing the implementation of this provision ([31]).

([29]) To give two examples for possible approaches: According to Eurostat, for off-balance-sheet-accounting the remuneration to the energy service provider must be dependent on energy savings achieved, and thus flexible. This does not mean, however, that a division of the remuneration into a fixed CAPEX part alongside a flexible OPEX part is impossible, as long as it is guaranteed at the same time that the energy service provider compensates the customer in full for a shortfall in performance, because in this way it is still ensured that the economic ownership is transferred to the energy service provider. Also, the requirement that the long-term maintenance and repair of the investments has to be carried out by the energy service provider shall ensure the full transfer of economic ownership. This does not exclude, however, that a part of the related cost is compensated within the fixed CAPEX part of the remuneration.

([30]) Saviuc, I., Lopez, C., Puskas, A., Rollert, K. and Bertoldi, P., 2022: Explicit Demand Response for small end-users and independent aggregators, EUR 31190 EN, Publications Office of the European Union, Luxembourg, ISBN 978-92-76-55850-7, doi:10.2760/625919, JRC129745.

([31]) Examples of projects funded from LIFE programme: INEXXs (Innovative Energy Efficiency Service Models for Sector Integration via Blockchain- developing an early concept to combine Virtual Power Plants with ESCO services); BungEES (developing an integrated package of smart energy efficiency services).

5. OBLIGATIONS RELATED TO THE REMOVAL OF REGULATORY AND NON-REGULATORY BARRIERS

5.1. Legal framework

Article 29(6), point (b), required Member States to support the proper functioning of energy service markets by removing regulatory and non-regulatory barriers. Furthermore, pursuant to Article 29(8), Member States are to ensure that energy distributors, distribution system operators and retail energy sales companies refrain from any activities which impede the provision of energy services.

5.2. Guidelines

To better understand the barriers that hinder the positive development of energy service markets, it is strongly recommended that Member States carry out an in-depth market analysis involving stakeholders from different market segments, including energy consumers (public, private, SME, residential, etc.), energy service providers, financing institutions and market facilitators. That analysis would provide a solid basis for establishing the most appropriate and beneficial policy instruments to enhance energy service markets. ([32])

6. PLANNING AND REPORTING REQUIREMENTS

6.1. Applicable provisions on the update of the integrated national energy and climate plans

Article 14(2) of Regulation (EU) 2018/1999 of the European Parliament and of the Council ([33])requires Member States to submit by 30 June 2024, and subsequently by 1 January 2034 and every 10 years thereafter, an update of their latest notified integrated **national energy and climate plan** (NECP). Article 14(1) of that Regulation requires Member States to provide a draft update of the NECP a year prior to the deadline in Article 14(2).

The planning requirements in relation to energy services are referred to in Annex I, part 1, Section A, point 3.2. (iii) to Regulation (EU) 2018/1999. The relevant information to be included in the NECP related to the implementation of Article 29 of Directive (EU) 2023/1791 should include the description of policy and measures to promote energy services in the public sector and measures to remove regulatory and non-regulatory barriers that impede the uptake of energy performance contracting and other energy efficiency service models.

6.2. Progress Reporting

6.2.1. *Legal framework*

The reporting requirements on policies and measures to promote energy services are laid down in Article 21, point (b)(5), and in Annex IX, Part 2, points (a) and (k) of Regulation (EU) 2018/1999.

Article 21, point (b)(5), of Regulation (EU) 2018/1999 requires Member States to include in the integrated national energy and climate progress reports policy and measures to promote energy services in the public sector and measures to remove regulatory and non-regulatory barriers that impede the uptake of energy performance contracting and other energy efficiency service models.

([32]) The latest EU assessment of energy performance contracting markets across Member States shows a very heterogeneous picture of the most important barriers for market uptake and has also revealed some rather surprising barriers for energy services markets across Europe. For example, subsidy schemes, if not appropriately designed, have been observed as major barriers for the provision of energy services. In particular, this has been reported with respect to the use of RRP grants, where the increasing availability of grants compete with energy performance contracting cf. Moles-Grueso, S., Bertoldi, P. and Boza-Kiss, B., Energy Performance Contracting in the EU – 2020-2021, Publications Office of the European Union, Luxembourg, 2023, doi:10.2760/751957, JRC133984.

([33]) Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1, ELI: http://data.europa.eu/eli/reg/2018/1999/oj).

6.2.2. *Guidelines*

In accordance with Annex IX, Part 2, points (a) and (k) of Regulation (EU) 2018/1999 and in conjunction with Article 29 of Directive (EU) 2023/1791, the relevant information to be included in the national energy and climate progress reports related to the implementation of Article 29 should include the following elements:

— policy measures to improve the overall transparency of energy service markets pursuant to Article 29(1), (3) and (6) of Directive (EU) 2023/1791, and in particular, the internet link to the website with the list or the interface of energy services providers that are qualified or certified and their qualifications or certifications in accordance with Article 28 of that Directive;

— availability of quality labels [Article 29(2) of Directive (EU) 2023/1791] and their actual use by energy service providers (number of labelled service providers);

— availability of model contracts for public bodies which are compliant with the Eurostat Guide on the recording of Energy Performance Contracts in government accounts, and examples of such model contracts (or where they are publicly available);

— public database for implemented and ongoing performance-based energy service projects as well as selected good practice examples in the public sector. In addition, good practice examples from the private sector could be included, if the relevant information is available or can be easily gathered;

— policy measures taken to ensure the feasibility assessment of performance-based energy services for renovation projects of public bodies.

In addition, the reporting could comprise the following information:

— other measures taken, if relevant, for example related to removal of regulatory of non-regulatory barriers or where the Member State has exercised its discretion pursuant to Article 29 of Directive (EU) 2023/1791;

— overall indicators related to energy service market development, such as number of (active) energy service providers, total annual contract values, etc.