

Comparisons between the original text of the EU Energy Services Directive (Dec 2003) and the more recent revised Dutch Presidency version (Sep 2004)

Introductory note to the revised version:

Delegations will find attached a revised text of the Directive, prepared by the Presidency following the examinations of the proposal that took place in March and in September, taking into account clarifications provided by the Commission Services and on the occasion of the seminar on end-use efficiency - in particular on the methodology concerning energy efficiency targets - held on 21 September on the initiative of the Commission. Generally speaking the changes introduced aim to increase Member States flexibility regarding the definition of targets, choice of implementing measures and reporting requirements as well as clarify measurement issues. Moreover in the light of likely technical developments in this field it seems appropriate to foresee a comitology procedure (new Articles 15 and 16) for amending Annexes II, III and IV.

Summary of the Differences

- **Article 3** - The revised text contains 4 definitions which do not appear in the original text (“energy efficiency”, “energy savings”, “public sector” and “body governed by public law”).
- **Article 7** – The text regarding the implementation of energy savings is considerably vaguer in the revised version of the Directive.
- **Article 12** – The section on energy audits has been tightened up and is considered in more detail in the revised version.
- **Article 13** – The text concerning metering and billing appears to have been watered down slightly in the revised version of the text.
- **Article 14** – The reporting structure appears to have changed slightly. Whereas in the original text, precise and quantified reports were to be submitted every 3 years to the Commission by member states – states are now expected to submit an interim report after 3 years containing “estimated progress to date” and then a final report with “definite targets”.
- **Article 15 and Article 16** – These 2 Articles concerning the Review and adaptation of the framework and the setting up of a committee to assist the Commission in implementing the Directive respectively, did not exist in the original text.
- **ANNEX I** – The base year has changed from 1991 in the original text to 1995 in the revised version
- **ANNEX IV** – This section has been greatly expanded in the revised version. A top-down model of calculating energy savings is outlined alongside the bottom-down model outlined in the original text and examples of the average lifetime of several common energy efficiency measures are provided. In addition, a section entitled “How to deal with and how to verify multiplier effects of energy savings” has been added to the revised version of the Directive.

Detailed Breakdown of the Differences

Article 1 – Purpose

Unchanged

Article 2 – Scope

Essentially unchanged

Article 3 – Definitions

4 new definitions have been added to the revised text: “energy efficiency”, “energy savings”, “public sector” and “body covered by public law”. They appear below.

“Energy efficiency”: a reduction in primary energy consumption, taking place in the energy transformation, transmission, distribution or end-use stage, due to technological, behavioural and / or economical changes, providing the same or a higher standard of comfort or amenities. End-use energy efficiency improvements reduce final as well as primary energy consumption.

“Energy savings”: an amount of energy determined by measuring and/or estimating consumption (final or primary) before and comparing it to the use after the implementation of a measure, while ensuring adjustment and normalisation for extrinsic conditions commonly affecting energy use.

“Public sector”: means the State, regional or local authorities, bodies governed by public law, associations formed by one or several of such authorities or one or several of such bodies governed by public law as defined in Directive 2004/18/EC6. This includes all bodies and categories of bodies governed by public law listed in Annex III of Directive 2004/18/EC7 .

“Body governed by public law”: means any body: (a) established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character; (b) having legal personality; and (c) financed, for the most part, by the State regional or local authorities, or other bodies governed by public law; or subject management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities, or by other bodies governed by public law.

In addition, small distributors or retail suppliers are defined as those with an annual turnover of less than the equivalent of **75 GWh** rather than 50GWh of metered electricity.

Article 4 – General Target

The target for member states to meet has now been set at 6 years, whereas previously there was no time period specified. The revised text also states that *“..when adopting their national target Member States shall ensure that the costs of the measures adopted to achieve this target do not exceed their benefits”*

The following paragraph has disappeared from the revised text:

4(6) Upon expiration of the period during which the target is applied, the Commission will review the target mentioned in paragraph (2) and examine whether it shall present a proposal for a prolongation or amendment of this target.

However, the following paragraph *remains* in the revised text:

After having reviewed and reported on this target the first time, the Commission will examine whether it is appropriate to come forward with a proposal for a Directive to develop further the market approach in energy efficiency by means of “white certificates”.

Article 5 – Procurement of energy end-use efficiency by the public sector

The final clause of article 5 has been removed:

Upon expiration of the period during which the target is applied, the Commission will review the target mentioned in paragraph (2) and examine whether it shall present a proposal for prolongation or amendment of this target.

Article 6 – Energy distributors and retail energy sales companies

The following phrases in bold, present in the original text, do not appear in the revised Dutch version:

Member States shall **remove barriers to the demand for energy services and** ensure that energy distributors and/or retail energy sales companies selling electricity, gas, district heat and/or heating oil:

(a) offer and actively promote energy services as an integral part of the distribution and/or sales of energy to customers, either directly or through other energy service providers. Energy audits shall be provided for free to their customers as long as 5% of them are not covered by energy services.

However, the following text has been *added* to the revised version:

The Member States shall choose whether the companies listed in paragraph (1) of this Article, shall, either directly and/or indirectly through other contracted providers of energy services:

- (a) ensure the offer and promotion of competitively priced energy services to their final customers ;
- (b) ensure the offer and promotion of competitively priced and independent energy audits to their final customers, in accordance with Article 12(2) of this Directive or;
- (c) contribute to the funds and funding mechanisms referred to in Article 11 of this Directive the financial resources that correspond to the estimated costs of the activities to be offered in paragraph 2(a) or (b), with the level to be agreed with the relevant public sector authorities or agencies designated in Article 4(5), or;
- (d) a combination of the options mentioned in paragraph 2(a), 2(b) and 2(c) of this Article.

The Member State shall guarantee that there exist sufficient incentives, equal competition and level playing fields for other companies than those listed in Article 6(1), -- e.g. ESCOs, energy equipment installers, energy advisors and energy consultants -- to independently offer and implement energy services and energy audits in the market.

If Member States choose to place responsibilities on energy distribution companies to ensure the offer energy services and/or energy audits to their customers, this must be done in such a way that the principle in the monopoly sectors of unbundling of energy distribution from energy generation, transmission and supply, as set out in Directives 2003/54/EC and 2003/55/EC, is respected.

Article 7 – Implementation of Savings

Original text:

Member States shall ensure that energy services, energy efficiency programmes or other energy efficiency measures are offered to all eligible customers, including small and medium-sized enterprises, consumers and voluntary aggregations of smaller customers; and that these energy services, programmes and other measures can be delivered and implemented, as appropriate, by qualified bodies, including equipment installers, energy service companies, energy advisors and energy consultants.

Revised version:

Member States shall ensure that information on energy efficiency mechanisms and financial and legal frameworks used in reaching the targets set out in Article 4 and Article 5 is transparent and widely disseminated to the relevant market players.

Article 8 – Qualification, certification and/or accreditation of providers of energy services and energy audits

The following paragraph, included in the original text, is not present in the revised version:

In accordance with Article 14, Member States shall include in their report to the Commission an assessment of the effectiveness of their national schemes for qualification certification and/or accreditation and on the possible need for EU harmonization.

Article 9 – Financial instruments for energy savings

Essentially unchanged

Article 10 – Tariffs and other regulations for net-bound energy

Essentially unchanged

Article 11 – Funds and funding mechanisms

Essentially unchanged

Article 12 – Energy Audits

The section in bold has been added to the revised version of the text:

Energy audits shall also be made available for smaller domestic, commercial and small and medium-sized industrial premises and undertakings with comparatively high transaction costs. **The segments of the market that have higher transaction costs and non-complex facilities may be reached by using off-site-inspection methods such as questionnaires made available on Internet and/or questionnaires sent to customers by mail. For market segments where energy audits are not offered on a commercial basis, Member States shall ensure their availability as described in Article 10(b) and /or Article 11(1).**

Article 13 - Metering and informative billing of energy consumption

The phrases in bold have been added to the revised version:

Member states shall ensure that:

- final customers of electricity, gas, district heating and/or cooling, **if the costs are reasonable in relation to the volume of consumption and savings potential**, are provided with competitively priced individual meters that accurately reflect the customer's actual energy consumption and actual time of use.

- **where appropriate, for energy distributors and retail energy sales companies, billing is based on** (as opposed to "reflects") actual consumption presented in clear and understandable terms, and is carried out frequently enough to enable customers to regulate their own energy consumption.

Article 14 – Report

This paragraph, present in the original text, has been removed from the revised text:

Member States shall report to the Commission on the overall administration and implementation of this Directive. The report shall include information on the measures taken or planned, including the qualification, certification and/or accreditation of energy service providers. It shall also include information on energy audit schemes, on the use of financial instruments for energy savings, on improved metering of consumption, and on informative billing. Information on the expected impact and financing of the measures should also be included.

The rest of the Article has also changed. In the original it read:

Not later than 2 years after adoption of this Directive and every three years thereafter up to and including 2012, Member States shall submit to the Commission a report on their success in meeting the national annual energy savings target, as set out in Article 4(1), on the public sector target, as set out in Article 5(1) and on the development of energy services, as set out in Article 6(a). The effect of measures of previous years that has been taken into account in the calculation of the savings shall be duly specified and quantified. This shall continue until the final year of the target set out in Article 4 and 5 is reported on.

On the basis of the Member States' reports the Commission shall assess to what extent Member States have made progress towards achieving their national targets. The Commission shall publish its conclusions in a report, for the first time **not later than 3 years after adoption of this Directive and thereafter every three years**. This report shall be accompanied, as appropriate and where necessary, by proposals to the European Parliament and to the Council for additional measures.

However, in the revised version, it has become:

Not later than **3** years after the date referred to in Article 16(1), Member States shall submit to the Commission an **interim** report on the overall administration and implementation of the Directive. A final report showing progress up to and including the year 2012 shall be submitted to the Commission not later than 8 years after the date referred to in Article 16(1). The interim report shall include i.a. the estimated progress to date with respect to the annual energy savings target, as set out in Article 4 (2) and Article 5 (2). The final report shall include definite results covering fulfilment of the target for the entire six-year period.

On the basis of the Member States' interim and final reports the Commission shall assess to what extent Member States have made progress towards achieving their national targets. The Commission shall publish a report with its conclusions on the first interim reports, **not later than 4 years after the date referred to in Article 16(1). Not later than one year after receipt of the final reports from Member States, the Commission shall publish its conclusions in a final report**. These reports shall be accompanied, as appropriate and where necessary, by proposals to the European Parliament and to the Council for additional measures **including a possible prolongation of the targets and other provisions set out in this Directive**.

Article 15 – Review and adaptation of the framework

This article has been added to the revised text:

The values and calculation methods referred to in Annexes II, III and IV shall be adapted to technical progress in accordance with the procedure referred to in Article 16(2).

Article 16 – Committee

This article has been added to the revised text:

1. The Commission shall be assisted by a Committee.
2. Where reference is made to this paragraph, Article 5 and 7 of Decision 1999/498/EC shall apply, having regard to the provisions of Article 8 thereof. The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.
2. The Committee shall adopt its Rules of procedure.

Article 17 – Repeals Article 15 in original text)

Unchanged

Article 18 – Transposition (Article 16 in original text)

Unchanged

Article 19 – Entry into force (Article 17 in original text)

Unchanged

Article 20 – Addressees (Article 18 in original text)

Unchanged

ANNEX I – Methodology for calculating targets for end-use efficiency

The calculation method appears to have been altered slightly. In the original text, it reads:

Member States shall calculate the arithmetic average of total final domestic energy consumption for the most recent **five calendar-year period**, previous to the implementation of this Directive for which official data are available, using this as the **base period** for the total duration of this Directive. This data shall be the amount of energy distributed or sold to final customers during the period, not adjusted for degree days, structural changes or for production changes.

Whereas in the more recent version, it states:

Member States shall use the annual **final inland** energy consumption **for sectors covered by the Directive for the most recent six year period**, previous to the implementation of this Directive for which official data are available, to calculate an annual average amount of consumption. **On the basis of this absolute amount of energy consumption, the annual 1% energy savings target as well as the 1.5% target for the public sector, will be calculated and the resulting absolute amount of energy applied for the total duration of this Directive.** This energy consumption shall be the amount of energy distributed or sold to final customers during the six-year period, not adjusted for degree days, structural changes or for production changes.

The base year has also changed from **1991** in the original text, to **1995** in the revised version.

ANNEX II – Primary energy content of selected fuels for end-use

Same figures - unchanged

ANNEX III – Eligible energy efficiency measures

This section:

energy efficiency measures must contain activities that result in verifiable and measurable savings that **reduce energy use, without increasing the environmental impact.**

Has been replaced with:

energy efficiency measures must contain activities that result in verifiable and measurable savings **that do not result in negative environmental impact.**

The actual list of eligible efficiency measures, however, remains the same.

ANNEX IV – Guidelines for measurement and verification of energy savings

This Annex appears to have changed substantially between the two versions. The original text outlines a “bottom-up model” for measuring energy savings whereby

energy savings obtained through a specific energy service, or in a specific energy efficiency programme...shall be measures in kWh, in joules or in kilogram oil equivalent (kgoe) and added together with energy savings results from other specific services, programmes, measures or projects.

The revised text also contains the paragraph quoted above; however, it also states:

...to ascertain the impact of individual measures, a top-down model or a combination of top-down and bottom-up models or energy efficiency indicators may be used to measure the overall annual improvements in energy efficiency for the interim report in Article 14(1). For the final report bottom-up measurements to corroborate top-down measurements shall be used when such measurements are available.

...A top-down model means that the amount of energy savings is calculated using the national or more aggregated sectoral levels of savings as the starting point. Adjustments of the annual data are then made for extraneous factors such as degree days, structural changes, product mix, etc. to derive a measure that gives a fair indication of total energy efficiency improvement. This method does not provide exact measurements at a detailed level nor does it show cause and effect relationships between measures and their resulting savings. However, the method is usually simpler and less costly and is often referred to as “energy efficiency indicators” because it gives an indication of developments.

The achieved energy savings results to be reported in accordance with Article 14 in this Directive shall be based on the following:

- (1) If the energy efficiency measure is finalised and sufficient data are available at the time of reporting, the results may be measured according to Chapter 2.1 in this Annex.
- (2) If the energy efficiency measure and its impact are interim or not finalised and/or sufficient data is not available at the time of reporting, the results may be measured according to Chapter 2.2 in this Annex.
- (3) If bottom-up calculations are not available for certain sectors, top-down indicators or mixtures of top-down and bottom-up calculations may be used in the reports to the Commission. Some bottom-up calculations will be necessary to measure the impact of measures implemented after 1995 but still having impacts.

The final section of Annex 4, “How to Verify the Energy Savings” has been substantially expanded in the revised version of the Directive. It now provides some examples of the lifetime of energy efficiency measures (e.g. loft insulation – 20 years). In addition, it states:

To ensure that all Member States apply the same lifetimes for similar measures, these lifetimes will be harmonised on a European level. The Commission, assisted by the Committee created in Article 16, shall therefore issue a complete list with the average lifetime of different energy efficiency mechanisms, measures and products not later than six months after the adoption of this Directive.

Finally, there is another section entitled “How to deal with and how to verify multiplier effects of energy savings”, which does not appear in the original text.

The implementation of one energy efficiency measure, e.g. hot water tank and pipe insulation in a building, may give future multiplier effects in the market, meaning that the market will implement a measure automatically without any further involvement from the energy authorities or agencies set out in Article 4 (5) or any private based energy services provider. A measure with multiplier potential would in most cases be more cost-effective than

measures that need to be repeated on a regular basis. Member States should estimate the energy savings potential of such measures including their multiplier effects and verify the total effects in an ex-post evaluation using indicators when appropriate.

Future potential energy saving results shall not be taken into account when Member States are reporting on the overall target set out in Article 4 and Article 5 of this Directive. Measures that promote long term market effects should in any case be encouraged and measures that already have resulted in multiplier energy savings effects should be taken into account when reporting on the targets set out in Article 4 and Article 5, provided they can be measured and verified using the guidance given in this Annex.

How to Verify the Energy Savings

If deemed cost-effective, the energy savings obtained through a specific energy service, energy efficiency programme or other energy efficiency measure shall be verified by a third party. This may be done by independent consultants, ESCOs or other market players. The appropriate Member State authorities or agencies referred to in Article 4 (5) may provide further instructions on this matter.