Amended proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on the energy performance of buildings

(presented by the Commission pursuant to Article 250 (2) of the EC Treaty)
A. Principles


2. On 6 February 2002, the European Parliament adopted a series of amendments at its first reading. The Commission gave its position on each of these amendments at that time, indicating those amendments it could accept as they are, those that could be accepted in principle and/or with redrafting, those that could be accepted in part and those that could not be accepted.

3. In the light of this, the Commission has drafted this amended proposal.

4. The Commission has made three types of amendments with the following justifications.

   Firstly, a number of new provisions have been accepted from the first reading by the European Parliament as they are. These amendments serve to improve the technical and financial definitions or they add balance and clarity and elaborate and illustrate points in the proposal.

   Secondly, the Commission has accepted some amendments in principle, although with minor redrafting, e.g. to improve consistency with other parts of the proposal or to define more clearly certain conditions, limits or exceptions.

   Thirdly, the Commission has taken parts of amendments from the first reading when these specific parts were deemed consistent with the purpose of the proposal and provided substantial added value while for the amendment in its entirety this was not the case.

B. Comments as regards the accepted amendments

Recitals

Recital 11

This amendment to recital 11 further defines the concept of "cost effectiveness", which is very important in the Commission proposal.

Recital 12

This amendment to recital 12 is important because it further encourages Member States to develop incentive systems and public subsidies to promote the implementation of energy performance certification and related information measures and their follow-up. It promotes equal access to the benefits of the proposal.

Recital 13
This is a new recital that clearly underlines the fact that passive cooling can make a major contribution to reducing both load and energy use, especially electricity.

Recital 15

A new recital that encourages the further development of EN832 to include air-conditioning systems, this proposed amendment has been redrafted to include lighting and prEN 13790 to improve consistency and balance.

Recital 16

This is a new recital. It has been strengthened through redrafting to further encourage the use of incentive systems and tax subsidies to promote energy performance in buildings.

Recital 17

This is another new recital to encourage individual billing based on actual consumption. This principle is laid down in the 93/76/EEC SAVE Directive. The European Parliament's amendment has been slightly modified to reflect the need for cost effectiveness even in metering, as it has earlier been demonstrated in some Member States that the energy and resource saving has been less than the cost of metering.

Recital 18

This amendment includes the adaptation of not only the methodology of calculation to technical progress and standardisation, but even the minimum standards that are grounded on this methodology. The proposed amendment has been modified to reflect the equally important need for regular revision of minimum standards, indicating more clearly that actual levels are established by Member States using the proposed integrated methodology for calculation.

Articles

Article 1

Paragraph 1

A slight redrafting of this amendment incorporates and consolidates the objective and the climatic and cost considerations into the first article. It eliminates part of the need for a recital on this, although it does not include essential requirements such as accessibility and intended use.

Article 2

Point (1)

This amendment concerning the definition of a building has been modified to include the word "structure", further eliminating the use of the word "building" to define a building.

Point (2)

The definition of energy performance has been strengthened in accordance with principles proposed in Amendment 11 from the European Parliament. The definition now includes a
reference point (relative comparison), and verification of actual performance (valorisation). In addition, it provides examples and brings the definition more closely in line with the calculation methodology outlined in the Annex.

**Article 4**

This amendment allows for a greater distinction to be made between existing and new buildings and proposes more precise terms for exclusions from upgrading requirements. These have been reflected in changes in Article 4. The scope for even wider revision of these articles is implied by the European Parliament’s Amendment 15 but this has not been made explicitly. Article 4 has been amended to reflect European Parliament's Amendment 19, which proposes more precise definitions of exclusions. It is appropriate to place exclusions in Article 4 and certification procedures in Article 6.

**Article 5**

**Point 2**

The inclusion and clear reference to the renovation of both the structure of the building and of the energy-consuming systems has been introduced in Article 5 as proposed in the European Parliament's Amendment 18. An additional and clearer reference to economic viability has been added as also proposed. While the 8-year payback period has been dropped as proposed by the European Parliament, the 25% threshold has been retained in order to define "major renovation."

**Article 6**

**Point 1**

The principle of allowing representative flats to be used to certify energy performance in entire buildings, as proposed in Amendment 19, has been introduced in Article 6. References to exceptions have also been made in article 4 as proposed in Amendment 19, although industrial sites have been excluded in their entirety for technical and definitional reasons. Four months per year has been chosen instead of three months to define residential buildings not used as normal residences. The proposed additional 5 years for compliance has not been taken on board but the European Parliament's proposal does leave an opening for a possible longer period for the validity of certificates or an option for additional time for Member States to comply with this article due to a demonstrated shortage of qualified and/or accredited experts.

**Point 2**

As proposed in the European Parliament's Amendment 20, updated and current legal standards and benchmarks have been introduced in Article 6. CO2 indicators remain a voluntary option as mentioned in Article 3. The Committee’s indirect (and potentially direct ) influence on certificates has been introduced in Article 6 to work toward selection of best practices in certification and possible greater harmonisation.

**Article 9**

This is a new article. It proposes an evaluation by the committee of the 1000 m2 threshold after 5 years. In addition, the evaluation would consider incentives for smaller measures not
covered by the threshold as defined by "major" renovations. The SAVE Directive reporting requirements could facilitate the committee's work in this evaluation.

**Article 10**

This is a new article, prescribed by the European Parliament's Amendment 24 in order to launch an information campaign. This is something that is, in fact, already being considered by the Commission.

**Article 13**

**Point 1, Paragraph 1**

Amendment 25 proposes to change the date of transposition of the Directive by Member States from a fixed date to 36 months after the entry into force of the Directive.

**Annex**

**Paragraph A**

**Sub-paragraph 1 - g.**

Indoor climate conditions are important and have been added to the Annex for the calculation methodology as proposed by Amendment 26.

**Sub-paragraph 1 - h.**

Amendment 28 proposes to include in the Annex thermal and energy characteristics certified by EN45011. When products are certified according to EU norms, their characteristics are fully recognised and should be taken into account in the integrated methodology. As EN45011 is included in the "Construction Products Directive" (89/106/EEC) as one of several options for compliance, the reference has instead been made to the Directive (a technical adjustment made after consultation with the competent services).

**Sub-paragraph 3 - g.**

Sports facilities are important energy-using buildings and can easily be shown as a separate item in the Annex. Eurostats "Classification of Types of Construction", CC of 15 October 1997 allows this without problem.
Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on the energy performance of buildings

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the Economic and Social Committee,

Having regard to the opinion of the Committee of the Regions,

Acting in accordance with the procedure laid down in Article 251 of the Treaty,

Whereas:

(1) Article 6 of the Treaty requires environmental protection requirements to be integrated into the definition and implementation of Community policies and actions.

(2) Natural resources, to whose prudent and rational utilisation Article 174 of the Treaty refers, include oil products, natural gas and solid fuels, which are essential sources of energy but also the leading sources of carbon dioxide emissions.

(3) Increased energy efficiency constitutes an important part of the package of policies and measures needed to comply with the Kyoto Protocol, and should appear in any policy package to meet further commitments.

(4) Demand management of energy is an important tool enabling the Community to influence the global energy market and hence the security of energy supply in the medium and long term.


Council Conclusions 8835/00 (30 May 2002) and Council Conclusion 14000/00 (5 December 2000).
The residential and tertiary sector, the major part of which is buildings covering the greater part of the Community's building stock, accounts for more than 40% of final energy consumption in the Community and is expanding, a trend which is bound to increase its energy consumption and hence also its carbon dioxide emissions.

Council Directive 93/76/EEC of 13 September 1993 to limit carbon dioxide emissions by improving energy efficiency (SAVE)\(^5\), which requires Member States to develop, implement and report on programmes in the field of energy efficiency in the building sector, is now starting to show some important benefits. However, a complementary legal instrument is needed to lay down more concrete actions with a view to achieving the great unrealised potential for energy savings and reducing the large differences between Member States’ results in this sector.

Council Directive 89/106/EEC\(^6\) of 21 September 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products requires that the construction works and its heating, cooling and ventilation installations must be designed and built in such a way that the amount of energy required in use shall be low, having regard to the climatic conditions of the location and the occupants.

The energy performance of buildings should be calculated on the basis of a methodology that integrates, in addition to thermal insulation, also other factors that play an increasingly important role such as heating/air-conditioning installations, application of renewable energy sources and design of the building. A common approach to this process, carried out by qualified personnel, will contribute to a level playing field as regards efforts made in Member States to energy saving in the buildings sector and would introduce transparency for prospective owners or users with regard to the energy performance in the Community property market.

Buildings will have an impact on long-term energy consumption and new buildings should therefore meet minimum energy performance standards tailored to the local climate. As the application of alternative energy supply systems is generally not explored to its full potential, a systematic assessment of the feasibility of such systems for new buildings above a certain size is appropriate.

Major renovations of existing buildings above a certain size should be regarded as an opportunity to take cost effective measures to enhance energy performance. The investments required should be economically viable, which is to say that they should offer a rate of return within a reasonable timescale.

By providing objective information on the energy performance of buildings when they are constructed, sold or rented out, energy certification will help to improve transparency of the property market and thus encourage investment in energy savings. The certification process may be supported by publicly funded programmes to guarantee equal access to improved energy performance, notably in the case of residential buildings constructed or administered as part of a social welfare policy. It should also facilitate the use of incentive systems. Public authority buildings and buildings frequently visited by the public should set an example by taking

environmental and energy considerations into account and therefore, should therefore be subject to energy certification on a regular basis. The dissemination to the public of this information on energy performance should be enhanced by clearly displaying these energy certificates. Moreover, the displaying of officially recommended indoor temperatures, together with the actual measured temperature, should discourage the misuse of heating, air-conditioning and ventilation systems. This will should contribute to avoiding unnecessary use of energy and to safeguarding comfortable indoor climatic conditions (thermal comfort) in relation to the outside temperature.

(13) Recent years have seen a rise in the number of air-conditioning systems in southern European countries. This creates considerable problems at peak load times, increasing the cost of electricity and disrupting the energy balance in those countries. Priority should be given to strategies which enhance the thermal performance of buildings during the summer period. To this end there should be further development of passive cooling techniques, primarily those that improve indoor climatic conditions and the microclimate around buildings.

(14) Regular maintenance of boilers and of central air conditioning systems by qualified personnel contributes to maintaining their correct adjustment in accordance with the product specification and in that way will ensure optimal performance from an environmental, safety and energy point of view. An independent assessment of the total heating installation is appropriate whenever replacement could be considered on the basis of cost effectiveness.

(15) Air conditioning and lighting systems are not included in the EN 832 or prEN 13790 efficiency standards; the Commission should therefore enlarge EN 832 and prEN 13790 so that they include air conditioning and lighting.

(16) Member States should employ a number of means to encourage enhanced energy performance such as interest tax deductions, low interest credits and the inclusion of energy performance as an important factor in public purchasing and procurement policies.

(17) The billing, to occupiers of buildings, of the costs of heating, air-conditioning and hot water, calculated in proportion to actual consumption, will contribute towards energy saving in the residential sector. It is desirable that occupants of such buildings should be enabled to regulate their own consumption of heat and hot water in so far as measures to do so are cost effective. In this connection, regard should be had to Article 3 of Directive 93/76/EEC and also to Council Recommendations 76/493/EEC7 and 77/712/EEC8 and to Council Resolutions of 9 June 19809 and of 15 January 198510 on the billing of such costs.

Provision should be made for the possibility of rapidly adapting the methodology of calculation and of regularly revising minimum standards in the field of energy performance of buildings in order to reflect technical progress and to—[future] developments in standardisation.

In accordance with the principles of subsidiarity and proportionality as set out in Article 5 of the Treaty, general principles providing for a system of energy performance standards and its objectives should be established at Community level, but the detailed implementation should be left to Member States, thus allowing each Member State to choose the regime which corresponds best to its particular situation. This Directive confines itself to the minimum required in order to achieve those objectives and does not go beyond what is necessary for that purpose.

Since the measures necessary for the implementation of this Directive are measures of general scope within the meaning of Article 2 of should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission11, they should be adopted by use of the regulatory procedure provided for in Article 5 of that Decision.

HAVE ADOPTED THIS DIRECTIVE:

Article 1

A common framework is hereby created The objective of this Directive is to promote the improvement of the energy performance of buildings within the Community, taking into account outdoor climatic conditions and indoor climatic requirements, and local conditions and cost-effectiveness.

This Directive lays down requirements as regards:

(a) the general framework of a common methodology for calculating the integrated energy performance of buildings,

(b) the application of minimum standards on the energy performance of new buildings,

(c) the application of minimum standards on the energy performance of large existing buildings that are subject to major renovation,

(d) energy certification of buildings, and for public buildings, prominent display of this certification and other relevant information, and

(e) regular inspection, of boilers and of central air-conditioning systems in buildings and in addition an assessment of the heating installation in which the boilers are older than 15 years.

9 OJ C 149, 18.6.1980, p. 3.
For the purpose of this Directive, the following definitions shall apply:

(1) **building**: a roofed construction having walls, for which energy is used to condition the indoor climate; building can refer to a building as a whole or, in the residential sector, to parts of the building structure which have been designed or altered to be used separately such as apartments or semi-detached houses;

(2) **energy performance of a building**: the total energy efficiency of a building as reflected in the relative amount of energy estimated and actually consumed to meet the different needs associated with the standardised use of the building including inter alia heating, water heating, cooling, ventilation and lighting. This amount shall be reflected in one or more numeric indicators which have been calculated, taking into account factors that influence energy demand, namely insulation, air tightness, technical and installation characteristics, design and positioning in relation to climatic aspects, solar exposure and use, influence of neighbouring structures, own and renewable energy generation and other factors, including indoor climate that influence the net energy demand;

(3) **minimum energy performance standard of a building**: a regulated minimum requirement as regards the energy performance of buildings;

(4) **energy performance certificate of a building**: an officially recognised certificate in which the result of the calculation of the energy performance of a building according to the methodology set out in the Annex has been laid down;

(5) **public buildings**: buildings occupied by public authorities or frequently visited and used by the general public, such as: schools, hospitals, public transport buildings, indoor sports centres, indoor swimming pools and retail trade services buildings larger than 1000 m2;

(6) **CHP (combined heat and power)**: the simultaneous conversion of primary fuels into mechanical or electrical energy and heat;

(7) **air conditioning system**: installation designed to cool and condition the ambient air;

(8) **boiler**: the combined boiler body and burner-unit designed to transmit to water the heat released from burning combustion;

(9) **effective rated output (expressed in kW)**: the maximum calorific output laid down and guaranteed by the manufacturer as being deliverable during continuous operation while complying with the useful efficiency indicated by the manufacturer;

(10) **useful efficiency (expressed in %)**: the ratio between the heat output transmitted to the boiler water and the product of the net calorific value at constant fuel pressure and the consumption expressed as a quantity of fuel per unit time;

(11) **heat pump**: installation that extracts heat from the surrounding environment and supplies it to the controlled environment.
Article 3

1. Member States shall adopt apply a methodology of calculation of the energy performance of buildings of which on the basis of the general framework is set out under heading A in the Annex.

   The energy performance of a building shall be expressed in a transparent and simple manner and may include a CO2 emission indicator.

2. Parts 1 and 2 of this framework shall be adapted to technical progress. This methodology shall be further developed and defined in accordance with the procedure referred to in Article 11(2). Such adaptation shall take into account those standards and norms at national level which may usefully serve in the promotion at best practices within the community.

   The energy performance of a building shall be expressed in a transparent and simple manner and may include a CO2 emission indicator.

Article 4

1. Member States shall take the necessary measures to ensure that new buildings which are intended to be regularly used meet minimum energy performance standards, calculated according to the methodology general framework set out under heading A in the Annex.

   When setting requirements, Member States may differentiate between new and existing buildings and different categories of buildings. These requirements shall take account of general indoor climate conditions in order to avoid possible negative effects and of best practice.

   These energy performance requirements shall be reviewed at regular intervals which shall not be longer than 5 years and, if necessary, updated in order to reflect technical progress in the building sector. These standards should include general indoor climate requirements in order to avoid possible negative effects such as inadequate ventilation. These energy performance standards shall be updated at least every five years in order to reflect technical progress in the building sector. Member States may exclude historic buildings, temporary buildings, industrial sites, workshops and residential buildings which are not used as normal residences.

2. Member States may decide not to set or apply the requirements referred to in paragraph 1 for the following categories:

   (a) buildings and monuments officially protected as part of a designated environment or because of their special architectural or historic merit, where compliance would unacceptably alter their character or appearance;

   (b) buildings used as places of worship and for religious activities;
(c) temporary buildings with a planned time of use of 2 years or less, industrial sites, workshops and non-residential agricultural buildings with low energy demand and non-residential agricultural buildings which are in use by a sector covered by a national sectoral agreement on energy performance;
(d) residential buildings which are intended to be used less than 4 months of the year;
(e) stand-alone buildings with a total useful floor area of less than 50m2.

Article 5

1. For new buildings with a total surface area over 1000 m², Member States shall ensure that the technical, environmental and economic feasibility of installing decentralised energy supply systems based on renewable energy, CHP, district heating or, under certain conditions, heat pumps, is assessed before the building permit is granted. The result of such an assessment shall be available to all stakeholders for consultation.

Article 5

2. Member States shall take the necessary measures to ensure that when buildings with a total useful floor area over 1000m2 undergo major renovation, their energy performance is upgraded in order to meet minimum requirements in so far as this is technically, functionally and economically feasible, with the requisite investment being economically viable.

Member States shall derive these minimum energy performance requirements on the basis of the energy performance requirements set for buildings in accordance with Article 3.

The requirements may be set either for the renovated building as a whole or for the energy-consuming systems or components when these are part of a renovation to be carried out within a limited time period, with the objective of improving the overall energy performance of the building, the energy performance of existing buildings with a total surface area over 1000 m² which are being renovated, are upgraded in order to meet minimum energy performance standards in so far as these are technically feasible and involve additional costs that can on the basis of the current average mortgage rate be recovered within a period of 8 years by the accrued energy savings.

3. This principle Paragraphs 1 and 2 shall apply in all those cases where the total cost of the renovation is higher than 25 % of the existing insured value of the building.

Article 6

1. Member States shall ensure that, when buildings are constructed, sold or rented out, an energy performance certificate, being not older than 5 years, is made available to the prospective buyer or tenant.
Certification for apartments or units designed for separate use in blocks can be based:

(a) on a common certification of the whole building for blocks with a common heating system;

(b) on the assessment of another representative apartment in the same block.

Member States may exclude from the application of the first sub-paragraph the categories referred to in Article 4(2), historic buildings, temporary buildings, industrial sites, workshops and residential buildings which are not used as normal residences.

2. The energy performance certificate for buildings shall provide relevant information for prospective users. It shall include information in the form of reference values such as current legal standards and best practice benchmarks in order to make it possible for consumers to compare and assess the energy performance of the building.

The certificate shall be accompanied by recommendations for the improvement of the energy performance.

The information and recommendations shall be open to amendment in accordance with the procedure referred to in Article 12(2).

3. Member States shall require for public buildings an energy performance certificate, which is not older than 5 years, to be placed in a prominent place clearly visible to the general public.

In addition, for public buildings the following information shall be clearly displayed:

(a) the range of indoor temperatures and, when appropriate, other relevant climatic factors such as relative humidity, that are recommended by the authorities for that specific type of building.

(b) the current indoor temperature and other relevant climatic factors indicated by means of a reliable device or devices.

Article 7

Member States shall lay down the necessary measures to establish a regular inspection:

(a) of boilers of an effective output of more than 10 kW of which the requirements are set out under heading B in the Annex,

(b) of central air conditioning systems of an effective output of more than 12 kW of which the requirements are set out under heading C in the Annex.

These requirements shall be further developed and defined amended in accordance with the procedure referred to in article 12(2).
Article 8

Member States shall lay down the necessary measures to establish a regular inspection of central air conditioning systems of an effective output of more than 12 kW, of which the requirements are set out in the Annex. These requirements shall be further developed and defined in accordance with the procedure referred to in article 11(2).

Article 9

Member States shall ensure that the certification of buildings, the drafting of the accompanying recommendations and the inspection of heating boilers and air-conditioning systems – whether performed by public bodies or by private-enterprise bodies authorised to do so – are carried out in an independent manner by qualified and independent personnel and/or accredited experts.

Article 9

The Commission shall, assisted by the committee referred to in Article 12(1), evaluate the Directive in the light of the experience gained during its operation no later than five years after its entry into force, and shall, if necessary, propose to the European Parliament and Council the appropriate amendments.

As a part of this evaluation the Commission shall consider:

(a) measures making existing buildings with a total surface area of less than 1000 m² which are being renovated subject to the requirements laid down in Article 5;

(b) general incentives for energy efficiency investments in buildings not undergoing major renovations, in order to reconcile the disparate interests of landlord and tenant.

Article 10

Member States shall take the necessary measures to inform the users of buildings as to the different methods and practices that serve to enhance energy performance.

The Commission shall assist Member States in staging the information campaigns concerned, which may be dealt with in Community programmes.

Article 11

Any amendments necessary in order to adapt the Annex to technical progress shall be adopted in accordance with the procedure referred to in Article 11(2).
Article 11

1. The Commission shall be assisted by the committee established by Article 10 of Council Directive 92/75/EEC, hereinafter referred to as the “committee”, composed of representatives of the Member States and chaired by the representative of the Commission.

2. Where reference is made to this paragraph, the regulatory procedure laid down in Article 5 of Decision 1999/468/EC shall apply, in compliance with having regard to the provisions of Article 7 and Article 8 thereof, shall apply.

3. The period provided for in Article 5(6) of Decision 1999/468/EC shall be three months.

3. The Committee shall adopt its rules of procedure.

Article 12

1. Member States shall bring into force the laws, regulations and administrative provisions to comply with this Directive by [date to be provided] by 31 December 2003 at the latest.

When Member States adopt those provisions, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2. Member States shall communicate to the Commission the provisions of national law which they adopt in the field covered by this Directive.

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Article 13

This Directive shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Communities.

Article 14

This Directive is addressed to the Member States.

Done at Brussels,

For the European Parliament
The President

For the Council
The President
ANNEX

A. Framework for the calculation of energy performances of buildings (Article 3)

1. The methodology of calculation of energy performances of buildings shall integrate the following aspects:
   a. thermal insulation (of building shell and installations)
   b. heating installation and hot water supply
   c. air-conditioning installation
   d. ventilation system
   e. lighting installation
   f. position and orientation of houses and apartments
   g. indoor climatic conditions
   h. elements, products or components whose thermal or energy characteristics are determined in accordance with the methodology adopted in the framework of the "Construction Products Directive" (89/106/EEC) or national standards when European standards do not yet exist.

2. The positive influence of the following aspects shall in this calculation be taken into account:
   a. solar systems and other heating and electricity systems based on renewable energy sources
   b. electricity produced by CHP and/or district heating systems

3. Buildings should for the purpose of this calculation at least be classified into the following categories:
   a. single family houses of different types
   b. apartment blocks
   c. offices
   d. education buildings
   e. hospitals
   f. hotels and restaurants
   g. sports facilities
   gh. wholesale and retail trade services buildings
   hi. other types of energy consuming buildings
B. Requirements for the inspection of boilers (Article 7, point a)

The inspection of boilers shall have regard to energy consumption and limiting carbon dioxide emissions.

Boilers of an effective output of more than 100 kW shall be inspected at least every 2 years.

For heating installations with boilers of an effective rated output of more than 10 kW which are older than 15 years, Member States shall lay down the necessary measures to establish a one-off inspection of the whole heating installation. On the basis of this inspection, which shall include an assessment of the boiler efficiency at full and part load and the boiler sizing compared to the heating requirements of the building, the competent authorities shall provide advice to the users on the replacement of the boilers and on alternative solutions.

C. Requirements for the inspection of central air conditioning systems (Article 87, point b)

The inspection of central air conditioning systems shall have regard to energy consumption and limiting carbon dioxide emissions.

On the basis of this inspection, which shall include an assessment of the air-conditioning efficiency at full and part load and the sizing compared to the cooling requirements of the building, the competent authorities shall provide advice to the users on possible improvement or replacement of the air-conditioning system and on alternative solutions.