THE FRENCH REPUBLIC

The Ministry for Ecology, Sustainable
Development, Transport and Housing

Decree of [ ]

regarding declaration of the environmental impact of construction and decoration products

NOR : […]

The Minister for Ecology, Sustainable Development, Transport and Housing and the Minister for the Economy, Finance and Industry,

Having regard to Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998, laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society services and notification no. ____/___/F;

Having regard to the Consumer Code and particularly Article L.214-1 thereof,

Having regard to Decree no. _____ regarding declaration of the environmental impact of construction and decoration products,

Hereby decree:

Article 1

The provisions of this decree are applicable to the products referred to in Article 2 of decree _____ above with the exception of electrical, electronic and HVAC equipment.

Article 2

the declaration of environmental impact referred to in Article 3 of decree _____ above includes a synthesis of the following information:

- prior to 1 July 2017, figures for the following environmental indicators, for the complete lifecycle and production phase:
  - consumption of energy resources – primary energy, total
  - consumption of energy resources – primary energy, process
  - consumption of energy resources – primary energy, non-renewable
  - consumption of energy resources – primary energy, process, recovered
  - consumption of recycled materials

    - potential for exhaustion of abiotic resources
    - water consumption
    - recovered solid waste
    - disposed solid waste – hazardous waste
    - disposed solid waste – radioactive waste
    - disposed solid waste – non-hazardous waste
    - disposed solid waste – inert waste
    - climate change
    - atmospheric acidification
    - air pollution
    - water pollution
    - formation of photochemical ozone.
- from 1 July 2017, figures for the following environmental indicators, for the complete lifecycle and production phase:
    - consumption of energy resources – primary energy, non-renewable process
    - consumption of energy resources – primary energy, renewable process
    - consumption of energy resources – primary energy, non-renewable matter
    - consumption of energy resources – primary energy renewable matter
    - consumption of energy resources – primary energy, process, recovered
    - consumption of recycled materials
    - potential for exhaustion of fossil abiotic resources
    - potential for exhaustion of non-fossil abiotic resources
    - water consumption
    - recovered solid waste
    - disposed solid waste – hazardous waste
    - disposed solid waste – radioactive waste
    - disposed solid waste – non-hazardous waste
    - disposed solid waste – inert waste
    - climate change
    - atmospheric acidification
    - air pollution
    - water pollution
    - formation of photochemical ozone,
    - eutrophication.
- optionally, figures for the same environmental indicators for the net benefits and impacts beyond the lifecycle of the product,

- functional unit including the typical lifespan of the declared product,
- description of the component products of the operational unit (type of materials and components), specifying whether these are included in the declared product, the packaging, or complementary products,
- technical and dimensional specifications not included in the functional unit,
- area of application of the product,
- product covered by declaration: family, commercial description(s) or designation(s), name(s) or designation of the party(ies) responsible for placing on the market
- reference and date of declaration,
- if applicable, contact details of assessor (independent third party),
- contact details of declaring party.

Article 3

Without prejudice to confidential industrial and commercial data, the declaration shall contain the following information:

- the results of inventory calculations,
- information in support of the typical lifespan cited,
- in the event of recourse to generic data deriving from public or private databases, documentation relating to how technologically, geographically and temporally representative the generic data used is, details of the databases from which it originates and details of the data modules used,
- total mass of entries not included in the lifecycle inventory due to the cut-off rule,
- the scenarios upon which the lifecycle inventory is based,
- in the event of recourse to a sampling method, evidence that the sample is representative - particularly geographically, temporally and technologically - of production of the product placed on the French market.

Article 4

The declaring party keeps all supporting component information, or the contact details of the individuals or legal entities holding these components, available to the only inspection authorities, permitting verification of the information included in the declaration, in particular:

- the origin of raw materials, materials and components of the product,
- identification of the entries not included in the lifecycle inventory due to the cut-off rule,
- the production site(s) covered by the declaration,
- the production of each site expressed using the unit of measurement defined in the functional unit.

Article 5

The formats for functional units for each category of product are set out in Annex I.

For each product, a typical lifespan is determined and justified according to the parameters set out in Annex II. The typical lifespan may not exceed the designed lifespan of the work, conventionally taken to be 100 years.

Article 6

The calculation methods for environmental indicators are set out under Standard NF P01-010, with the exception of the following environmental indicators:

- consumption of energy resources – primary energy, non-renewable process
- consumption of energy resources – primary energy, renewable process
- consumption of energy resources – primary energy, process, recovered
- consumption of energy resources – energy, non-renewable matter
- consumption of energy resources – energy, renewable matter
- potential for exhaustion of fossil abiotic resources
- potential for exhaustion of non-fossil abiotic resources
- eutrophication
- net benefits and impacts beyond the lifecycle of the product

for which the environmental indicator calculation methods are correspondingly set out in Annexes III to VII of this decree.

Article 7

When the declaration covers multiple production sites, the inventory data is weighted according to the unit of measurement defined in the functional unit or a physical unit directly attached to the functional unit.

Article 8

From 1 July 2017, the declaration shall be the subject of independent third-party verification notably covering:

- adherence to calculation methods for the environmental indicators referred to in Article 6;
- justification of the typical lifespan mentioned in Article 5;
- where applicable, justification of the representative nature of the generic data and the sample referred to in Article 3, and/or the uniformity of the environmental indicators referred to in Article 11.

Article 9

The declaring party submits the declaration to the platform made available by the authorities via the following website: _____

Article 10

The declaration is updated with each significant change to the product known by the declaring party, or maximum every 5 years.

Article 11

By way of derogation, the declaration may be based on a collective declaration regarding similar products placed on the market by different suppliers to the market. In this case, the following conditions must be met:

Firstly,

- The collective declaration concerns a 'product-type'; it is written up according to the conditions set out in the preceding articles;
- Uniformity must be ensured for environmental indicators among market suppliers, through uniformity of the parameters significantly influencing those environmental indicators; to this end, the collective declaration includes a validity framework containing the following information:
  - Identification of the relevant parameters, specifying whether they are completed with generic or specific data,
  - the validity intervals of these parameters;
- The declaring party submitting the collective declaration is responsible for the information which it contains;
- Suppliers to the market are responsible for the elements which they submit to the above-mentioned declaring party; they must respect the validity framework of the collective declaration;

Secondly,

- The declaration written up by the party responsible for placement on the market is not subject to the obligations of articles 3, 4, 7 and 8; it contains, in addition to the synthesis referred to in Article 1, the reference to the collective declaration;
- The party responsible for placement on the market is responsible for the conformity of the declaration for their product with the collective declaration; they thereby undertake to respect the validity framework of the collective declaration;
- Only suppliers to the market designated through the collective declaration may write up a declaration on the basis of this collective declaration.

Article 12

When communicating, in accordance with the conditions referred to in Article 3 of decree _____ above, the party responsible for placement on the market indicates via the communication media used that the declaration is available at the web address referred to in Article 9 of this decree, specifying its reference details.

Article 13

The Director of Housing, Urbanism and Landscapes and the Director General for Competitiveness, Industry and Services are responsible, each in their own sphere, for the application of this decree, which will be published in the Official Journal of the French Republic.

ANNEX I

No.	Function	Category	Format of functional unit (without technical characteristics, complementary products and details)	Family	Family numerical code
1	Road system / various networks (including interior)	Tanks and reservoirs	a unit of given volume	Steel	01.01.01
				Concrete	01.01.02
				Copper	01.01.03
				Brass	01.01.04
				Polyester	01.01.05
				Polyethylene	01.01.06
		Drainage and sanitation networks (rainwater and waste water)	average mL	Steel	01.02.01
				Aluminium	01.02.02
				Concrete	01.02.03
				Copper	01.02.04
				Cast iron	01.02.05
				Brass	01.02.06
				Polyester	01.02.07
				Polyethylene	01.02.08
				PVC	01.02.09
				Zinc	01.02.10
		Water delivery networks (interior and exterior)	average mL	Stainless steel	01.03.01
				Galvanised steel	01.03.02
				Copper	01.03.03
				Cast iron	01.03.04
				Brass	01.03.05
				Polybutylene	01.03.06
				Polyethylene	01.03.07
				PVC	01.03.08
		Gas delivery networks	average mL	Steel	01.04.01
				Copper	01.04.02
				Brass	01.04.03
				Polyethylene	01.04.04
		Drainage system	average mL	Polyethylene	01.05.01
				PVC	01.05.02
		Roadways and exterior cladding	m² of cladding for a given purpose (external terrace, road system for light traffic, parking, etc.)	Prefabricated concrete	01.06.01
				Solid wood	01.06.02
				Reconstituted wood	01.06.03
				Ceramic	01.06.04
				Coated materials	01.06.05

				Materials based on hydraulic binding agents	01.06.06
				Natural stone	01.06.07
		Various			01.00.00
2	Structure / masonry / building shell / frame	Flue blocks and chimney flue pipes	mL of duct of given internal cross-section	Steel	02.01.01
				Concrete	02.01.02
				Reinforced concrete	02.01.03
				Fire brick	02.01.04
				Terracotta	02.01.05
		Screeds / floating screeds	m² for a given thickness	Cement-based concrete and mortar	02.02.01
				Anhydrite screed	02.02.02
				Plasterboard (dry screeds)	02.02.03
		Frames	m² of surface covered	Steel	02.03.01
				Aluminium	02.03.02
				Concrete	02.03.03
				Solid wood	02.03.04
				Reconstituted wood	02.03.05
		Bracing	m² of bracing	Steel	02.03.01
				Concrete	02.03.02
				Solid wood	02.03.03
				Reconstituted wood	02.03.04
				Wood-cement composites	02.03.05
		Paving slabs and pre-cast slabs	m²	Steel	02.04.01
				Hollow-core concrete	02.04.02
				Aerated concrete	02.04.03
				Solid reinforced concrete	02.04.04
				Solid non-reinforced concrete	02.04.05
				Pre-stressed concrete	02.04.06
				Wood wool	02.04.07
		Horizontal load bearing elements (beams / joists / beam and block floor elements / lintels)	mL of load bearing element (specify load capacity and cross-section)	Steel	02.05.01
				Concrete	02.05.02
				Reinforced concrete	02.05.03
				Pre-stressed concrete	02.05.04
				Solid wood	02.05.05
				Reconstituted wood	02.05.06
				Polypropylene	02.05.07
				Terracotta	02.05.08
		Vertical load-bearing elements (posts / columns / pillars)	mL of element (specify cross-section)	Steel	02.06.01
				Reinforced concrete	02.06.02
				Pre-stressed concrete	02.06.03
				Solid wood	02.06.04
				Reconstituted wood	02.06.05
				Natural stone	02.06.06

				Terracotta	02.06.07
		Stairs (internal and external)	a unit for a given height elevation	Steel	02.07.01
				Aluminium	02.07.02
				Concrete	02.07.03
				Solid wood	02.07.04
				Reconstituted wood	02.07.05
				Natural stone	02.07.06
				Terracotta	02.07.07
		Foundations	m^3	Steel	02.08.01
				Reinforced concrete	02.08.02
				Non-reinforced concrete	02.08.03
				Solid wood	02.08.04
				Prefabricated concrete elements	02.08.05
		Small masonry components	m² (specify the thermal resistance)	Concrete	02.09.01
				Aerated concrete	02.09.02
				Wood concrete	02.09.03
				Hemp concrete	02.09.04
				Natural stone	02.09.05
				Pumice	02.09.06
				Sand-lime	02.09.07
				Adobe	02.09.08
				Terracotta	02.09.09
		Floors	m² of floor (specify loading)	Steel	02.10.01
				Steel/concrete	02.10.02
				Ribbed steel trough	02.10.03
				Reinforced concrete	02.10.04
				Solid wood	02.10.05
				Reconstituted wood	02.10.06
				Wood-based compounds	02.10.07
		Concrete shells (architectural elements)	m² of shell (specify thickness and thermal resistance)	Reinforced concrete	02.11.01
		Various			02.00.00
3	Façades	Cladding paints (insulated cladding / cladding / facing stone)	m² of façade	Steel	03.01.01
				Aluminium	03.01.02
				Concrete	03.01.03
				Solid wood	03.01.04
				Reconstituted wood	03.01.05
				Copper and alloys	03.01.06
				Fibre-cements	03.01.07
				Natural stone	03.01.08
				Reconstituted stone	03.01.09
				Polycarbonate	03.01.10

				PVC	03.01.11
				Terracotta	03.01.12
				Glass	03.01.13
				Zinc	03.01.14
		Curtain walls and glazing	m² of façade (specify the percentage of opaque surface)	Steel	03.02.01
				Aluminium	03.02.02
				Copper and alloys	03.02.03
				PVC	03.02.04
				Zinc	03.02.05
		External façade cladding/coating (including Composite External Thermal Insulation Systems)	m² de façade (specify the thermal resistance if relevant)	Mineral rendering mortar	03.03.01
				Organic rendering mortar	03.03.02
				Exterior paint rendering	03.03.03
				Mineral paint products	03.03.04
				Organic paint products	03.03.05
				Accessory products	03.03.06
		Various			03.00.00
4	Roofing / sealing	Large element roofing elements	m² of roofing	Steel	04.01.01
				Aluminium	04.01.02
				Copper and alloys	04.01.03
				Fibre-cements	04.01.04
				Brass	04.01.05
				Polycarbonate	04.01.06
				Polyester	04.01.07
				Polymethacrylate	04.01.08
				PVC	04.01.09
				Zinc	04.01.10
		Small element roofing elements	m² of roofing	Slate	04.02.01
				Bituminous shingles	04.02.02
				Concrete	04.02.03
				Wood	04.02.04
				Fibre-cements	04.02.05
				Stone	04.02.06
				Terracotta	04.02.07
				Zinc	04.02.08
		Waterproofing and sealing products for buried walls	m² of roofing	Bituminous rendering	04.03.01
				Bitumen-based sheets	04.03.02
				Bentonite membrane	04.03.03
				Synthetic membranes (PVC, polyolefins, etc.)	04.03.04
		Roof sealing products	m² of roofing	Asphalt	04.04.01
				Liquid sealing	04.04.02
				Bitumen-based sheets	04.04.03

				Synthetic membranes (PVC, polyolefins, etc.)	04.04.04
		Green roof elements	m² of roof (specify the type of vegetation supported and the thermal characteristics if relevant)		04.05.01
		Various			04.00.00
5	Interior and exterior joinery / closures	Fencing	mL of fencing	Steel	05.01.01
				Aluminium	05.01.02
				Wood	05.01.03
				Copper	05.01.04
				Polycarbonate	05.01.05
				Polymethacrylate	05.01.06
				PVC	05.01.07
		Windows / French windows / roof windows	m² of joinery (open surface area before fitting) (specify U-value, solar factor, Air Water Wind rating and light transmission)	Steel	05.02.01
				Aluminium	05.02.02
				Solid wood	05.02.03
				Reconstituted wood	05.02.04
				Wood-aluminium	05.02.05
				Copper and alloys	05.02.06
				Polyester	05.02.07
				Polyethylene	05.02.08
				PVC	05.02.09
		Railings	mL of railings	Steel	05.04.01
				Aluminium	05.03.02
				Wood	05.03.03
				Copper and alloys	05.03.04
				Polycarbonate	05.03.05
				Polymethacrylate	05.03.06
				PVC	05.03.07
				Glass	05.03.08
		Doors (interior / exterior / gates, etc.)	m² (open surface area before fitting)	Steel	05.04.01
				Aluminium	05.04.02
				Solid wood	05.04.03
				Reconstituted wood	05.04.04
				Bronze	05.04.05
				PVC	05.04.06
				Glass	05.04.07
		Shutters / roller blinds / louvres / blinds / sunshades	m² of blinded/shielded surface area	Steel	05.05.01
				Aluminium	05.05.02
				Solid wood	05.05.03
				Reconstituted wood	05.05.04
				Copper and alloys	05.05.05

				Brass	05.05.06
				PVC	05.05.07
				Terracotta	05.05.08
				Fabric	05.05.09
				Coated fabric	05.05.10
		Various			05.00.00
6	Insulation	Rafter insulation blocks / roof panels	m² of insulation (specify the thermal resistance)	Rock wool	06.01.01
				Expanded polystyrene	06.01.02
				Extruded polystyrene	06.01.03
				Polyurethane	06.01.04
		Lining systems	m² of insulation (specify the thermal resistance)	Plasterboard + rock wool	06.02.01
				Plasterboard + glass wool	06.02.02
				Plasterboard + expanded polystyrene	06.02.03
				Plasterboard + extruded polystyrene	06.02.04
				Plasterboard + polyurethane	06.02.05
		Additional insulation	m² of insulation (specify the thermal resistance)	Phase change materials	06.03.01
				Thin reflective products	06.03.02
		Insulating slabs/filler	m² of insulation (specify the thermal resistance)	Expanded polystyrene	06.04.01
		Thermal and acoustic insulation in rigid plaques and flexible panels	m² of insulation (specify the thermal and acoustic resistance)	Cotton fibre	06.05.01
				Flax fibre	06.05.02
				Hemp wool	06.05.03
				Sheep's wool	06.05.04
				Rock wool	06.05.05
				Glass wool	06.05.06
				Wood wool and fibre	06.05.07
				Expanded cork	06.05.08
				Vacuum insulation panels	06.05.09
				Duck feathers	06.05.10
				Expanded polystyrene	06.05.11
				Extruded polystyrene	06.05.12
				Polyurethane	06.05.13
				Cellular glass	06.05.14
		Thermal and acoustic insulation on rolls	m² of insulation (specify the thermal and acoustic resistance)	Hemp wool	06.06.01
				Flax wool	06.06.02
				Sheep's wool	06.06.03
				Rock wool	06.06.04
				Glass wool	06.06.05
				Duck feathers	06.06.06
		Thermal and acoustic insulation, loose	m² of insulation (specify the thermal and	Hemp hurds	06.07.01
				Cotton wool	06.07.02

			acoustic resistance)	Slag wool	06.07.03
				Sheep's wool	06.07.04
				Rock wool	06.07.05
				Glass wool	06.07.06
				Cellulose wadding	06.07.07
				Perlite	06.07.08
				Vermiculite	06.07.09
		Thermal and acoustic insulation for flat roofs	m² of insulation (specify the thermal and acoustic resistance)	Rock wool	06.08.01
				Glass wool	06.08.02
				Expanded perlite	06.08.03
				Expanded polystyrene	06.08.04
				Extruded polystyrene	06.08.05
				Polyurethane	06.08.06
				Cellular glass	06.08.07
		Under-screed thermal and acoustic insulation	m² of insulation (specify the thermal and acoustic resistance)	Rock wool	06.09.01
				Glass wool	06.09.02
				Polyester	06.09.03
				Expanded polystyrene	06.09.04
				Extruded polystyrene	06.09.05
				Polyurethane	06.09.06
		Non-load-bearing distributed insulation	m² of insulation (specify the thermal and acoustic resistance if relevant)	Hemp concrete	06.10.01
				Straw	06.10.02
				Cob	06.10.03
		Various			06.00.00
7	Partitioning / suspended ceilings	Partitioning	m² of partitioning (specify an acoustic performance, if relevant)	Steel	07.01.01
				Concrete	07.01.02
				Solid wood	07.01.03
				Reconstituted wood	07.01.04
				Plaster tile	07.01.05
				Copper and alloys	07.01.06
				Cement board	07.01.07
				Plasterboard	07.01.08
				Sand-lime brick	07.01.09
				Terracotta	07.01.10
				Glass	07.01.11
		Suspended ceilings	m² of suspended ceiling (specify acoustic performance)	Steel	07.02.01
				Solid wood	07.02.02
				Reconstituted wood	07.02.03
				Wood wool	07.02.04
				Rock wool	07.02.05
				Glass wool	07.02.06

				Plasterboard	07.02.07
				Sand-lime brick	07.02.08
				PVC	07.02.09
				Terracotta	07.02.10
				Vermiculite	07.02.11
		Various			07.00.00
8	floor and wall claddings / paints / decoration products	Paints, stains and varnishes, paint renders (without saturators)	m² of surface covered	Solvent-based paints	08.01.01
				Water-based paints	08.01.02
				Other paints	08.01.03
				Solvent-based stains and varnishes	08.01.04
				Water-based stains and varnishes	08.01.05
				Other stains and varnishes	08.01.06
				Paint render	08.01.07
		Skirting boards	mL of skirting boards	Solid wood	08.02.01
				Reconstituted wood	08.02.02
				Ceramic	08.02.03
				Stone	08.02.04
				Reconstituted stone	08.02.05
				PVC	08.02.06
				Terracotta	08.02.07
		Wall and ceiling coatings	m² of coating	Steel	08.03.01
				Copper and alloys	08.03.02
				Plaster render	08.03.03
				Wood and reconstituted panelling	08.03.04
				Wallpaper	08.03.05
				Natural stone	08.03.06
				Reconstituted stone	08.03.07
				PVC	08.03.08
				Terracotta	08.03.09
				Textiles / non-woven fabrics	08.03.10
				Fibreglass cloth	08.03.11
		Hard floor coverings	m² of covering (specify usage class or UPEC certification class for wear and impact resistance, characteristics when wet and chemical resistance properties)	Ceramic	08.04.01
				Laminated wooden parquet	08.04.02
				Solid wood parquet	08.04.03
				Stratified wood parquet	08.04.04
				Natural stone	08.04.05
				Reconstituted stone	08.04.06
				Terracotta	08.04.07
		Soft floor coverings	m² of covering (specify usage class or UPEC certification class for wear and	Rubber	08.05.01
				Linoleum	08.05.02
				PVC	08.05.03

			impact resistance, characteristics when wet and chemical resistance properties)	Textile (pile, needled or flocked carpets)	08.05.04
		Acoustic products	m² of covering (specify usage class or UPEC certification class for wear and impact resistance, characteristics when wet, chemical resistance and acoustic performance)	PVC fabric complex/ Polyurethane foam	08.06.01
				PVC fabric panel / Melamine foam	08.06.02
		Saturators	m² of surface covered		08.07.01
		Various			08.00.00
9	Preparation and installation products	Carpentry adhesives	kg (specify density)	Resorcinol	09.01.01
				Melamine urea formaldehyde (MUF)	09.01.02
				Polyurethane	09.01.03
		Repairs and assembly	kg (specify density)	Epoxy adhesives	09.02.01
				Wood glues	09.02.02
				Contact adhesives	09.02.03
				Hot melt adhesives	09.02.04
				PVC glues	09.02.05
		Floors	m² of glue on floor	Solvent-based adhesives	09.03.01
				Water-based adhesives	09.03.02
				Reactive adhesives	09.03.03
				Floor levelling (smoothing/skimming), screeds	09.03.04
				Floor preparation primers	09.03.05
		Masonry mortars	kg (specify density)	Assembly mortars	09.04.01
				Thin joint mortars	09.04.02
		Tiling	m² tiling	Sealing/waterproofing	09.05.01
				Base preparation primers	09.05.02
				Ready-to-use adhesives	09.05.03
				High-bond mortars	09.05.04
				Jointing mortars	09.05.05
		Decoration	kg (specify density)	Paste glues for walls	09.06.01
				Powdered glues for walls	09.06.02
				Preparation compounds	09.06.03
		Polyurethane mastics and foams	ml (specify mass per unit length)	Adhesive mastic	09.07.01
				Masonry mastics	09.07.02
				Roofing mastics	09.07.03
				Sanitary mastics	09.07.04
				Glazing and multi-purpose mastics	09.07.05
				Jointing mastics	09.07.06
				Polyurethane foams	09.07.07

		Building chemistry	kg (specify density)	Admixtures and additives	09.08.01
				Protection/sealing	09.08.02
				Surface treatment	09.08.03
		Products for concrete	kg (specify density)	Paving, grouting, sealing mortars	09.09.01
				Repair mortars	09.09.02
				Wall rendering mortars	09.09.03
				Waterproofing mortars	09.09.04
		Synthetic resins	m² (specify density)	Industrial and pedestrian floor resins	09.10.01
				Recreational and safety floors	09.10.02
				Protection/repair	09.10.03
		Various			09.00.00
10	Sanitary and bathroom equipment	Tap and shower fittings	Unit (specify type)	Brass	10.01.01
		Bathtub	Unit (specify volume in litres and shape)	Enamelled steel	10.02.01
				Cast iron	10.02.02
				Synthetic material	10.02.03
		Shower tray	Unit (specify dimensions: width and length)	Enamelled steel	10.03.01
				Ceramics (enamelled stoneware and vitrified china)	10.03.02
				Synthetic material	10.03.03
		Sink	Unit (specify dimensions: width, length and number of bowls)	Enamelled steel	10.04.01
				Stainless steel	10.04.02
				Copper	10.04.03
				Ceramics (enamelled stoneware and vitrified china)	10.04.04
				Synthetic material	10.04.05
		Wash basin	Unit (specify dimensions: width, length and number of bowls)	Enamelled steel	10.05.01
				Ceramics (enamelled stoneware and vitrified china)	10.05.02
				Cement	10.05.03
				Copper and alloys	10.05.04
				Synthetic material	10.05.05
				Natural stone	10.05.06
				Glass	10.05.07
		WC - Toilet	Unit (specify dimensions width and length)	Steel	10.06.01
				Ceramic (vitrified china)	10.06.02
		Various			10.00.00
00	Others	Various			00.00.00

ANNEX II

The following table lists the seven groups of parameters enabling justification of the typical lifespan referred to in Article 5.

Parameters
Declared properties of the product (direct from factory) and finishes, etc.
Theoretical application parameters (if imposed by the manufacturer), including references to appropriate practices

Expected quality of works when installation is in accordance with the manufacturer's instructions
External environment (for external applications), for example inclement weather, pollutants, exposure to UV and wind, building orientation, shade, temperature
Internal environment (for internal applications), for example temperature, humidity, exposure to chemicals
Conditions of use, for example frequency of use, mechanical exposure, etc.
Maintenance, for example specified frequency, type and quality and replacement of replaceable components

ANNEX III

Calculation of the potential for exhaustion of non-fossil abiotic resources is achieved by the conversion of consumption flows of the resources listed in the table below, and which appear in the inventory calculation results referred to in Article 6, into a reference flow of antimony expressed in equivalent kilogram's of antimony (equiv. kg Sb)

If a resource flow is present in the inventory but does not appear in the following table, its ADP coefficient or an equivalent ADP coefficient shall be obtained.

Flow	Conversion coefficient (to be multiplied by the flow value in kg)
Antimony (Sb)	1.00
Silver (Ag)	1.84
Clay	2.99×10^{-11}
Arsenic (As)	9.17×10^{-3}
Bauxite (Al_2O_3)	1.00×10^{-8}
Bentonite	2.99×10^{-11}
Bismuth (Bi)	7.31×10^{-2}
Boron (B)	4.67×10^{-3}
Cadmium (Cd)	3.30×10^{-1}
Limestone	7.08×10^{-10}
Sodium Carbonate (Na_2CO_3)	8.24×10^{-11}
Sodium Chloride (NaCl)	4.86×10^{-8}
Chromium (Cr)	8.58×10^{-4}
Cobalt (Co)	2.62×10^{-5}
Copper (Cu)	1.94×10^{-3}
Dolomite	3.73×10^{-9}
Tin(Sn)	3.30×10^{-2}
Feldspar	3.13×10^{-8}
Iron (Fe)	8.43×10^{-8}
Fluorite (CaF_2)	2.96×10^{-6}
Gravel	2.99×10^{-11}
Lithium (Li)	9.23×10^{-6}
Kaolin ($Al_2O_3{,}2SiO_2{,}H_2O$)	1.00×10^{-8}
Magnesium (Mg)	3.73×10^{-9}
Manganese (Mn)	1.38×10^{-5}
Mercury (Hg)	4.95×10^{-1}

Flow	Conversion coefficient (to be multiplied by the flow value in kg)
Molybdenum (Mo)	3.17×10^{-2}
Nickel (Ni)	1.08×10^{-4}
Gold (Au)	8.95×10^{1}
Palladium (Pd)	3.23×10^{-1}
Silica (SiO_2)	2.99×10^{-11}
Platinum (Pt)	1,29
Lead (Pb)	1.35×10^{-2}
Potassium chloride (KCl)	3.13×10^{-8}
Rhodium (Rh)	3.23×10^{-1}
Rutile (TiO_2)	4.40×10^{-8}
Sand	2.99×10^{-11}
Sulphur (S)	3.58×10^{-4}
Barium sulphate ($Ba\ SO_4$)	1.06×10^{-10}
Titanium (Ti)	4.40×10^{-8}
Tungsten (W)	1.17×10^{-2}
Uranium (U)	2.87×10^{-3}
Vanadium (V)	1.16×10^{-6}
Zinc (Zn)	9.92×10^{-4}
Zirconium (Zr)	1.86×10^{-5}

ANNEX IV

Calculation of the potential for exhaustion of fossil abiotic resources is achieved by the conversion of consumption flows to energy flows for the resources listed in the table below, and which appear in the inventory calculation results referred to in Article 6, using their lower calorific value (LCV).

The LCV values used are among the elements to be made available to the monitoring authorities under Article 4. These LCV values may depend on the supply source.

Flow	Conversion coefficient
Coal	LCV
Lignite	LCV
Natural gas	LCV
Oil	LCV

ANNEX V

Eutrophication refers to the imbalance resulting from an excessive influx of nutrients into a body of water (nitrogen, carbon and phosphorous).

The environmental indicator calculation relating to eutrophication is achieved by the conversion into a reference flow of phosphate ion PO_4^{2-} of the flows of the substances listed in the table below, and which appear in the inventory calculation results referred to in Article 6, expressed in equivalent grams of PO_4^{2-} (equiv. g PO_4^{2-}).

Flow	Conversion coefficient (to be multiplied by the flow value in g)
Ammonia (NH_4^+)	0,42
Chemical Oxygen Demand (COD)	0,022
Nitrate (NO_3^-)	0,095
Nitrate (NO_2^-)	0,13
Oxides of nitrogen (NO_2)	0,13
Nitric oxide (NO)	0,2
Nitrogen compounds (in N)	0,42
Phosphate (PO_4^{2-})	1
Phosphorous compounds (in P)	1
Phosphorous (P)	1
Phosphorous pentoxide (P_2O_5)	1,336

ANNEX VI

Calculation of net environmental benefits and impacts beyond the lifecycle of the product.

In the event of recycling, for a given recycled waste (and thus a given *lambda* material), the following formula applies:

NetBenefRecycl = MSval (IVval – ISval) – MS (IV – IS)

where

MSval = mass of secondary material effectively recovered from the stock mass collected (recovered matter flow: *lambda* of table 8 of standard NF P01-010);

IVval = production inventory of material (or mixture) for which the recycled *lambda* secondary material is substituted in the downstream system using it (i.e. not the production inventory of the downstream product, but the production inventory of the component material of this downstream product);

Isval = production inventory of ready-to-use secondary material in the downstream system from stock;

MS = mass of secondary material introduced into the product to which the declaration applies, at fabrication (flow, recycled material: *lambda* of table 4 of standard NF P01-010);

IV = production inventory of virgin material used to produce the product to which the declaration applies, in the absence of recycling of the material;

IS = production inventory of ready-to-use secondary material used to produce the product to which the declaration applies.

In the case of energy recycling, for a given flow of recycled waste, the following formula applies:

BenefNetValoNRJ = MSval (LCVSval x REval x IVval – ISval)

where

Msval = mass of secondary material effectively recovered from the stock mass collected;

Ivval = production inventory of the energy for which the energy recovered by energy recycling of the secondary materials is substituted in the downstream system (i.e. not the

production inventory of the downstream system, but the production inventory of energy consumed by the downstream system – attention per MJ delivered);

Isval = inventory of energy recycling of the secondary material from stock, for which the reference flow is the quantity of recycled secondary material;

LCVSval = LCV of recovered secondary material;

Reval = energy output from the recovered secondary material energy recycling installation.

The global benefit for the declared product is then obtained through summation of the collective benefits calculated for each of the materials/flows.

ANNEX VII

Principles for the calculation of energy indicators

Tables 1 and 4 of standard NF P01-010 provide the information necessary for the calculation of energy indicators.

Consumption of energy resources – Primary energy, non-renewable process

This indicator is calculated by totalling the Lower Calorific Values (LCV) corresponding to the flows of non-renewable energy resources identified in Table 1 as process resources (fossil resources and uranium). The LCV values used are among the elements to be made available to the monitoring authorities under Article 3.

Consumption of energy resources – Primary energy, renewable process

This indicator is calculated by totalling the Lower Calorific Values (LCV) corresponding to the flows of renewable energy resources identified in Table 1 as process resources and final energy requirements met by solar, wind or hydro energy. The LCV values used are among the elements to be made available to the monitoring authorities under Article 3.

Consumption of energy resources – Primary energy, process, recovered

This indicator corresponds to the line ' recovered energy ' in Table 4 of standard NF P01-010.

Consumption of energy resources – Energy, non-renewable matter

This indicator is calculated by totalling the Lower Calorific Values (LCV) corresponding to the flows of non-renewable energy resources identified in Table 1 as material resources (essentially oil). The LCV values used are among the elements to be made available to the monitoring authorities under Article 3.

Consumption of energy resources – Energy, renewable matter

This indicator is calculated by totalling the Lower Calorific Values (LCV) corresponding to the flows of renewable energy resources identified in Table 1 as material resources. The LCV values used are among the elements to be made available to the monitoring authorities under Article 3.

GLOSSARY

Functional unit (NF P01-010): quantified performance of a system of products intended for use as a unit of reference in a lifecycle analysis.

Typical lifespan (NF P01-010): theoretical product lifespan given for the functional unit.

Complementary product (NF P01-010): general term for any product which must necessarily be associated with the main product at each of the phases of installation and working lifetime.

It may consist of fitting accessories for installation (such as mortars, fixings, concrete release agents, etc.), or maintenance products for the working lifetime phase.

Technological, geographical and temporal representativeness of a sample: Geographical, technological et temporal data retained in the reference sample is similar to that which characterises the production placed on the market.

Cut-off rule (NF P01-010): criterion for the inclusion of inputs and outputs. Under standard NF P01-010, the mass-based cut-off criterion has been retained for its ease of implementation.

Analysis of the lifecycle inventory (NF P01-010): lifecycle analysis phase (LCA) involving the compilation and quantification of inputs and outputs for a given product system during its lifecycle.

Energy, process (NF P01-010): energy input necessary in an elementary process to commence the process or cause the necessary equipment to operate, exclusive of production energy inputs and the delivery of this energy.

Energy, material (NF P01-010): This corresponds to the proportion of primary energy contained in materials not used as fuels which are input to the system. This quantity of energy (lower calorific value) may be recovered at end of life if collection and recycling mechanisms are in place.