Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (recast) (Text with EEA relevance)

ANNEX I

Method for setting generic ecodesign requirements (referred to in Article 15(6))

Generic ecodesign requirements aim at improving the environmental performance of products, focusing on significant environmental aspects thereof without setting limit values. The method referred to in this Annex must be applied when it is not appropriate to set limit values for the product group under examination. The Commission must, when preparing a draft implementing measure to be submitted to the Committee referred to in Article 19(1), identify significant environmental aspects which must be specified in the implementing measure.

In preparing implementing measures laying down generic ecodesign requirements pursuant to Article 15, the Commission must identify, as appropriate to the product covered by the implementing measure, the relevant ecodesign parameters from among those listed in Part 1, the information supply requirements from among those listed in Part 2 and the requirements for the manufacturer listed in Part 3.

Part 1.

Ecodesign parameters for products

- 1.1. In so far as they relate to product design, significant environmental aspects must be identified with reference to the following phases of the life cycle of the product:
- (a) raw material selection and use;
- (b) manufacturing;
- (c) packaging, transport, and distribution;
- (d) installation and maintenance;
- (e) use; and
- (f) end-of-life, meaning the state of a product having reached the end of its first use until its final disposal.
- 1.2. For each phase, the following environmental aspects must be assessed where relevant:
- (a) predicted consumption of materials, of energy and of other resources such as fresh water;
- (b) anticipated emissions to air, water or soil;
- (c) anticipated pollution through physical effects such as noise, vibration, radiation, electromagnetic fields;
- (d) expected generation of waste material; and
- (e) possibilities for reuse, recycling and recovery of materials and/or of energy, taking into account Directive 2002/96/EC.
- 1.3. In particular, the following parameters must be used, as appropriate, and supplemented by others, where necessary, for evaluating the potential for improving the environmental aspects referred to in point 1.2:

- (a) weight and volume of the product;
- (b) use of materials issued from recycling activities;
- (c) consumption of energy, water and other resources throughout the life cycle;
- (d) use of substances classified as hazardous to health and/or the environment according to Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances⁽¹⁾ and taking into account legislation on the marketing and use of specific substances, such as Council Directive 76/769/EEC of 27 July 1976 on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations⁽²⁾ or Directive 2002/95/EC;
- (e) quantity and nature of consumables needed for proper use and maintenance;
- (f) ease for reuse and recycling as expressed through: number of materials and components used, use of standard components, time necessary for disassembly, complexity of tools necessary for disassembly, use of component and material coding standards for the identification of components and materials suitable for reuse and recycling (including marking of plastic parts in accordance with ISO standards), use of easily recyclable materials, easy access to valuable and other recyclable components and materials; easy access to components and materials containing hazardous substances;
- (g) incorporation of used components;
- (h) avoidance of technical solutions detrimental to reuse and recycling of components and whole appliances;
- (i) extension of lifetime as expressed through: minimum guaranteed lifetime, minimum time for availability of spare parts, modularity, upgradeability, reparability;
- (j) amounts of waste generated and amounts of hazardous waste generated;
- (k) emissions to air (greenhouse gases, acidifying agents, volatile organic compounds, ozone depleting substances, persistent organic pollutants, heavy metals, fine particulate and suspended particulate matter) without prejudice to Directive 97/68/ EC of the European Parliament and of the Council of 16 December 1997 on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery⁽³⁾;
- (l) emissions to water (heavy metals, substances with an adverse effect on the oxygen balance, persistent organic pollutants); and
- (m) emissions to soil (especially leakage and spills of dangerous substances during the use phase of the product, and the potential for leaching upon its disposal as waste).

Part 2.

Requirements relating to the supply of information

Implementing measures may require information to be supplied by the manufacturer that may influence the way the product is handled, used or recycled by parties other than the manufacturer. This information may include, as applicable:

- (a) information from the designer relating to the manufacturing process;
- (b) information for consumers on the significant environmental characteristics and performance of a product, accompanying the product when it is placed on the market to allow consumers to compare these aspects of the products;
- (c) information for consumers on how to install, use and maintain the product in order to minimise its impact on the environment and to ensure optimal life expectancy, as well as on how to return the product at end-of-life, and, where appropriate, information on the period of availability of spare parts and the possibilities of upgrading products; and
- (d) information for treatment facilities concerning disassembly, recycling, or disposal at end-of-life.

Information should be given on the product itself wherever possible.

This information must take into account obligations under other Community legislation, such as Directive 2002/96/EC.

Part 3.

Requirements for the manufacturer

1. Addressing the environmental aspects identified in the implementing measure as capable of being influenced in a substantial manner through product design, manufacturers of products must perform an assessment of the product model throughout its lifecycle, based upon realistic assumptions about normal conditions and purposes of use. Other environmental aspects may be examined on a voluntary basis.

On the basis of this assessment, manufacturers must establish the product's ecological profile. It must be based on environmentally relevant product characteristics and inputs/outputs throughout the product life cycle expressed in physical quantities that can be measured.

2. Manufacturers must make use of this assessment to evaluate alternative design solutions and the achieved environmental performance of the product against benchmarks.

The benchmarks must be identified by the Commission in the implementing measure on the basis of information gathered during the preparation of the measure.

The choice of a specific design solution must achieve a reasonable balance between the various environmental aspects and between environmental aspects and other relevant considerations, such as safety and health, technical requirements for functionality, quality, and performance, and economic aspects, including manufacturing costs and marketability, while complying with all relevant legislation.

ANNEX II

Method for setting specific ecodesign requirements (referred to in Article 15(6))

Specific ecodesign requirements aim at improving a selected environmental aspect of the product. They may take the form of requirements for reduced consumption of a given resource, such as a limit on the use of a resource in the various stages of an product's life cycle, as appropriate (such as a limit on water consumption in the use phase or on the quantities of a given material incorporated in the product or a requirement for minimum quantities of recycled material).

In preparing implementing measures laying down specific ecodesign requirements pursuant to Article 15, the Commission must identify, as appropriate to the product covered by the implementing measure, the relevant ecodesign parameters from among those referred to in Annex I, Part 1, and set the levels of these requirements, in accordance with the regulatory procedure referred to in Article 19(2), as follows:

1. A technical, environmental and economic analysis must select a number of representative models of the product in question on the market and identify the technical options for improving the environmental performance of the product, keeping sight of the economic viability of the options and avoiding any significant loss of performance or of usefulness for consumers.

The technical, environmental and economic analysis must also identify, for the environmental aspects under consideration, the best-performing products and technology available on the market.

The performance of products available on international markets and benchmarks set in other countries' legislation should be taken into consideration during the analysis as well as when setting requirements.

On the basis of this analysis, and taking into account economic and technical feasibility as well as the potential for improvement, concrete measures must be taken with a view to minimising the product's environmental impact.

Concerning energy consumption in use, the level of energy efficiency or consumption must be set aiming at the life cycle cost minimum to end-users for representative product models, taking into account the consequences on other environmental aspects. The life cycle cost analysis method uses a real discount rate on the basis of data provided from the European Central Bank and a realistic lifetime for the product; it is based on the sum of the variations in purchase price (resulting from the variations in industrial costs) and in operating expenses, which result from the different levels of technical improvement options, discounted over the lifetime of the representative product models considered. The operating expenses cover primarily energy consumption and additional expenses in other resources, such as water or detergents.

A sensitivity analysis covering the relevant factors, such as the price of energy or other resource, the cost of raw materials or production costs, discount rates, and, where appropriate, external environmental costs, including avoided greenhouse gas emissions, must be carried out to check if there are significant changes and if the overall conclusions are reliable. The requirement will be adapted accordingly.

A similar methodology may be applied to other resources such as water.

2. For the development of the technical, environmental and economic analyses, information available in the framework of other Community activities may be used.

The same applies for information available from existing programmes applied in other parts of the world for setting the specific ecodesign requirement of products traded with the European Union's economic partners.

3. The date of entry into force of the requirement must take the redesign cycle for the product into account.

ANNEX III

CE marking (referred to in Article 5(2))

The CE marking must have a height of at least 5 mm. If the CE marking is reduced or enlarged the proportions given in the above graduated drawing must be respected.

The CE marking must be affixed to the product. Where this is not possible, it must be affixed to the packaging and to the accompanying documents.

ANNEX IV

Internal design control (referred to in Article 8(2))

1. This Annex describes the procedure whereby the manufacturer or its authorised representative who carries out the obligations laid down in point 2 ensures and declares that the product satisfies the relevant requirements of the applicable implementing measure. The EC declaration of conformity may cover one or more products and must be kept by the manufacturer.

2. A technical documentation file making possible an assessment of the conformity of the product with the requirements of the applicable implementing measure must be compiled by the manufacturer.

The documentation must contain, in particular:

- (a) a general description of the product and of its intended use;
- (b) the results of relevant environmental assessment studies carried out by the manufacturer, and/or references to environmental assessment literature or case studies, which are used by the manufacturer in evaluating, documenting and determining product design solutions;
- (c) the ecological profile, where required by the implementing measure;
- (d) elements of the product design specification relating to environmental design aspects of the product;
- (e) a list of the appropriate standards referred to in Article 10, applied in full or in part, and a description of the solutions adopted to meet the requirements of the applicable implementing measure where the standards referred to in Article 10 have not been applied or where those standards do not cover entirely the requirements of the applicable implementing measure;
- (f) a copy of the information concerning the environmental design aspects of the product provided in accordance with the requirements specified in Annex I, Part 2; and
- (g) the results of measurements on the ecodesign requirements carried out, including details of the conformity of these measurements as compared with the ecodesign requirements set out in the applicable implementing measure.
- 3. The manufacturer must take all measures necessary to ensure that the product is manufactured in compliance with the design specifications referred to in point 2 and with the requirements of the measure which apply to it.

ANNEX V

Management system for assessing conformity (referred to in Article 8(2))

- 1. This Annex describes the procedure whereby the manufacturer who satisfies the obligations of point 2 ensures and declares that the product satisfies the requirements of the applicable implementing measure. The EC declaration of conformity may cover one or more products and must be kept by the manufacturer.
- 2. A management system may be used for the conformity assessment of a product provided that the manufacturer implements the environmental elements specified in point 3.
- 3. Environmental elements of the management system

This point specifies the elements of a management system and the procedures by which the manufacturer can demonstrate that the product complies with the requirements of the applicable implementing measure.

3.1. The environmental product performance policy

The manufacturer must be able to demonstrate conformity with the requirements of the applicable implementing measure. The manufacturer must also be able to provide a framework for setting and reviewing environmental product performance objectives and indicators with a view to improving the overall environmental product performance.

IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

All the measures adopted by the manufacturer to improve the overall environmental performance of, and to establish the ecological profile of, a product, if required by the implementing measure, through design and manufacturing, must be documented in a systematic and orderly manner in the form of written procedures and instructions.

These procedures and instructions must contain, in particular, an adequate description of:

- (a) the list of documents that must be prepared to demonstrate the product's conformity, and, if relevant, that have to be made available;
- (b) the environmental product performance objectives and indicators and the organisational structure, responsibilities, powers of the management and the allocation of resources with regard to their implementation and maintenance;
- (c) the checks and tests to be carried out after manufacture to verify product performance against environmental performance indicators;
- (d) the procedures for controlling the required documentation and ensuring that it is kept up-to-date; and
- (e) the method of verifying the implementation and effectiveness of the environmental elements of the management system.
- 3.2. Planning

The manufacturer must establish and maintain:

- (a) procedures for establishing the ecological profile of the product;
- (b) environmental product performance objectives and indicators, which consider technological options, taking into account technical and economic requirements; and
- (c) a programme for achieving these objectives.
- 3.3. Implementation and documentation
- 3.3.1. The documentation concerning the management system must, in particular, comply with the following:
- (a) responsibilities and authorities must be defined and documented in order to ensure effective environmental product performance and reporting on its operation for review and improvement;
- (b) documents must be established indicating the design control and verification techniques implemented and processes and systematic measures used when designing the product; and
- (c) the manufacturer must establish and maintain information to describe the core environmental elements of the management system and the procedures for controlling all documents required.

- 3.3.2. The documentation concerning the product must contain, in particular:
- (a) a general description of the product and of its intended use;
- (b) the results of relevant environmental assessment studies carried out by the manufacturer, and/or references to environmental assessment literature or case studies, which are used by the manufacturer in evaluating, documenting and determining product design solutions;
- (c) the ecological profile, where required by the implementing measure;
- (d) documents describing the results of measurements on the ecodesign requirements carried out including details of the conformity of these measurements as compared with the ecodesign requirements set out in the applicable implementing measure;
- (e) the manufacturer must establish specifications indicating, in particular, standards which have been applied; where standards referred to in Article 10 are not applied or where they do not cover entirely the requirements of the relevant implementing measure, the means used to ensure compliance; and
- (f) copy of the information concerning the environmental design aspects of the product provided in accordance with the requirements specified in Annex I, Part 2.
- 3.4. Checking and corrective action
- 3.4.1. The manufacturer must:
- (a) take all measures necessary to ensure that the product is manufactured in compliance with its design specification and with the requirements of the implementing measure which applies to it;
- (b) establish and maintain procedures to investigate and respond to non-conformity, and implement changes in the documented procedures resulting from corrective action; and
- (c) carry out at least every three years a full internal audit of the management system with regard to its environmental elements.

ANNEX VI

EC declaration of conformity

(referred to in Article 5(3))

The EC declaration of conformity must contain the following elements:

- 1. the name and address of the manufacturer or of its authorised representative;
- 2. a description of the model sufficient for its unambiguous identification;
- 3. where appropriate, the references of the harmonised standards applied;
- 4. where appropriate, the other technical standards and specifications used;
- 5. where appropriate, the reference to other Community legislation providing for the affixing of the CE mark that is applied; and

6. the identification and signature of the person empowered to bind the manufacturer or its authorised representative.

ANNEX VII

Contents of the implementing measures (referred to in Article 15(8))

The implementing measure must specify, in particular:

- 1. the exact definition of the type(s) of product(s) covered;
- 2. the ecodesign requirement(s) for the product(s) covered, implementing date(s), staged or transitional measures or periods:
 - (a) in the case of generic ecodesign requirement(s), the relevant phases and aspects selected from those mentioned in Annex I, points 1.1 and 1.2, accompanied by examples of parameters selected from those mentioned in Annex I, point 1.3 as guidance when evaluating improvements regarding identified environmental aspects;
 - (b) in the case of specific ecodesign requirement(s), its (their) level(s);
- 3. the ecodesign parameters referred to in Annex I, Part 1 relating to which no ecodesign requirement is necessary;
- 4. the requirements on installation of the product where it has a direct relevance to the product's environmental performance considered;
- 5. the measurement standards and/or measurement methods to be used; where available, harmonised standards, the reference numbers of which have been published in the *Official Journal of the European Union*, must be used;
- 6. the details for conformity assessment under Decision 93/465/EEC:
 - (a) where the module(s) to be applied is (are) different from Module A, the factors leading to the selection of that specific procedure;
 - (b) where relevant, the criteria for approval and/or certification of the third parties;

Where different modules are laid down in other CE requirements for the same product, the module defined in the implementing measure must prevail for the requirement concerned;

- 7. requirements on information to be provided by manufacturers notably on the elements of the technical documentation which are needed to facilitate the checking of the compliance of the product with the implementing measure;
- 8. the duration of the transitional period during which Member States must permit the placing on the market and/or putting into service of products which comply with the regulations in force in their territory on the date of adoption of the implementing measure;
- 9. the date for the evaluation and possible revision of the implementing measure, taking into account the speed of technological progress.

ANNEX VIII

Self-regulation

(referred to in Article 17)

In addition to the basic legal requirement that self-regulatory initiatives must comply with all provisions of the Treaty (in particular internal market and competition rules), as well as with the international engagements of the Community, including multilateral trade rules, the following non-exhaustive list of indicative criteria may be used to evaluate the admissibility of self-regulatory initiatives as an alternative to an implementing measure in the context of this Directive:

1. **Openness of participation**

Self-regulatory initiatives must be open to the participation of third country operators, both in the preparatory and in the implementation phases.

2. Added value

Self-regulatory initiatives must deliver added value (more than 'business as usual') in terms of the improved overall environmental performance of the product covered.

3. **Representativeness**

Industry and their associations taking part in a self-regulatory action must represent a large majority of the relevant economic sector, with as few exceptions as possible. Care must be taken to ensure respect for competition rules.

4. **Quantified and staged objectives**

The objectives defined by the stakeholders must be set in clear and unambiguous terms, starting from a well-defined baseline. If the self-regulatory initiative covers a long time-span, interim targets must be included. It must be possible to monitor compliance with objectives and (interim) targets in an affordable and credible way using clear and reliable indicators. Research information and scientific and technological background data must facilitate the development of these indicators.

5. **Involvement of civil society**

With a view to ensuring transparency, self-regulatory initiatives must be publicised, including through the use of the Internet and other electronic means of disseminating information.

The same must apply to interim and final monitoring reports. Stakeholders including Member States, industry, environmental NGOs and consumers' associations must be invited to comment on a self-regulatory initiative.

6. **Monitoring and reporting**

Self-regulatory initiatives must contain a well-designed monitoring system, with clearly identified responsibilities for industry and independent inspectors. The Commission services, in partnership with the parties to the self-regulatory initiative, must be invited to monitor the achievement of the objectives.

The plan for monitoring and reporting must be detailed, transparent and objective. It must remain for the Commission services, assisted by the Committee referred to in Article 19(1), to consider whether the objectives of the voluntary agreement or other self-regulatory measures have been met.

7. **Cost-effectiveness of administering a self-regulatory initiative**

The cost of administering self-regulatory initiatives, in particular as regards monitoring, must not lead to a disproportionate administrative burden, as compared to their objectives and to other available policy instruments.

8. Sustainability

Self-regulatory initiatives must respond to the policy objectives of this Directive, including the integrated approach, and must be consistent with the economic and social dimensions of sustainable development. The protection of the interests of consumers, health, quality of life and economic interests, must be integrated.

9. **Incentive compatibility**

Self-regulatory initiatives are unlikely to deliver the expected results if other factors and incentives — market pressure, taxes, and legislation at national level — send contradictory signals to participants in the self-regulatory initiative. Policy consistency is essential in this regard and must be taken into consideration when assessing the effectiveness of the initiative.

ANNEX IX

PART A

REPEALED DIRECTIVE WITH LIST OF ITS SUCCESSIVE AMENDMENTS

(referred to in Article 24)	
Directive 2005/32/EC of the European Parliament and of the Council (OJ L 191, 22.7.2005, p. 29)	
Directive 2008/28/EC of the European Parliament and of the Council (OJ L 81, 20.3.2008, p. 48)	only Article 1

PART B

LIST OF TIME LIMITS FOR TRANSPOSITION INTO NATIONAL LAW

(referred to in Article 24)

Directive	Deadline for transposition
2005/32/EC	11 August 2007
2008/28/EC	

ANNEX X

CORRELATION TABLE

Directive 2005/32/EC	This Directive
Articles 1 to 20	Articles 1 to 20
Article 21	—
Article 22	—
Article 23	Article 21
Article 24	Article 22
Article 25	—
	Article 23
	Article 24
Article 26	Article 25
Article 27	Article 26
Annexes I to VIII	Annexes I to VIII
	Annex IX
	Annex X

- (**1**) OJ 196, 16.8.1967, p. 1.
- (**2**) OJ L 262, 27.9.1976, p. 201.
- (**3**) OJ L 59, 27.2.1998, p. 1.