

II REACHING THE TARGETS

Part II details the main elements of the EED, providing a background for each of the subject areas, the requirements of the EED and recommendations for effective implementation and monitoring. Because many subject areas are covered by more than one article, each is treated separately here. Part II starts by reviewing Energy Efficiency Obligations, then follows with the public sector and energy audits, and ends with a discussion of supply side efficiency and demand response.

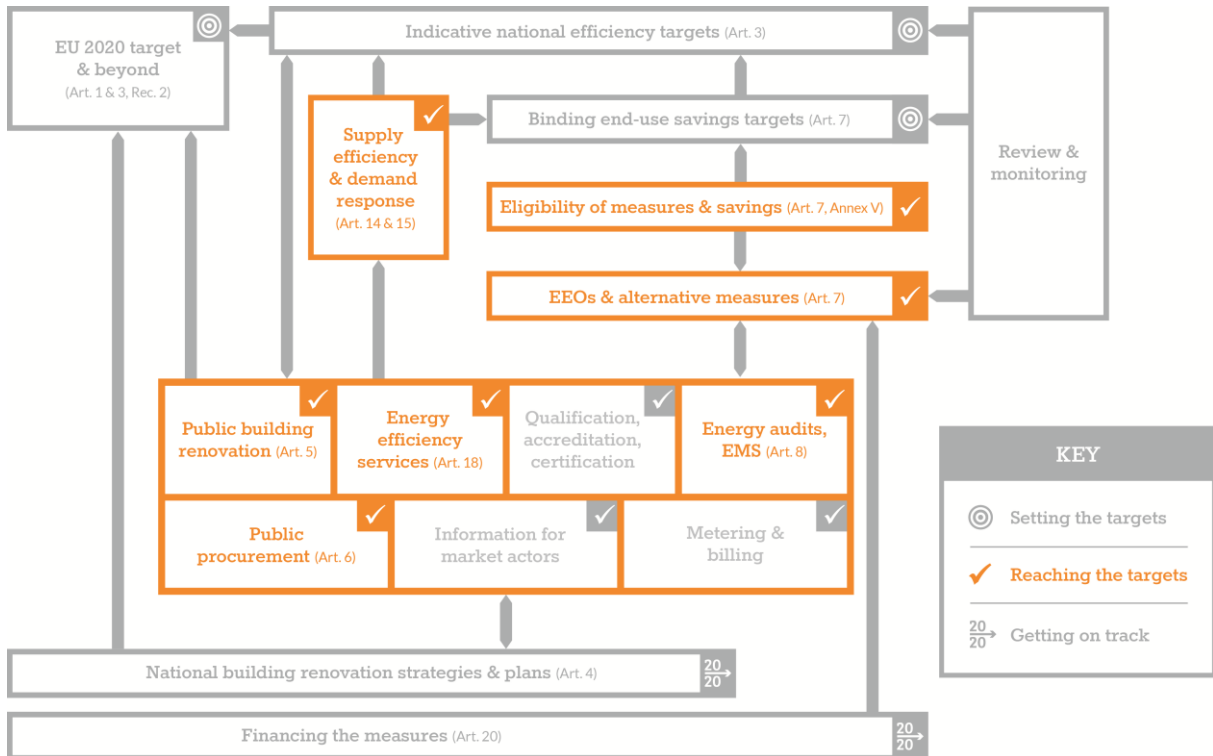


Figure 16 – Guidebook Overview Map: Reaching targets and objectives

II.6 Energy efficiency services (Article 18)

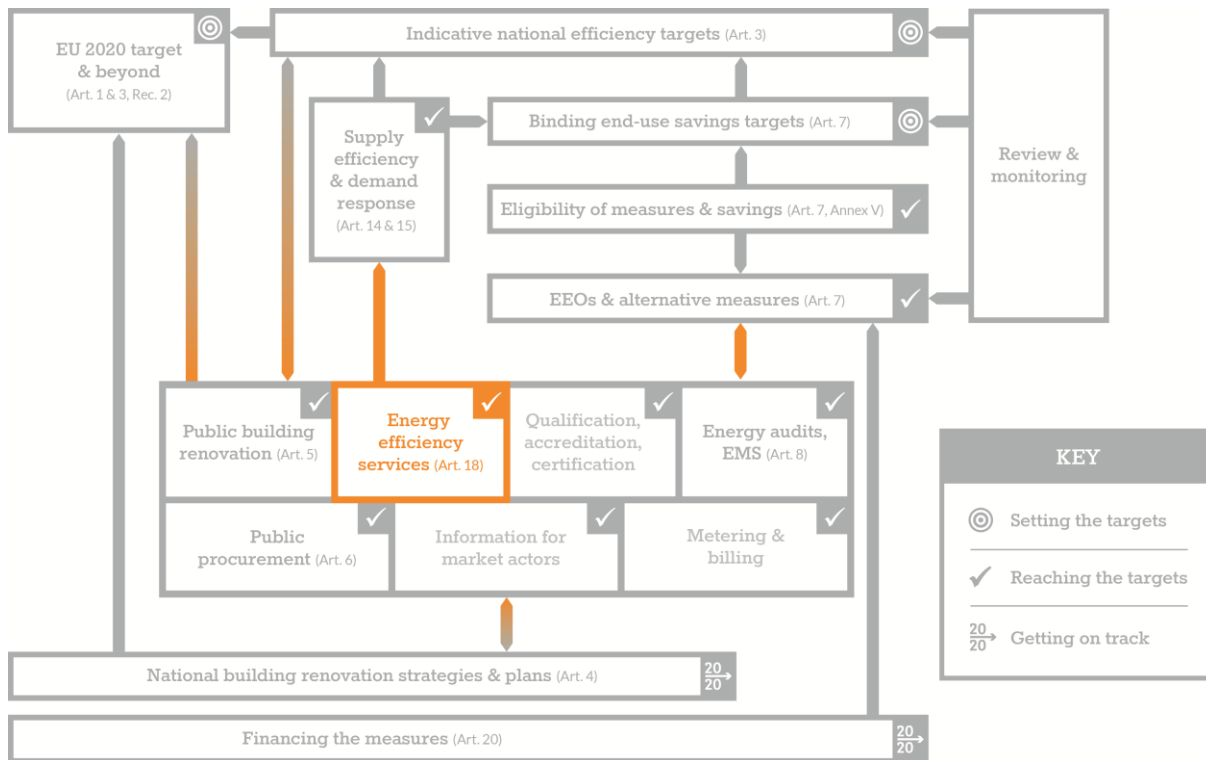


Figure 23 – Guidebook Overview Map: Energy efficiency services

II.6.1 Summary

EU energy efficiency policy has the potential to transform the energy market into one which focuses on the delivery of energy *services* – i.e. the useful outcome of using energy – rather than purely on the delivery of energy itself. Companies and business models which are organised in this way already exist, but so far market conditions and the legislative framework are not as supportive or effective as they could be. Article 18 of the EED seeks to address this with an explicit requirement on MSs to promote the energy services market and to support its proper functioning by, for example, providing information to final consumers.

The EED also adds certainty to the market by providing useful definitions, including one for Energy Performance Contracting (EPC), and by requiring EPC model contracts to be provided by MSs. Three key characteristics qualify a contract as EPC: a precise definition of energy performance goals to be achieved within a certain time period, detailed measurement and verification processes and contractually agreed energy savings/consumption.

MSs should particularly focus on removing regulatory and non-regulatory obstacles to performance contracting and energy services. They should also cooperate with each other and with the European Commission against continuing EU-wide barriers, such as an interpretation of the EUROSTAT rules regarding qualifying investments by energy service companies (ESCOs) as public deficit that hinders a development of energy services. The Coalition also urges that MSs consider obstacles to energy efficiency investment caused by the necessity for public bodies to count investment as “capital expenses” and reduced costs as “operational expenses”.

Regarding energy efficiency services, the following is recommended:

- Ask MSs to specify the following three notions of EPC as the core ones:
 - A precise definition of energy performance goals to be achieved within a certain duration of time;

- Contractually agreed energy savings; and
- Agreed measurement and verification procedures in place to measure contractually agreed savings with prior measurement of energy consumption before and after a contract enters into force.
- In creating an information platform by which to catalogue energy service providers, ask MSs to categorise providers by clearly defined criteria (their specialisation, for example);
- Support the European Commission in actions to modify the interpretations of EUROSTAT rules on public debt and deficit, which considers investments in energy efficiency under energy service contracts as public deficits in the National Accounts even if organised under ESCOs;
- Encourage MSs to take into account EPC and other overall types of energy service contracts in order not to oblige public bodies to divide contracts into lots, as there is a likelihood that the new Directives on public procurement will prescribe such divisions¹. Otherwise, the use of EPC and other overall energy service contracts by the public sector will be substantially limited, which adds a risk of not achieving the maximum cost-effective and guaranteed energy savings²; and
- Encourage the grouping of SMEs in tendering procedures.

In terms of reporting and monitoring requirements, Article 19 requires MSs to notify the Commission in the first National Energy Efficiency Action Plans (NEEAPs) due 30 April 2014 what measures will be taken to remove barriers to energy efficiency. MSs are additionally required to put in place certification and accreditation schemes or their equivalent (including suitable training programmes) for energy service providers by 31 December 2014 under Article 16.1.

II.6.2 Background

Energy services are without a doubt one of the key tools to achieve energy savings. Existing provisions under the Energy Services Directive (2006/32/EC) have been an important starting point, as they encourage the public sector to lead by example in making use of energy services. However, they have not resulted in unlocking the full potential of savings that could be offered if energy services were widely used. Therefore, a focus on both supply and demand of energy services, including other actors as companies, was necessary and recognised by the European Commission when putting forward its proposal for the EED.

Apart from supportive measures, the EED provides important clarification on definitions and a basis for appropriate qualification and certification schemes for providers of such services. By the time the EED was adopted, the market could use EN 15900 standards on energy efficiency services, which have served as the main point of reference for market actors on supply and demand side. However, this norm alone is not sufficient to ensure the stability of the market and its further development, creating a need for legislative measures at the EU level. Nevertheless, actors in the energy efficiency services market should continue using the concepts from EN 15900 as they include valuable requirements for energy efficiency services.

In parallel with the growing needs for energy services, the EED offers adequate and clear provisions to address the competition issue between energy and energy service providers.

¹ Public Procurement Directives 2004/17/EC and 2004/18/EC are currently being amended and the legislative process is ongoing.

² This is due to the following: 1) energy efficiency projects under EPC and other overall energy service contracts require coordination between different actions in order to achieve a guaranteed amount of energy savings, 2) splitting energy efficiency into separate actions can cause lock-in effects (after completing one action, the decision to take another one may take years) and 3) comprehensive actions have the potential to bring more energy savings and be more cost-effective.

Good practice examples, according to the European Commission Joint Research Centre's ESCO market report³, come from MSs where national energy agencies cooperate with stakeholders from public and private sectors to stimulate the energy efficiency market. In countries with a challenging combination of rising energy prices, high energy efficiency potential, limited financial resources and experience, an improvement of the legal framework is extremely important for a growth of ESCOs. Please refer to Annex D for specific examples.

II.6.3 EED requirements

Article 18 indicates how MSs will promote the energy efficiency market by listing actions such as providing model contracts for energy performance contracting and disseminating information on energy services and their providers to clients.

Importantly, MSs shall address barriers to energy efficiency service models including EPC. According to Article 19 MSs are also obliged to evaluate and engage themselves, if necessary, in removing the existing regulatory and non-regulatory barriers⁴ such as administrative practices regarding public purchasing, annual budgeting and accounting and the split incentives between tenants and owners.

Useful definitions in Article 2 of the EED

'**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**' 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**' 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.

Dissemination of information

The measures that MSs must undertake include disseminating information on available energy service contracts and clauses, making available information on financial instruments to support energy service projects (Article 18.1(a)) and creating and updating a public list of energy service providers who are qualified and/or certified (Article 18.1(c)). Alternatively, MSs may set up an interface where energy service providers can provide information.

Empowering final customers

Specific provisions on measures targeted at final customers (Article 18.2) include:

- Identifying and publicising points of contact with information on energy services;
- Considering putting in place or assigning the role of an independent mechanism, such as an ombudsman, to ensure the efficient handling of complaints and out-of-court settlement of disputes arising from energy service contracts; and

³ [Bertoldi, P., Boza-Kiss, B., Marino, A. and Rezessy, S., Energy Service Companies Market in Europe - Status Report 2010, Joint Research Centre, European Commission, 2010.](#)

⁴ The barriers to ESCOs are described in detail in: Bertoldi, P., Boza-Kiss, B. and Rezessy, S., *Latest development of energy service companies across Europe - A European ESCO update*, Status Report, Joint Research Centre, European Commission, 2007. They are analysed specifically by every EU Member State in the Status Report from 2010. See also [conclusions from the ChangeBest project](#) focusing on promoting the development of an energy efficiency service (EES) market.

- Enabling independent market intermediaries to play the role of market stimulators on both demand and supply side.

Certification and qualification schemes

The provisions on certification schemes, accreditation schemes and/or equivalent qualification schemes constitute a substantial contribution of the EED towards the development of the market for energy services. However, a great margin of flexibility is left to MSs, as they decide whether such schemes are necessary. Accreditation and/or qualification schemes must be in place by 31 December 2014. If necessary, they will also make available training programmes for providers of energy services, energy audits, energy managers and installers of energy-related building elements in accordance with the Energy Performance of Buildings Directive (2010/31/EU).

Energy Performance Contracting (EPC)

A definition of EPC in Article 2 contains an important element to the effect that investments (work, supply or service), if any, in the energy efficiency improvement 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. This clarification explains that investments made by a party other than the contract provider, possibly a third financing party, are not always fully recouped by energy savings within the duration of the contract.

The EED also puts a requirement on MSs to provide model contracts for EPC with the public sector and best practice examples including cost-benefit analysis using a life-cycle approach (Article 18.1(d)). Model contracts have to contain the minimum list of items enumerated in Annex XIII of the EED. A general aim of this list is to develop a market for energy services by making the contracts clear and transparent.

Other measures

The EED also requires a qualitative review to be provided in the framework of NEEAPs regarding the current and future development of the energy services market (Article 18.1(e)).

The notion of fair competition also appears in the final text. MSs shall ensure that energy distributors, distribution system operators and retail energy sales companies refrain from any activities that may impede the demand for and delivery of energy services or hinder the development of markets for such services and measures, including foreclosing the market for competitors or abusing dominant positions (Article 18.3).

II.6.4 Legal checks and recommendations

Legal checks

- 1. Ensure that MSs evaluate and remove regulatory and non-regulatory barriers to energy efficiency (Article 19.1). The results of this need to be described in the first National Energy Efficiency Action Plan due 30 April 2014.**

The variety of barriers towards energy services include *inter alia* public procurement and accounting rules, regulated energy pricing, a lack of appropriate forms of financing, split incentives between tenants and landlords, lack of guarantees and low awareness.

- 2. Check that MSs ensure that energy suppliers and/or distributors are not impeding energy efficiency services and their market development.**

Good practice recommendations

- 1. Encourage MSs to specify the three notions of EPC as the core ones:**
 - A precise definition of energy performance goals to be achieved within a certain duration of time;
 - Contractually agreed savings; and

- Agreed measurement and verification procedures in place to measure contractually agreed savings with prior measurement of energy consumption before and after a contract enters into force.

2. As for other items to be included in EPC that add clarity and transparency, ask MSs to consider the following items that are missing in Annex XIII:

- Definitions of “third party”, “verification body” and “energy auditor”;
- Characteristics of the reference period, taking into account that an EPC may require at least one year of collecting data (degree days, primary energy consumption and energy mix, for example) to define a reference period;
- Reference characteristics for buildings (surface, volume and temperature, for example);
- Reference characteristics regarding users of buildings (number of persons, time of presence or specific behaviour);
- Adequate monitoring and performance guarantees, such as penalty or reward caps during the lifetime of a contract;
- Performance criterion that refers to the energy saved instead of money saved, expressed, for example, in MWh/year, in comparison with reference consumption and normalised measurement;
- The saved delivered energy calculated and priced according to the prices during the contract period;
- An agreement for the verification procedure; and
- A list of changing framework conditions that affect the content and outcome of the contract.

3. In creating an information platform by which to catalogue energy service providers, ask MSs to categorise providers by clearly defined criteria (their specialisation, for example).

In addition, they should include details about possible types of works, equipment and services in order to explain possible solutions to final customers in the simplest and most efficient way. Otherwise, the information platforms would add more confusion than visibility to the market of energy services. The usefulness of information platforms on energy service providers will increase significantly if the Commission provides a template clearly indicating the criteria by which the information should be organised and published.

4. Support the European Commission in actions to modify the interpretations of EUROSTAT rules on public debt and deficit, which considers investments in energy efficiency under energy service contracts as deficits in the National Accounts even if organised under ESCOs.

5. For accounting rules, MSs should consider obstacles to energy efficiency investments by public bodies having to count investments in “capital expenses”, whereas reduced costs will be registered under “operational expenses”.

6. Encourage MSs to consider their VAT rules when they are not favourable to energy efficiency services.

For example, a normal VAT rate may be applicable to energy service contracts, providing for equipment and services, whereas a reduced VAT rate may apply for purchases of energy efficient equipment only, which end up much less energy efficient without maintenance and services⁵.

⁵ For example, in Italy, the 10% rate is applicable to the simple purchase of energy efficient systems and equipment, and potentially to one-year operation and maintenance. The 21% rate is applicable to full and long-term energy

7. Encourage MSs to take into account EPC and other types of overall energy service contracts in order not to oblige public bodies to divide contracts into lots, especially in the context⁶ of the upcoming transposition of the new Public Procurement Directive.

The Directive does not make it obligatory to divide large contracts in lots; however, public entities would have to state their reasons for not doing so. Indicating such reasons may be problematic for public entities who may feel that are not capable of correctly doing so. In order to avoid litigations, public entities could tend to favour the principle (“splitting”) rather than an exception (“not splitting”)⁷.

Otherwise, the use of EPC and other overall energy service contracts by the public sector will be substantially limited, potentially preventing achieving the maximum cost-effective and guaranteed energy savings.

8. Work to develop energy services through the implementation of Article 7.2(c) with respect to Article 15.2(b), which mentions energy efficiency improvements in the network infrastructure. In cases where MSs decide to apply exemptions quoted in Article 7.2(c), actions made by ESCOs allow energy savings achieved in the energy transformation, distribution and transmission sectors to be counted towards the 25% exemption within the binding energy end-use savings target discussed in Article 7.1 and chapter I.5 of this guide.

Good practices in practice

The FRESH project, which is funded under the Intelligent Energy Europe (IEE) Programme, looks into the possibilities for EPC in the social housing sector. The social housing sector is specific due to ownership structures – a single project can easily comprise several buildings. However, the nature of social housing allows less flexibility in rent increases following refurbishment measures. The FRESH project identified possible solutions to tackle the split incentives problem, such as mechanisms that divide financial savings between the owner and the tenant, and explored possible financing tools and incentives like tax abatements. Read more at <http://www.fresh-project.eu>.

Another valuable project under the IEE Programme was ChangeBest, which specifically focused on developing the market for energy efficiency services in the EU. The project identified recommendations to support energy efficiency services. For the public sector, this included market facilitators, such as networks, platforms and campaigns, for public administrations. Read more at <http://eaci-projects.eu>.

efficiency service contracts and potentially to new energy efficient equipment (a complete engineering process for refurbishment of a technical plant, design and installation of equipment manufactured elsewhere, operation and maintenance with guaranteed savings, an energy performance guarantee or any guarantee for CO₂ emission reductions). Clients often prefer to buy “pure equipment” without services, even if it is not the most energy efficient solution, to take advantage of the 10% VAT rate. This is particularly true for clients that cannot recover VAT (households, universities and public entities including schools, to name a few).

⁶ This compromise was agreed in July 2013 by the European Parliament, the Council and the European Commission as a result of trialogue negotiations and is expected to be officially adopted by European Parliament in December 2013.

⁷ The compromise text leaves two possible ways for MSs to transpose the legislation: (1) MSs may oblige public entities to award contracts in the form of separate lots under conditions to be specified in their national law. If properly transposed into national law, public entities could afford the possibility to consider EPC and other overall energy efficiency service contracts as exempted under national law from the splitting obligation. (2) Alternatively, MSs do not oblige public bodies to split contracts into lots, but in such cases public entities should indicate reasons for their choice.