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 (Text with EEA relevance)

#### **CHAPTER II**

## **EFFICIENCY IN ENERGY USE**

#### Article 4

# **Building renovation**

Member States shall establish a long-term strategy for mobilising investment in the renovation of the national stock of residential and commercial buildings, both public and private. This strategy shall encompass:

- (a) an overview of the national building stock based, as appropriate, on statistical sampling;
- (b) identification of cost-effective approaches to renovations relevant to the building type and climatic zone:
- (c) policies and measures to stimulate cost-effective deep renovations of buildings, including staged deep renovations;
- (d) a forward-looking perspective to guide investment decisions of individuals, the construction industry and financial institutions;
- (e) an evidence-based estimate of expected energy savings and wider benefits.

A first version of the strategy shall be published by 30 April 2014 and updated every three years thereafter and submitted to the Commission as part of the National Energy Efficiency Action Plans.

## Article 5

# Exemplary role of public bodies' buildings

1 Without prejudice to Article 7 of Directive 2010/31/EU, each Member State shall ensure that, as from 1 January 2014, 3 % of the total floor area of heated and/or cooled buildings owned and occupied by its central government is renovated each year to meet at least the minimum energy performance requirements that it has set in application of Article 4 of Directive 2010/31/EU.

The 3 % rate shall be calculated on the total floor area of buildings with a total useful floor area over 500 m² owned and occupied by the central government of the Member State concerned that, on 1 January of each year, do not meet the national minimum energy performance requirements set in application of Article 4 of Directive 2010/31/EU. That threshold shall be lowered to 250 m² as of 9 July 2015.

Where a Member State requires that the obligation to renovate each year 3 % of the total floor area extends to floor area owned and occupied by administrative departments at a

level below central government, the 3 % rate shall be calculated on the total floor area of buildings with a total useful floor area over 500 m<sup>2</sup> and, as of 9 July 2015, over 250 m<sup>2</sup> owned and occupied by central government and by these administrative departments of the Member State concerned that, on 1 January of each year, do not meet the national minimum energy performance requirements set in application of Article 4 of Directive 2010/31/EU.

When implementing measures for the comprehensive renovation of central government buildings in accordance with the first subparagraph, Member States may choose to consider the building as a whole, including the building envelope, equipment, operation and maintenance.

Member States shall require that central government buildings with the poorest energy performance be a priority for energy efficiency measures, where cost-effective and technically feasible.

- 2 Member States may decide not to set or apply the requirements referred to in paragraph 1 to the following categories of buildings:
  - a buildings officially protected as part of a designated environment, or because of their special architectural or historical merit, in so far as compliance with certain minimum energy performance requirements would unacceptably alter their character or appearance;
  - b buildings owned by the armed forces or central government and serving national defence purposes, apart from single living quarters or office buildings for the armed forces and other staff employed by national defence authorities;
  - c buildings used as places of worship and for religious activities.
- 3 If a Member State renovates more than 3 % of the total floor area of central government buildings in a given year, it may count the excess towards the annual renovation rate of any of the three previous or following years.
- 4 Member States may count towards the annual renovation rate of central government buildings new buildings occupied and owned as replacements for specific central government buildings demolished in any of the two previous years, or buildings that have been sold, demolished or taken out of use in any of the two previous years due to more intensive use of other buildings.
- For the purposes of paragraph 1, by 31 December 2013, Member States shall establish and make publicly available an inventory of heated and/or cooled central government buildings with a total useful floor area over 500 m<sup>2</sup> and, as of 9 July 2015, over 250 m<sup>2</sup>, excluding buildings exempted on the basis of paragraph 2. The inventory shall contain the following data:
  - a the floor area in m<sup>2</sup>; and
  - b the energy performance of each building or relevant energy data.
- Without prejudice to Article 7 of Directive 2010/31/EU, Member States may opt for an alternative approach to paragraphs 1 to 5 of this Article, whereby they take other cost-effective measures, including deep renovations and measures for behavioural change of occupants, to achieve, by 2020, an amount of energy savings in eligible buildings owned and occupied by their central government that is at least equivalent to that required in paragraph 1, reported on an annual basis.

For the purpose of the alternative approach, Member States may estimate the energy savings that paragraphs 1 to 4 would generate by using appropriate standard values for the energy consumption of reference central government buildings before and after renovation and according to estimates of the surface of their stock. The categories of

reference central government buildings shall be representative of the stock of such buildings.

Member States opting for the alternative approach shall notify to the Commission, by 31 December 2013, the alternative measures that they plan to adopt, showing how they would achieve an equivalent improvement in the energy performance of the buildings within the central government estate.

- 7 Member States shall encourage public bodies, including at regional and local level, and social housing bodies governed by public law, with due regard for their respective competences and administrative set-up, to:
  - a adopt an energy efficiency plan, freestanding or as part of a broader climate or environmental plan, containing specific energy saving and efficiency objectives and actions, with a view to following the exemplary role of central government buildings laid down in paragraphs 1, 5 and 6;
  - b put in place an energy management system, including energy audits, as part of the implementation of their plan;
  - c use, where appropriate, energy service companies, and energy performance contracting to finance renovations and implement plans to maintain or improve energy efficiency in the long term.

#### Article 6

# Purchasing by public bodies

1 Member States shall ensure that central governments purchase only products, services and buildings with high energy-efficiency performance, insofar as that is consistent with cost-effectiveness, economical feasibility, wider sustainability, technical suitability, as well as sufficient competition, as referred to in Annex III.

The obligation set out in the first subparagraph shall apply to contracts for the purchase of products, services and buildings by public bodies in so far as such contracts have a value equal to or greater than the thresholds laid down in Article 7 of Directive 2004/18/ EC.

- The obligation referred to in paragraph 1 shall apply to the contracts of the armed forces only to the extent that its application does not cause any conflict with the nature and primary aim of the activities of the armed forces. The obligation shall not apply to contracts for the supply of military equipment as defined by Directive 2009/81/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of procedures for the award of certain works contracts, supply contracts and service contracts by contracting authorities or entities in the fields of defence and security<sup>(1)</sup>.
- Member States shall encourage public bodies, including at regional and local levels, with due regard to their respective competences and administrative set-up, to follow the exemplary role of their central governments to purchase only products, services and buildings with high energy-efficiency performance. Member States shall encourage public bodies, when tendering service contracts with significant energy content, to assess the possibility of concluding long- term energy performance contracts that provide long-term energy savings.
- Without prejudice to paragraph 1, when purchasing a product package covered as a whole by a delegated act adopted under Directive 2010/30/EU, Member States may require that the aggregate energy efficiency shall take priority over the energy efficiency of individual

products within that package, by purchasing the product package that complies with the criterion of belonging to the highest energy efficiency class.

#### Article 7

## **Energy efficiency obligation schemes**

Each Member State shall set up an energy efficiency obligation scheme. That scheme shall ensure that energy distributors and/or retail energy sales companies that are designated as obligated parties under paragraph 4 operating in each Member State's territory achieve a cumulative end-use energy savings target by 31 December 2020, without prejudice to paragraph 2.

That target shall be at least equivalent to achieving new savings each year from 1 January 2014 to 31 December 2020 of 1,5 % of the annual energy sales to final customers of all energy distributors or all retail energy sales companies by volume, averaged over the most recent three-year period prior to 1 January 2013. The sales of energy, by volume, used in transport may be partially or fully excluded from this calculation.

Member States shall decide how the calculated quantity of new savings referred to in the second subparagraph is to be phased over the period.

- 2 Subject to paragraph 3, each Member State may:
  - a carry out the calculation required by the second subparagraph of paragraph 1 using values of 1 % in 2014 and 2015; 1,25 % in 2016 and 2017; and 1,5 % in 2018, 2019 and 2020;
  - b exclude from the calculation all or part of the sales, by volume, of energy used in industrial activities listed in Annex I to Directive 2003/87/EC;
  - c allow energy savings achieved in the energy transformation, distribution and transmission sectors, including efficient district heating and cooling infrastructure, as a result of the implementation of the requirements set out in Article 14(4), point (b) of Article 14(5) and Article 15(1) to (6) and (9) to be counted towards the amount of energy savings required under paragraph 1; and
  - d count energy savings resulting from individual actions newly implemented since 31 December 2008 that continue to have an impact in 2020 and that can be measured and verified, towards the amount of energy savings referred to in paragraph 1.
- The application of paragraph 2 shall not lead to a reduction of more than 25 % of the amount of energy savings referred to in paragraph 1. Member States making use of paragraph 2 shall notify that fact to the Commission by 5 June 2014, including the elements listed under paragraph 2 to be applied and a calculation showing their impact on the amount of energy savings referred to in paragraph 1.
- Without prejudice to the calculation of energy savings for the target in accordance with the second subparagraph of paragraph 1, each Member State shall, for the purposes of the first subparagraph of paragraph 1, designate, on the basis of objective and non-discriminatory criteria, obligated parties amongst energy distributors and/or retail energy sales companies operating in its territory and may include transport fuel distributors or transport fuel retailers operating in its territory. The amount of energy savings to fulfil the obligation shall be achieved by the obligated parties among final customers, designated, as appropriate, by the Member State, independently of the calculation made pursuant to paragraph 1, or, if Member States so decide, through certified savings stemming from other parties as described in point (b) of paragraph 7.

- Member States shall express the amount of energy savings required of each obligated party in terms of either final or primary energy consumption. The method chosen for expressing the required amount of energy savings shall also be used for calculating the savings claimed by obligated parties. The conversion factors set out in Annex IV shall apply.
- Member States shall ensure that the savings stemming from paragraphs 1, 2 and 9 of this Article and Article 20(6) are calculated in accordance with points (1) and (2) of Annex V. They shall put in place measurement, control and verification systems under which at least a statistically significant proportion and representative sample of the energy efficiency improvement measures put in place by the obligated parties is verified. That measurement, control and verification shall be conducted independently of the obligated parties.
- Within the energy efficiency obligation scheme, Member States may:
  - a include requirements with a social aim in the saving obligations they impose, including by requiring a share of energy efficiency measures to be implemented as a priority in households affected by energy poverty or in social housing;
  - b permit obligated parties to count towards their obligation certified energy savings achieved by energy service providers or other third parties, including when obligated parties promote measures through other State-approved bodies or through public authorities that may or may not involve formal partnerships and may be in combination with other sources of finance. Where Member States so permit, they shall ensure that an approval process is in place which is clear, transparent and open to all market actors, and which aims at minimising the costs of certification;
  - c allow obligated parties to count savings obtained in a given year as if they had instead been obtained in any of the four previous or three following years.
- 8 Once a year, Member States shall publish the energy savings achieved by each obligated party, or each sub-category of obligated party, and in total under the scheme.

Member States shall ensure that obligated parties provide on request:

- a aggregated statistical information on their final customers (identifying significant changes to previously submitted information); and
- b current information on final customers' consumption, including, where applicable, load profiles, customer segmentation and geographical location of customers, while preserving the integrity and confidentiality of private or commercially sensitive information in compliance with applicable Union law.

Such a request shall be made not more than once a year.

As an alternative to setting up an energy efficiency obligation scheme under paragraph 1, Member States may opt to take other policy measures to achieve energy savings among final customers, provided those policy measures meet the criteria set out in paragraphs 10 and 11. The annual amount of new energy savings achieved through this approach shall be equivalent to the amount of new energy savings required by paragraphs 1, 2 and 3. Provided that equivalence is maintained, Member States may combine obligation schemes with alternative policy measures, including national energy efficiency programmes.

The policy measures referred to in the first subparagraph may include, but are not restricted to, the following policy measures or combinations thereof:

- a energy or CO<sub>2</sub> taxes that have the effect of reducing end-use energy consumption;
- b financing schemes and instruments or fiscal incentives that lead to the application of energy-efficient technology or techniques and have the effect of reducing end-use energy consumption;

- c regulations or voluntary agreements that lead to the application of energy-efficient technology or techniques and have the effect of reducing end-use energy consumption;
- d standards and norms that aim at improving the energy efficiency of products and services, including buildings and vehicles, except where these are mandatory and applicable in Member States under Union law;
- e energy labelling schemes, with the exception of those that are mandatory and applicable in the Member States under Union law;
- f training and education, including energy advisory programmes, that lead to the application of energy-efficient technology or techniques and have the effect of reducing end-use energy consumption.

Member States shall notify to the Commission, by 5 December 2013, the policy measures that they plan to adopt for the purposes of the first subparagraph and Article 20(6), following the framework provided in point 4 of Annex V, and showing how they would achieve the required amount of savings. In the case of the policy measures referred to in the second subparagraph and in Article 20(6), this notification shall demonstrate how the criteria in paragraph 10 are met. In the case of policy measures other than those referred to in the second subparagraph or in Article 20(6), Member States shall explain how an equivalent level of savings, monitoring and verification is achieved. The Commission may make suggestions for modifications in the three months following notification.

- Without prejudice to paragraph 11, the criteria for the policy measures taken pursuant to the second subparagraph of paragraph 9 and Article 20(6) shall be as follows:
  - a the policy measures provide for at least two intermediate periods by 31 December 2020 and lead to the achievement of the level of ambition set out in paragraph 1;
  - b the responsibility of each entrusted party, participating party or implementing public authority, whichever is relevant, is defined;
  - c the energy savings that are to be achieved are determined in a transparent manner;
  - d the amount of energy savings required or to be achieved by the policy measure are expressed in either final or primary energy consumption, using the conversion factors set out in Annex IV;
  - e energy savings are calculated using the methods and principles provided in points (1) and (2) of Annex V;
  - f energy savings are calculated using the methods and principles provided in point 3 of Annex V;
  - an annual report of the energy savings achieved is provided by participating parties unless not feasible and made publicly available;
  - h monitoring of the results is ensured and appropriate measures are envisaged if the progress is not satisfactory;
  - i a control system is put in place that also includes independent verification of a statistically significant proportion of the energy efficiency improvement measures; and
  - j data on the annual trend of energy savings are published annually.
- Member States shall ensure that the taxes referred to in point (a) of the second subparagraph of paragraph 9 comply with the criteria listed in points (a), (b), (c), (d), (f), (h) and (j) of paragraph 10.

Member States shall ensure that the regulations and voluntary agreements referred to in point (c) of the second subparagraph of paragraph 9 comply with the criteria listed in points (a), (b), (c), (d), (e), (g), (h), (i) and (j) of paragraph 10.

Member States shall ensure that the other policy measures referred to in the second subparagraph of paragraph 9 and the Energy Efficiency National Funds referred to in Article 20(6) comply with the criteria listed in points (a), (b), (c), (d), (e), (h), (i) and (j) of paragraph 10.

Member States shall ensure that when the impact of policy measures or individual actions overlaps, no double counting of energy savings is made.

#### Article 8

# Energy audits and energy management systems

- 1 Member States shall promote the availability to all final customers of high quality energy audits which are cost-effective and:
  - a carried out in an independent manner by qualified and/or accredited experts according to qualification criteria; or
  - b implemented and supervised by independent authorities under national legislation.

The energy audits referred to in the first subparagraph may be carried out by in-house experts or energy auditors provided that the Member State concerned has put in place a scheme to assure and check their quality, including, if appropriate, an annual random selection of at least a statistically significant percentage of all the energy audits they carry out.

For the purpose of guaranteeing the high quality of the energy audits and energy management systems, Member States shall establish transparent and non-discriminatory minimum criteria for energy audits based on Annex VI.

Energy audits shall not include clauses preventing the findings of the audit from being transferred to any qualified/accredited energy service provider, on condition that the customer does not object.

2 Member States shall develop programmes to encourage SMEs to undergo energy audits and the subsequent implementation of the recommendations from these audits.

On the basis of transparent and non-discriminatory criteria and without prejudice to Union State aid law, Member States may set up support schemes for SMEs, including if they have concluded voluntary agreements, to cover costs of an energy audit and of the implementation of highly cost-effective recommendations from the energy audits, if the proposed measures are implemented.

Member States shall bring to the attention of SMEs, including through their respective representative intermediary organisations, concrete examples of how energy management systems could help their businesses. The Commission shall assist Member States by supporting the exchange of best practices in this domain.

3 Member States shall also develop programmes to raise awareness among households about the benefits of such audits through appropriate advice services.

Member States shall encourage training programmes for the qualification of energy auditors in order to facilitate sufficient availability of experts.

4 Member States shall ensure that enterprises that are not SMEs are subject to an energy audit carried out in an independent and cost-effective manner by qualified and/or accredited

experts or implemented and supervised by independent authorities under national legislation by 5 December 2015 and at least every four years from the date of the previous energy audit.

5 Energy audits shall be considered as fulfilling the requirements of paragraph 4 when they are carried out in an independent manner, on the basis of minimum criteria based on Annex VI, and implemented under voluntary agreements concluded between organisations of stakeholders and an appointed body and supervised by the Member State concerned, or other bodies to which the competent authorities have delegated the responsibility concerned, or by the Commission.

Access of market participants offering energy services shall be based on transparent and non-discriminatory criteria.

- 6 Enterprises that are not SMEs and that are implementing an energy or environmental management system certified by an independent body according to the relevant European or International Standards shall be exempted from the requirements of paragraph 4, provided that Member States ensure that the management system concerned includes an energy audit on the basis of the minimum criteria based on Annex VI.
- 7 Energy audits may stand alone or be part of a broader environmental audit. Member States may require that an assessment of the technical and economic feasibility of connection to an existing or planned district heating or cooling network shall be part of the energy audit.

Without prejudice to Union State aid law, Member States may implement incentive and support schemes for the implementation of recommendations from energy audits and similar measures.

## Article 9

# Metering

1 Member States shall ensure that, in so far as it is technically possible, financially reasonable and proportionate in relation to the potential energy savings, final customers for electricity, natural gas, district heating, district cooling and domestic hot water are provided with competitively priced individual meters that accurately reflect the final customer's actual energy consumption and that provide information on actual time of use.

Such a competitively priced individual meter shall always be provided when:

- a an existing meter is replaced, unless this is technically impossible or not cost-effective in relation to the estimated potential savings in the long term;
- b a new connection is made in a new building or a building undergoes major renovations, as set out in Directive 2010/31/EU.
- Where, and to the extent that, Member States implement intelligent metering systems and roll out smart meters for natural gas and/or electricity in accordance with Directives 2009/72/EC and 2009/73/EC:
  - a they shall ensure that the metering systems provide to final customers information on actual time of use and that the objectives of energy efficiency and benefits for final customers are fully taken into account when establishing the minimum functionalities of the meters and the obligations imposed on market participants;
  - b they shall ensure the security of the smart meters and data communication, and the privacy of final customers, in compliance with relevant Union data protection and privacy legislation;

- in the case of electricity and at the request of the final customer, they shall require meter operators to ensure that the meter or meters can account for electricity put into the grid from the final customer's premises;
- d they shall ensure that if final customers request it, metering data on their electricity input and off-take is made available to them or to a third party acting on behalf of the final customer in an easily understandable format that they can use to compare deals on a like-for-like basis;
- e they shall require that appropriate advice and information be given to customers at the time of installation of smart meters, in particular about their full potential with regard to meter reading management and the monitoring of energy consumption.
- Where heating and cooling or hot water are supplied to a building from a district heating network or from a central source servicing multiple buildings, a heat or hot water meter shall be installed at the heating exchanger or point of delivery.

In multi-apartment and multi-purpose buildings with a central heating/cooling source or supplied from a district heating network or from a central source serving multiple buildings, individual consumption meters shall also be installed by 31 December 2016 to measure the consumption of heat or cooling or hot water for each unit where technically feasible and cost-efficient. Where the use of individual meters is not technically feasible or not cost-efficient, to measure heating, individual heat cost allocators shall be used for measuring heat consumption at each radiator, unless it is shown by the Member State in question that the installation of such heat cost allocators would not be cost-efficient. In those cases, alternative cost-efficient methods of heat consumption measurement may be considered.

Where multi-apartment buildings are supplied from district heating or cooling, or where own common heating or cooling systems for such buildings are prevalent, Member States may introduce transparent rules on the allocation of the cost of thermal or hot water consumption in such buildings to ensure transparency and accuracy of accounting for individual consumption. Where appropriate, such rules shall include guidelines on the way to allocate costs for heat and/or hot water that is used as follows:

- a hot water for domestic needs;
- b heat radiated from the building installation and for the purpose of heating the common areas (where staircases and corridors are equipped with radiators);
- c for the purpose of heating apartments.

#### Article 10

## **Billing information**

Where final customers do not have smart meters as referred to in Directives 2009/72/EC and 2009/73/EC, Member States shall ensure, by 31 December 2014, that billing information is accurate and based on actual consumption, in accordance with point 1.1 of Annex VII, for all the sectors covered by this Directive, including energy distributors, distribution system operators and retail energy sales companies, where this is technically possible and economically justified.

This obligation may be fulfilled by a system of regular self-reading by the final customers whereby they communicate readings from their meter to the energy supplier. Only when the final customer has not provided a meter reading for a given billing interval shall billing be based on estimated consumption or a flat rate.

Meters installed in accordance with Directives 2009/72/EC and 2009/73/EC shall enable accurate billing information based on actual consumption. Member States shall ensure that final customers have the possibility of easy access to complementary information on historical consumption allowing detailed self-checks.

Complementary information on historical consumption shall include:

- a cumulative data for at least the three previous years or the period since the start of the supply contract if this is shorter. The data shall correspond to the intervals for which frequent billing information has been produced; and
- b detailed data according to the time of use for any day, week, month and year. These data shall be made available to the final customer via the internet or the meter interface for the period of at least the previous 24 months or the period since the start of the supply contract if this is shorter.
- Independently of whether smart meters have been installed or not, Member States:
  - a shall require that, to the extent that information on the energy billing and historical consumption of final customers is available, it be made available, at the request of the final customer, to an energy service provider designated by the final customer;
  - b shall ensure that final customers are offered the option of electronic billing information and bills and that they receive, on request, a clear and understandable explanation of how their bill was derived, especially where bills are not based on actual consumption;
  - c shall ensure that appropriate information is made available with the bill to provide final customers with a comprehensive account of current energy costs, in accordance with Annex VII:
  - d may lay down that, at the request of the final customer, the information contained in these bills shall not be considered to constitute a request for payment. In such cases, Member States shall ensure that suppliers of energy sources offer flexible arrangements for actual payments;
  - e shall require that information and estimates for energy costs are provided to consumers on demand in a timely manner and in an easily understandable format enabling consumers to compare deals on a like-for-like basis.

#### Article 11

# Cost of access to metering and billing information

- 1 Member States shall ensure that final customers receive all their bills and billing information for energy consumption free of charge and that final customers also have access to their consumption data in an appropriate way and free of charge.
- Notwithstanding paragraph 1, the distribution of costs of billing information for the individual consumption of heating and cooling in multi-apartment and multi-purpose buildings pursuant to Article 9(3) shall be carried out on a non-profit basis. Costs resulting from the assignment of this task to a third party, such as a service provider or the local energy supplier, covering the measuring, allocation and accounting for actual individual consumption in such buildings, may be passed onto the final customers to the extent that such costs are reasonable.

#### Article 12

# Consumer information and empowering programme

- 1 Member States shall take appropriate measures to promote and facilitate an efficient use of energy by small energy customers, including domestic customers. These measures may be part of a national strategy.
- 2 For the purposes of paragraph 1, these measures shall include one or more of the elements listed under point (a) or (b):
  - a a range of instruments and policies to promote behavioural change which may include:
    - (i) fiscal incentives;
    - (ii) access to finance, grants or subsidies;
    - (iii) information provision;
    - (iv) exemplary projects;
    - (v) workplace activities;
  - b ways and means to engage consumers and consumer organisations during the possible roll-out of smart meters through communication of:
    - (i) cost-effective and easy-to-achieve changes in energy use;
    - (ii) information on energy efficiency measures.

## Article 13

# **Penalties**

Member States shall lay down the rules on penalties applicable in case of non-compliance with the national provisions adopted pursuant to Articles 7 to 11 and Article 18(3) and shall take the necessary measures to ensure that they are implemented. The penalties provided for shall be effective, proportionate and dissuasive. Member States shall notify those provisions to the Commission by 5 June 2014 and shall notify it without delay of any subsequent amendment affecting them.

(1) OJ L 216, 20.8.2009, p. 76.