


SAWYER

Skills and safety needs
in a circular furniture sector

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Technical working
document:
State of the art of
Circular Economy in
different EU Countries

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The content of this document has been prepared based on the inputs coming from the following entities::

- **APMR** - Asociatia Producatorilor de Mobila din Romania / Romania
- **BBCWFI** - Bulgarian Branch Chamber of Woodworking and Furniture Industry / Bulgaria
- **CBM** - Koninklijke CBM, Branchevereniging voor interieurbouw en Meubelindustrie / The Netherlands
- **CENFIM** - Home & Contract furnishing cluster and innovation hub / Spain
- **FCBA** - l'Institut Technologique Forêt Cellulose Bois-construction Ameublement) / France
- **FEDERLEGNOARREDO** - Italian Federation of Woodworking and furniture industries / Italy
- **GS** - The Swedish Union of Forestry, Wood and Graphical Workers) / Sweden



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List of Acronyms

BREEAM - The Building Research Establishment's Environmental Assessment Method
CARB - California Air Resources Board
ECHA - European Chemicals Agency
EEE - Electrical and Electronic Equipment
EMAS - The EU Eco-Management and Audit Scheme
EMS - Environmental Management System
EPR - Extended Producer Responsibility
ERP - Energy Related Product
EU - European Union
EUTR - European Union Timber Regulation
FLECT - Forest Law, Enforcement, Governance and Trade
FR - Flame retardant
FSC - Forest Stewardship Council
GPP - Green Public Procurement
ISO - International Organization for Standardization
JRC - Join Research Centre
LCA - Life Cycle Assessment
LEED - Leadership in Energy and Environmental Design
NGO - Non-governmental organisation
OECD - The Organisation for Economic Co-operation and Development
OEF - Organisation Environmental Footprint
PEF - Product Environmental Footprint
PEFC - Programme for the Endorsement of Forest Certification
POP - Persistent organic pollutant
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals
RED - Renewable energy Directive
RoHS - Restriction of Hazardous Substances
SVHC - Substances of very high concern
TSCA - Toxic Substances Control Act
VPA - Voluntary Partnership Agreements
WEEE - Waste of Electrical and Electronic Equipment



1. INTRODUCTION

1.1. OBJECTIVE OF THE DOCUMENT

The objective of this document is to analyse the current status of the circular economy within the furniture sector, in different EU countries:

- Bulgaria
- France
- Italy
- Romania
- Spain
- Sweden
- The Netherlands

This document is complementary with the document “State of the art of Circular Economy in the Furniture Sector”, which analyses the status at EU level.

1.2. SELECTED INSTRUMENTS

The following legislative and voluntary instruments have been selected due to their potential impact on promoting the transition of the furniture sector toward the circular economy.

Nowadays, some of them have a reduced impact on the sector, but it is foreseen that their influence will be greater in a near future.

Legislative Instruments:

- Circular Economy Package of the EC
- Waste Electrical and Electronic Equipment Directive (WEEE)
- Restriction of hazardous substances in Electrical and Electronic Equipment (ROHS)
- Energy related Products Directive (ErP or eco-design directive)
- Extended Producers Responsibility (EPR schemes)
- Hazardous substances / REACH Regulation
- Formaldehyde emissions
- EU's rules on “end-of-waste” criteria
- Flame retardants
- Renewable energy Directive (RED II)
- Illegal logging and illegal timber trade

Voluntary Instruments:

- Green Public Procurement
- Environmental management in organizations
- Eco design methodology (
- Eco labels (Type I, II, and III)
- Chain of custody certification
- Green building certification

Other Policies and Strategies



- Cascading use of wood
- EU industry policy for Forestry
- Forest-based Industries Blueprint
- Bioeconomy

The institutions that have collaborated in this analysis have been:

- Bulgaria (BBCWFI – Bulgarian Branch Chamber of Woodworking and Furniture Industry)
- France (FCBA - l'Institut Technologique Forêt Cellulose Bois-construction Ameublement)
- Italy (FEDERLEGNOARREDO - Italian Federation of Woodworking and furniture industries)
- Romania (APMR – Asociatia Producatorilor de Mobila din Romania)
- Spain (CENFIM – Home & Contract furnishing cluster and innovation hub)
- Sweden (GS – The Swedish Union of Forestry, Wood and Graphical Workers)
- The Netherlands. (CBM - Koninklijke CBM, Branchevereniging voor interieurbouw en Meubelindustrie)

The following sections analyse these instruments for each selected EU country.

2. BULGARIA

2.1. VOLUNTARY INSTRUMENTS

2.1.1. Circular Economy package of the EC

According to the deputy minister of economy in Bulgaria the private investments in circular economy are about 0.18% which is higher than the average level in the EU and thus create over 60 000 workplaces. The government takes this matter very seriously and prepares strategies and directives for all sectors. The leading ministries are the Ministry of Economy, the Ministry of Environment and Water and the Ministry of Agriculture, Forestry and Food. Local district administrations also are involved. One of the main pillars in the Bulgarian Strategy is the technical modernization in the production sector that uses waste-less technologies that reduce the carbon emissions¹.

The main financial instrument in the Strategy is the OP “Innovations and competitiveness”. 111 million euros will be spent on research and implementation of new products, processes and business models in the production companies and factories. Another 152 million euros will be directed towards energy efficiency, pilot initiatives increasing the effective use of resources and directly contribute to the development of circular economy and environment.

2.1.2. Waste Electrical and Electronic Equipment Directive (WEEE)

In Bulgaria, the WEEE Directive comes into power on the 01.01.2014 and it regulates the separate collection, transportation, storage, pre-treatment, re-use and recycling of obsolete electrical and electronic equipment. The Ministry of Environment and Water regularly updates a list of organizations and companies utilizing the old electrical and electronic equipment, list of companies selling electrical and electronic equipment, and a list of projects related to this matter.

1

<https://www.moew.government.bg/static/media/ups/buyerprofile/attachments/Dokumentacia439f3ca6f4a832e8a9263bb4ab73801c.pdf>



2.1.3. Restriction of hazardous substances in Electrical and Electronic Equipment (ROHS)

The Directive 2011/65/EU was incorporated to the Bulgarian law by a decree #55 of the Ministerial Council on the 6.03.2013.

2.1.4. Energy related Products Directive (ErP or eco-design directive)

The eco-design Directive 2009/125/EC was transposed to Bulgarian law by a decree #101 by the Ministerial Council on the 21.05.2010.

Private companies try to comply with the directive. On Governmental level there is insufficient information.

2.1.5. Extended Producers Responsibility (EPR schemes)

The Law for waste management (which came into power on the 13.07.2012) has a whole chapter on EPR in which are defined the obligations and responsibilities. In the law it is provided that all entities (legal or economical) that sell products after which are formed massive wastes (municipal waste; production waste; construction waste; hazardous waste), are responsible (individually or through collective systems) for their separate collection and treatment, as well as for the achievement of relevant targets for separate collection, reuse and recycling.

Those producers are obliged to report regularly to the Ministry of Environment and Water and they have to prove that they properly execute their obligations.

There is not a specific EPR scheme for furniture waste in Bulgaria, but there are several NGOs that take the matter very seriously.

2.1.6. Hazardous substances / REACH Regulation

On the 5th of July 2016 the Ministry of Environment and Water issues an "Instruction for cooperation between the Ministry of Environment and Water and the National Customs Agency. There is an Expert Council for the evaluation of priority substances founded on the 5.09.2014.

All companies operating on the territory of Bulgaria have access to the ECHA data base and the Ministry of Environment and Water is ready to any additional information or advice.

The number of registrations is 266

2.1.7. Formaldehyde emissions

In Bulgaria all companies work under the EU emission standard EN 717. There is not enough data for the control procedure.

Kronospan² (the biggest producer of particleboards and MDF) opened a modern factory where they produce chipboards with formaldehyde emissions E05.

2.1.8. EU's rules on "end-of-waste" criteria

After the Waste Framework Directive 2008/98/EC was published The Ministry of Environment and Water issued a National Strategic plan for the period 2011 -2020, which introduce Introduces a

² <https://bg.kronospan-express.com/bg>



new five-level waste hierarchy in waste management and waste prevention policy and policy, with the following priority:

- prevention;
- preparation for re-use;
- recycling;
- other utilization, such as energy recovery;
- disposal,

According to Directive 2008/98 / EU on waste, certain waste ceases to be waste when it fulfils specific criteria developed in accordance with the following conditions:

- it is common practice to use the substance or object for specific purposes;
- there is a market or demand for that substance or object;
- the substance or article complies with the technical requirements for the specific purposes and is in accordance with existing legislation and standards applicable to the products;
- the use of the substance or object will not lead to an overall adverse effect on the environment or human health.

The criteria shall include limit values for contamination where necessary, taking into account any possible adverse effects on the environment.

In order to improve waste prevention activities and to facilitate the dissemination of best practices in this field, the Directive introduces the following requirements for:

1. Development of waste prevention programs:

- programs focus on key environmental impacts, taking them into account throughout the life cycle of products and materials;
- their measures are aimed at breaking the link between economic growth and the environmental consequences of waste generation; The deadline for their development is December 12, 2013.

2. Optimizing the introduced principle of "Extended" producer responsibility "as one of the means to support the development and production of goods, considering the fuller and more efficient use of products and the conservation of resources throughout their lifecycle. The Directive contributes to bringing the EC closer to a "recycling society" that seeks to avoid the generation of waste and to use it as a resource. In this context, the following objectives are set for the preparation for re-use and the recycling of waste:

- by 2020, the preparation for reuse and recycling of waste materials, at least such as paper, metal, plastic and glass from households and possibly from other sources, insofar as these waste streams resemble household waste, should increase at least up to 50% of total weight;
- by 2020, preparation for re-use, recycling and other recovery of materials (including bulk waste using waste to replace other materials) of non-hazardous construction and demolition wastes classified under code 17 05 04 of the Waste List, should be increased to at least 70% by weight.

2.1.9. Flame retardants

Similar to other countries, there is not a specific legislation regarding the use of flame retardants in Bulgaria. However this must be within the powers of the Directorate-General for Fire Safety and Population Protection under the Ministry of Interior.



2.1.10. Renewable energy Directive (RED II)

The targets originally fixed for renewable energy use in Bulgaria are the following.

| | |
|---|-------|
| A) Share of energy from renewable sources in gross final consumption of energy in 2005 (S2005) (%) | 5,46% |
| B) Target of energy from renewable sources in gross final consumption of energy in 2020 (S2020) (%) | 20% |
| C) Expected total adjusted energy consumption in 2020 (ktoe) | |
| D) Expected amount of energy from renewable sources corresponding to the 2020 target (ktoe) | 1713 |

According to the Energy Strategy of Republic of Bulgaria 2020 data (2017), the Bulgarian evolution since 2009 has been the following.

| | Electricity generation all sources | Fuel Used in transport | Fuel consumed for heating and cooling | Overall energy |
|-------------|------------------------------------|------------------------|---------------------------------------|----------------|
| Year | RES-E [%] | RES-T [%] | RES-H&C [%] | RES [%] |
| 2009 | 11,30% | 1,00% | 21,70% | 12,2% |
| 2010 | 12.36% | 1.42% | 24.41% | 13,97% |
| 2011 | 12.62% | 0.83% | 24.88% | 14.2% |
| 2012 | 15.82% | 0,6% | 27.53% | 15.97% |
| 2013 | 18.68% | 5.83% | 29.20% | 18.88% |
| 2014 | 18.69% | 5.68% | 28.32% | 17.98% |
| 2015 | 18.98% | 6.44% | 28.63% | 18.16% |
| 2016 | 19.15% | 7.16% | 30.00% | 18.76% |
| 2017 | 19.02% | 7.24% | 29.90% | 18.7% |
| Target 2020 | 20 % | 10 % | 20 % | 16 % |

Consumption of wood-based fuels in Europe has been growing at a high and steady pace over the last 10 years or more. This trend is expected to continue in 2020. Bulgaria is no exception, even more so: there is a real boom in the construction of pelletizing plants, the demand for wood both for the domestic market and for export is growing strongly.

2.1.11. Illegal logging and illegal timber trade

The annual volume of illegal logging in Bulgaria reaches 2.4 - 2.7 million cubic meters. This is one quarter or one third of the total production, which equals BGN 150 million a year.

With the implementation of electronic tickets and surveillance systems, as well as GPS devices in timber haulage trucks, the authorities take measures to that will give a result in combating illegal logging.



From November 2016 will be running an electronic timber sales system, which will save time and money for the bidders, increase competition and eliminate the possibility of corruption and reduce the illegal trades.

The introduction of electronic auctions aims at facilitating procedures and increasing the share of outsourced electronic logging or timber trade. The auctions may be by open or secret bidding. The methods of conducting auctions in the different State-owned enterprises are yet to be unified.

2.2. VOLUNTARY INSTRUMENTS:

2.2.1. Green Public Procurement

Bulgaria developed a National Strategy for Development of the Public Procurement Sector in Bulgaria 2014-2020 and Action Plan 2014-2020 (the latter includes as a measure the elaboration of Guidelines on GPP - in progress).

The time scope of the strategy is set for the period from 2014 to 2020, due to which it comprises three types of measures:

- Short-term - with implementation due by the end of 2014;
- Mid-term - to be implemented over 2015-2016;
- Long-term - to be implemented over 2017-2020.

The overview of the public procurement sector presents a trend of upward development in many aspects. It should be noted that a number of legislative and practical measures are aimed at providing a high degree of publicity and transparency at all stages of the awarding process. One of the most important among them is gathering and publishing basic information (from the opening of the procedure till the implementation of the contract is completed) in a unified electronic database, which is free of charge and accessible to all.

Another such measure is the publicity of the activities of the committee for examination and evaluation of tenders, a most striking example of which is the announcement of the intermediate ranking before the public opening of the price bid etc.

The building and sustaining of a durable lawful practice should be ensured by means of a well-structured and effectively working control system, for both ex-ante and ex-post control, and by means of the possibility for sufficiently quick and just appeal procedures.

After the strategy sets the aim and the methods to achieve it, they lead to formulating the following secondary aims: Framework, stable and simplified legislation, fully compliant with the new EU Directives;

- Establishing a lawful practice;
- Enhancing publicity and transparency by introducing fully electronic methods and means for the award of public procurements;
- Creating a sustainable administrative capacity and enhancing professionalism;
- Enhancing the effectiveness of ex-ante, ongoing, and ex-post control on public procurements.

In the National GPP Strategy have been developed criteria for the following 5 priority product groups:

- office IT equipment,
- air conditioning and ventilation,
- white goods,



- office lightening and public street lightening,
- motor vehicles.

2.2.2. Environmental management in organizations

The situation of these environmental standards in Bulgaria is the following:

EMAS in Bulgaria

Number of registered organisations: 15

Number of Sites: 29

Number of registered organisations related to furniture (NACE 31): 1 (YUDIGAR, S.A.)

ISO 14001 in Bulgaria

Number of registered organisations: 1.820

Number of registered organisations related to furniture (manufacture of wood and wood products): 33

At regional level there are some active organisations that promote the implementation of EMAS in companies, for example in Consejo (<https://www.consejo.bg/>).

2.2.3. Eco design methodology

No information provided in this point.

2.2.4. Eco labels (Type I, II, and III)

No information provided in this point.

2.2.5. Chain of custody certification

The following table summarises the data for Bulgaria, considering the previous information:

| Scheme | Date | Total Area (ha) | Chain of Custody Certificates |
|--------|---------------|-----------------|-------------------------------|
| FSC | August 2018 | 1,460,403 | 469 |
| PEFC | December 2018 | / | 6 |

2.2.6. Green building certification

The following table summarises the data for Bulgaria, considering the previous information:

| Scheme | Date | Number of Certified Projects |
|--------|----------------------------------|------------------------------|
| BREEAM | Web-based database (August 2019) | 27 |
| LEED | Web-based database (August 2019) | 39 |



2.3. OTHER POLICIES AND STRATEGIES

2.3.1. Cascading use of wood

Campaign - a new life of used wood, through the collection, sorting, treatment and recycling of wood waste started in Burgas. It is part of the strategy for responsible and sustainable development of Kronospan.

The initiative envisages the treatment of wood waste from packaging, households, construction and industry. The resulting raw material will be used in the production of particle board, i.e. its life cycle will be maximized.

2.3.2. EU industry policy for Forestry

The main strategic document in the field of the forest sector of Bulgaria is the National Strategy for the Development of the Forest Sector in the Republic of Bulgaria for the period 2013 - 2020, adopted by the Council of Ministers (Council of Ministers) in November 2013.

The vision of the Strategy clearly and accurately emphasized that "by 2020 Bulgaria will have viable, productive and multifunctional forests, a sustainable, competitive and innovative forestry sector, preserved biodiversity, quantity and quality of water resources in the forest territories. The sector will support the economic development of the country, provide conditions for the full realization of its employees, will maximize the mitigation of the effects of climate change and ensure the maintenance of a healthy environment. "

In addition, the third strategic objective of the Strategy is directly aimed at increasing the contribution of the forestry sector to the green economy. In the Strategic Plan for the Development of the Forestry Sector in the Republic of Bulgaria, 2014-2023., which is in practice an action plan for the implementation of the National Strategy, has set operational objective for the sustainable production and consumption of biomass as a renewable energy source.

2.3.3. Forest-based Industries Blueprint

The Bulgarian forests fulfil many economic, environmental and social functions of particular importance for the sustainable development of others. They are a key factor for the formation and service of the living environment.

The forest areas of Bulgaria as of 31.12.2011 occupy 4 148 114 ha or 37,4% of the territory of the country. Of these, 3 774 778 million ha (91.0%) are forests, 75.4 % of which are state-owned.

Based on the formulated vision, mission and strategic goals in the National Strategy for the Development of the Forestry Sector in the Republic of Bulgaria for the period 2013-2020, the following priorities for the development of the forestry sector until 2020 have been determined:

1. Maintaining vibrant, productive and multifunctional forest ecosystems that contribute to mitigating the effects of climate change;
2. Conservation, restoration and maintenance of biological and landscape diversity in forest areas;
3. Increasing the vitality and competitiveness of the forestry sector;
4. Harnessing the potential of the forestry sector for green economy development.

2.3.4. Bioeconomy

Bulgaria is still developing a National Bioeconomy Strategy.



In 2017 Stara Zagora, ranked second in GDP per capita after Sofia region - the capital, published strategy for developing the bioeconomy in the region.

The document is associated with the EU strategy and the adopted plan to base and develop the bioeconomy in 3 main directions:

- -Investments in research, innovation and skills;
- - Enhanced policy interaction and stakeholder engagement;
- - Strengthening markets and increasing competitiveness in the bioeconomy.

Following these directions, the bioeconomy will be based on the existing specific natural resources in the field as a resource and the possibilities for introducing innovative technological solutions for the production of products that are marketable as scientific achievements worldwide.



3. FRANCE

3.1. VOLUNTARY INSTRUMENTS

3.1.1. Circular Economy package of the EC

The anti-waste law for a circular economy was enacted very recently, in February 2020 (n° 2020-105 of 10/02/2020).

This law mobilises the four major levers of public action to bring about a transition to the circular economy: training, incentive, regulation and taxation.

The 130 articles cover different issues such as:

- Strategic objectives for the management and prevention of waste production
- Consumer information
- Promote reuse and re-use as well as the economy of functionality and service as part of the fight against wastage
- Producer responsibility
- Control of wild deposits

Regarding the furniture sector, the main modification concern 2 topics:

- the perimeter of EPR scheme for the furniture is extended to home textile decoration products from 1 January 2022
- the law provides for a reinforcement of the producers' obligations to inform the consumer about the environmental characteristics of their products, with regard to a large number of criteria (durability, reparability, reusability, recyclability, etc.). An obligation to inform the consumer on the availability or non-availability of spare parts is introduced for electrical and electronic products and furniture.

3.1.2. Waste Electrical and Electronic Equipment Directive (WEEE)

In France, the WEEE Directive (Directive 2012/19/EU of 4 July 2012 that became effective on 14 February 2014) has been incorporated to national law through the French Decree number 2014-928 of 19 August 2014 relatives to electrical and electronic equipment wastes, and to electrical and electronic equipment used.

This Decree introduce a system called REP for "Responsabilité Élargie des Producteurs" (Enlarged Producers Responsibility - See Part 3.5 below) for the electrical and electronic equipments. It concerns the household and the professional equipments.

The French Decree 2014-928 has been completed by the:

- French Order of 8 October 2014 that forced the Europeans distributors and mandatories to take back their products;
- French Avis of 27 November 2014 to the application field of the Decree 2014-928;
- French Order of 2 December 2014 that explain the agreement procedure of the Eco-organisms.

In 2017, the main eco-organisms have collected and recycled 533.640 tons of WEEE (10.2 kg by people), that represents 50% of the EEE put onto the French market.



The objectives of collect for the year 2019 and 2020 are

65% of the average weight of the EEE put onto the market during the 3 last years, or 85% of the WEEE produced in weight. The more, the Eco-organisms have to guaranty an access to the deposit of WEEE in order to increase the quantity of products that will be repacked and resold for their initial use.

The Eco-organisms also have to take back, without any buying obligation, the small electronic end electric equipment, in case of the distributors have a selling surface that is at least of 400 m².

3.1.3. Restriction of hazardous substances in Electrical and Electronic Equipment (ROHS)

In France, the RoHS Directive (Directive 2011/65/EU of 8th June 2011, that became effective on 3rd January 2013) was incorporated to national law through the French Decree Nbr 2013-988 of the 6th of November 2013 relatives to the limitation of use of certain hazardous chemicals in electrical and electronic equipment. The regulation in this text is the same as the Directive 2011/65/UE ones.

Since the 22nd of July 2014, the news products that have the CE marking are presumed to comply with the Directive 2011/65/EU, in the absence of proof to the contrary. However, some producers have introduced their own products markings like "Pb free", "RoHS compliant", "Lead free", etc.

The Directive 2017/2102 that modifies the Directive 2011/65/EU has not been transposed yet into French law.

3.1.4. Energy related Products Directive (ErP or eco-design directive)

The Eco-design Directive 2009/125/EC was transposed into French law by the French Decree number 2011-764 of 28 June 2011.

This Decree list all the executive Regulations that represents the executive measures of the frame Directive 2009/125. The more it explains the measures of market watching (evaluation of the conformity, declaration of conformity, products markings).

3.1.5. Extended Producers Responsibility (EPR schemes)

In France the principle of the Extended Producer Responsibility (EPR) is developed in several products families exists since 1975. The EPR that concerns the furniture products came into force in the year 2012.

In France several texts exist to regulate the furniture ERP (the Decree number 2012-22 of 6 January 2012 concerning the waste managing of furniture products created that specific ERP channel, the Decree number 2017-1607 of 27 November 2017 and the Order of 27 November 2017 concerning the agreement procedure and the specifications for the eco-organisms of the furniture products wastes).

Two Eco-organisms, Éco-Mobilier and Valdélia, are agreed until the 31st of December 2023 to provide for furniture products waste prevention, collect end treatment.

Each year around 860 000 tons of furniture products wastes are collected, among them 80% know a second life through their reusing, a recycling or an energetic valorization.

The chain objective fixed by the Decree number 2017-1607 of 27 November 2017 and the Order of 27 November 2017 is:

- In 2023, a level of furniture products wastes collected apart from the other wastes of 40% of furniture products put onto the market;
- In 2022 a recycling of 50% of furniture products wastes collected;



- In 2022, a valorization (reusing, recycling and energetic valorization) of 90% of furniture products wastes collected;
- Since 2021, to put to the disposal of the actors of the social and solidarity economy, 1,5% of the furniture products wastes collected for the household ones, and 5% for the others, according to a quality level that enables a reusing level of 60% of these wastes.

The Order of 29 October 2019 modified the prescriptions of the Order of 27 November 2017, with the provision of eco-modulations criteria for furniture products and other ones.

As for the furniture products, the eco-organisms must implement modulations for the furniture products that include wooden particles panels that include recycled wood particles (12% in 2021, 15% in 2022 and 20% in 2023).

3.1.6. Hazardous substances / REACH Regulation

France has got the third place into the UE concerning the number of registration files, behind Germany and UK, with 8 000 registration files for 4 000 chemicals.

The registration of chemicals the where between 1 Ton and 10 Tons concerned a lot of chemicals in several types of products (paints, cleaning products, varnish, furniture, jewels, textiles products, etc.) and concerned a lot of small factories in France (around 1 700 000 companies).

The French authorities implicated in the implementation of REACH regulation in France are:

- French Environmental Ministry: it is the leader in this implementation using its service of General Directory of Risks Prevention (Direction Générale de la Prévention et des Risques - DGPR).
- Some other French Ministries are involved in the REACH implementation in France: Work Ministry with its Work General Direction (Direction Générale du Travail - DGT), Economy Ministry with its Companies General Direction (Direction Générale des Entreprises - DGE), and Health Ministry with its Health General Direction (Direction Générale de la santé - DGS).
- The DGPR Service works with the ANSES and the INERIS, 2 administrative public establishments, to get its scientific expertise. Some experts from the ANSES are participating to the ECHA committees on risks evaluations of chemical. The INERIS helps the companies to implement the REACH regulation with a national service of Helpdesk and also participates the ECHA's evaluation committees.
- The French authorities of control are the Work Inspection, the General Direction of Consumption and Fraud Prevention (DGCCRF in French), the General Direction of Custom and Indirect Taxation (DGDDI), the Regional Directions of Environment, Urban development and Housing (DREAL).

3.1.7. Formaldehyde emissions

In France, for furniture products containing wood-based panels, a project of regulation regarding to the products emissions exists.

The origin of this project is the French Environmental Code issuing from the 2009 Grenelle law.

The legislative package presented to EU in January 2017 and composed by Decree and Order (Technical Guidance mentioned but not notified to EU) consists of:



- 1) A Decree on the labelling of furniture products regarding their emissions of volatile pollutants. Legal obligations by the decree:
- 2) An Order on the labelling of furniture products regarding their emissions of volatile pollutants. Specifications by the order:
- 3) A Technical Guidance was mentioned but not notified to EU “Test protocol for characterising emissions of volatile pollutants by furniture products”.

This project of regulation should be applied:

- to furniture products containing wood-based panels, whether or not they are intended exclusively for indoor use;
- for a production of more than 10 identical items.

Currently the project is still in standby by the French authorities.

3.1.8. EU's rules on “end-of-waste” criteria

In France the Waste Framework Directive 2008/98/EC has been transposed to French regulation through the French Decree Nbr 2011-828 of 11 July 2011, which includes various provisions related to the wastes prevention and management.

It details the regulatory measures to transpose the frame Directive of 19 November 2008, that creates a new hierarchy in the waste treatment methods.

That Decree has been completed by the Opinion of 13 January 2016 to the operators of installation of wastes treatment and to the operators of production installations using wastes in substitution of raw materials.

According to that text, some wastes can ceased to be wastes if they passed through a waste treatment facility, when that possibility is foreseen in a European regulation, or a ministerial order specific to this type of waste, and if the completeness of the criteria established by this regulation or this order, are respected.

In that case, we speak about “explicit end-of-waste” and the product coming from the waste must comply with the REACH and CLP regulations (Regulation (EC) number 1272/2008).

An article according to the REACH Regulation, or an assembling of articles that makes an object, that are made in a production facility that uses all or some parts of wastes as raw material, has not the waste status. Likewise, a chemical or a blend, according to the REACH and CLP regulations, made in a production facility that uses all or some parts of wastes as raw material, have not the waste status when they look like the chemical or the blend that would have been made without using wastes.

In these cases, we speak about “implicit end-of-waste”.

Such chemicals, blends, articles or assembling of articles made by a production facility that uses wastes in substitution of raw materials, must respect all the provisions of the REACH and CLP regulations.

3.1.9. Flame retardants

In France, the regulations for the treatment of upholstered furniture do not (or almost) apply to domestic furniture.

On the other hand, there is a regulation, with AM 18 applying to row seating in public receiving facilities and for all seating in type P establishments (prisons). There is the decree of 6 March 2006 which requires an assessment of the fire behaviour of upholstery/envelope combinations used for



upholstered seats when they are subjected to an ignition source equivalent to a 20g paper cushion ignited in accordance with standard NF D 60 013.

Other regulations apply to furniture, of which the following are a few examples.

| Application type | Regulation | Kind of furniture | Requirement | Standard |
|---------------------|-------------------|---|---|-----------------------|
| Domestic | Decree N°2000-164 | Bedding items (cushions, bolsters, pillows, duvets, quilts, quilted covers) | No cigarette ignition | NF EN ISO 12952-1 |
| Public | U23 (medical) | Bedding | No cigarette ignition | NF EN ISO 12952-1 |
| | | Mattresses | No cigarette ignition | NF EN 597-1 |
| | AM 18 (shows) | Seats | No ignition by an ignition source equivalent to a flaming 20g paper cushion | NF D 60013 |
| | | | M3 minimum | NF P92501 à NF P92507 |
| GPEMD1-90 (prisons) | Mattresses | No ignition by cigarette, match and a stronger ignition source | NF EN 597-1 NF EN 597-2 GPEM D1-90 | |

3.1.10. Renewable energy Directive (RED II)

The targets originally fixed for renewable energy development in France through the Law on Energy Transition for Green Growth (LTECV) enacted on 17 August 2015 are the following.

| | |
|---|------|
| A) Share of renewable energies of gross final energy consumption in 2030 | 32 % |
| B) Share of electricity production from renewable sources in 2030 | 40% |
| C) Share of the final consumption of heat from renewable sources in 2030 | 38% |
| D) Share of final consumption of fuel from renewable sources in 2030 | 15% |
| E) Share of renewable gas consumption in 2030 | 10% |
| F) Quantity of renewable and recovered heat and cooling delivered by the heating and cooling networks by 2030 | X5 |

According to Eurostat data (2017), the French evolution since 2009 has been the following.



| | Electricity generation all sources | Fuel Used in transport | Fuel consumed for heating and cooling | Overall energy |
|-------------|------------------------------------|------------------------|---------------------------------------|----------------|
| Year | RES-E [%] | RES-T [%] | RES-H&C [%] | RES [%] |
| 2009 | 15,09% | 6,57% | 15,04% | 12,22% |
| 2010 | 14,81% | 6,50% | 16,16% | 12,67% |
| 2011 | 16,17% | 0,95% | 15,94% | 11,02% |
| 2012 | 16,54% | 7,38% | 17,22% | 13,44% |
| 2013 | 16,95% | 7,57% | 18,16% | 14,04% |
| 2014 | 18,45% | 8,22% | 18,75% | 14,58% |
| 2015 | 18,82% | 8,35% | 19,53% | 15,01% |
| 2016 | 19,21% | 8,43% | 20,78% | 16,01% |
| 2017 | 19,93% | 8,83% | 21,09% | 16,59% |
| Target 2030 | 40,00% | / | / | 32,00% |

3.1.11. Illegal logging and illegal timber trade

In France, the circular³ DGPAAT/SDFB/C2013-3029 (from 14th march 2013) sets out the provisions of the EUTR Regulations that come into force on March 3, 2013.

It is complemented by the DGPAAT/SDFB/2014-992 (2014) procedure⁴ for the control of operators responsible for the placing on the market of timber or timber products which have to comply with the obligations of the EU GBER.

According to the review of the implementation of the European environmental policy (2019)⁵ in France, the number of operators marketing timber in the Union is estimated at 5 000 and the number of operators importing timber is estimated at 14 000.

And in 2015 a technical note on the implementation of controls falling within the competence of the Ministry of Ecology, Sustainable Development and Energy with regard to the application of the EUTR completed the system⁶.

More recently, the French government has developed a national strategy to combat imported deforestation for the period 2018-2030⁷.

It aims to halt by 2030 the import of unsustainable forest or agricultural products contributing to deforestation, reduce deforestation, forest degradation, ecosystem conversion and indirect land-use change abroad.

³ https://agriculture.gouv.fr/sites/minagri/files/documents//DGPAATC20133029Z_cle4c3143.pdf

⁴ <https://info.agriculture.gouv.fr/gedei/site/bo-agri/instruction-2014-992>

⁵ https://ec.europa.eu/environment/eir/pdf/report_fr_fr.pdf

⁶ https://agriculture.gouv.fr/sites/minagri/files/note_technique_medde.pdf

⁷ https://www.ecologique-solidaire.gouv.fr/sites/default/files/2018.11.14_SNDI_0.pdf



3.2. VOLUNTARY INSTRUMENTS:

3.2.1. Green Public Procurement

France has published several green procurement guidelines.⁸

The first circular dated of 2008 establishes the concept of Exemplary State regarding the Sustainable Development, and particularly about the Green Public Procurement, with technical files by family of product.⁹

One of them is about furniture buying.

There are two targets:

By 2010: reach 100% of purchased products from legal wood sources or with a sustainable forest management label from an internationally recognized certification system (for wooden furniture).

By 2012: reaching 50% of the amount of furniture contracts build with other raw material: with characteristics at least equivalent to the French ecolabel (NF Environment) or having been the subject of an eco-design (relief of structures, use of recycled materials, decrease in production energy, lifespan and end-of-life ease of dismantling and recycling).

In 2015, an Order about public market precise how to add sustainable goal before public tender. (Ordonnance n° 2015-899 du 23 juillet 2015 relative aux marchés publics)

In October 2016 "Directorate of Legal Affairs (DAJ) of the Ministry of Economy and Finance" published a guide to limit the climate change into public procurement. This document presents practical tools for integration of environmental criteria on the buying process for all range of products."¹⁰

3.2.2. Environmental management in organizations

EMAS in France:

Number of registered organisations: 31

Number of Sites: 45

In 2015, the number of ISO 14001 certified was 6,847¹¹

Number of registered organisations related to furniture (manufacture of wood and wood products): 17

3.2.3. Eco design methodology

No quantitative data was encountered regarding the ISO 14006 management system. It is considered in France as non-certifiable.

⁸<https://www.economie.gouv.fr/cedef/marches-publics-criteres-sociaux-environnementaux>

⁹<https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000020243534&fastPos=1&fastReqId=1686176411&categorieLien=id&oldAction=rechTexte>

¹⁰ https://www.economie.gouv.fr/files/files/directions_services/daj/marches_publics/oeap/gem/guide-climat/guide-climat.pdf

¹¹ <https://lemagcertification.afnor.org/blog/iso-survey-la-france-bonne-eleve-de-la-certification/>



3.2.4. Eco labels (Type I, II, and III)

There are 47 company NF Environment certified furniture products in France whereas there are not products with the EU ecolabel certification.

Within the EPD System, there are no furniture products registered for France.

In the new circular economy law (dated of 2020 February) an environmental labelling or an environmental and social labelling is featured. Currently this environmental display is voluntary.

The text introduces an experimentation period of 18 months.

The environmental labelling will become mandatory, as a priority for garment and footwear sector. Nevertheless, the perimeter, and the methodology will be specified by decree (The furniture sector could be involved).

3.2.5. Chain of custody certification

The following table summarises the data for France, considering the previous information:

| Scheme | Date | Total Area (ha) | Chain of Custody Certificates |
|--------|---------------|-----------------|--|
| FSC | February 2020 | 65,160 | 768 |
| PEFC | 2018 | 8,012,846 | 2,065 (1,079 for wood based product manufacturers) |

3.2.6. Green building certification

The French HQE™ certification created in 2004 is a voluntary approach for the construction, renovation or operation of all buildings. Whereas in France the first LEED certification arrived in 2010 and the first BREEAM certification arrived in 2011, the first HQE™ was obtained in 2005.

The following table summarises the data for France, considering the previous information:

| Scheme | Date | Number of Certified Projects |
|--------|----------------------------------|------------------------------|
| BREEAM | Web-based database (August 2019) | 1,878 |
| LEED | Web-based database (August 2019) | 125 |
| HQE™ | Web-based ¹² (2018) | Around 1,300 |

3.3. OTHER POLICIES AND STRATEGIES

3.3.1. Cascading use of wood

This topic is closely related to the one regarding the Extended Producer Responsibility (EPR) scheme developed for furniture products 2012 (see previous chapter).

¹² <https://www.greensoluce.com/barometre-de-la-certification-environnementale-edition-2019/>



3.3.2. EU industry policy for Forestry

Forests cover vast terrestrial ecosystems, totalling some 4 billion hectares, including 16m hectares in metropolitan France (which makes France in fourth position in Europe) and 8.5m in French overseas territories. The National Forest and Wood Programme (PNFB) has been designed in close consultation with all stakeholders in the forestry & wood sector as well as with several government ministries. It defines the focuses for forestry policy over the 2016-2026 period with four objectives:

- Create value in the context of green growth by managing the resource sustainably
- Meet the expectations of the general public and integrate region-wide projects
- Combine climate change mitigation and forest adaptation
- Develop synergy between forests and industry

75% of the French forest is privately owned against 15% publicly locally owned and 10% by central government. 71% of the species constitute hardwood.

3.3.3. Forest-based Industries Blueprint

In 2016, forests cover 31% of the French metropolitan surface. The French forest employs 440,000 people and generates a turnover of 60 billion euros per year, i.e. nearly 3% of GDP (source: Agreste).

Introduced by the Energy Transition Law for Green Growth (LTECV), the National Low Carbon Strategy (SNBC) is France's roadmap to combat climate change.

In order to achieve the carbon neutrality set out in the Climate Plan by 2050, an additional mobilization target of 12 million m³ of wood from French forests per year by 2026 has been set by the National Wood Forest Program 2016-2026 (PNFB). At the same time, the French government has identified 18 priority actions, grouped together in an interministerial action plan that includes three axes:

- Mobilize and sustainably renew the forest resource
- Developing end markets, supporting innovation and investment
- Improving the environmental performance of the sector and its development in the territories

3.3.4. Bioeconomy

In 2015, the Ministries in charge of Ecology, Research, Industry, Agriculture and Forestry launched work to develop a bioeconomy strategy.

The action plan for the period 2018-2020¹³ translates the bio-economy strategy into operational actions divided into five areas:

- improving knowledge;
- promoting the bioeconomy and its products to the general public;
- creating the conditions to meet demand;
- producing, mobilizing and sustainably transforming bioresources;
- lifting the brakes and mobilizing the financements.

¹³ <https://agriculture.gouv.fr/une-strategie-bioeconomie-pour-la-france-plan-daction-2018-2020>

4. ITALY

4.1. VOLUNTARY INSTRUMENTS

4.1.1. Circular Economy package of the EC

Italy has developed the following frameworks to support the transition to a more Circular Economy:

A broad national consultation was launched in 2017 to comment on a Circular Economy strategy that the environmental ministry drafted. Based on that process, different tools are being implemented

- **Green new deal Strategy**

Italian Government approved on 10 October 2019 the so called “Climate Decree” (DL 111/2019) as a first leg of a comprehensive Italian “Green new deal”.

It provides incentives to get rid of old vehicles, for citizen that live in areas with high levels of air pollutants. They will receive vouchers to buy public transport cards, and shared mobility services.

It also provides funds for municipalities to facilitate the uptake of public transports

A program for urban reforestation

Funds to help shops owner to offer also “non packaged” goods

- New waste strategy with new EPR schemes. A draft new regulation **calls for an EPR scheme for Textiles, furniture and mattresses** to be implemented in two years.
- At the end of 2019 a plastic tax of 0.45 Euro/kilo on single use plastic has been approved, with some limitations.

4.1.2. Waste Electrical and Electronic Equipment Directive (WEEE)

In Italy, the WEEE Directive was incorporated to national law through the Legislative Decree 14 march 2014 n. 49.

- In 2018 Italy WEEE collection system collected 983.611 ton of WEEE (75% of which from domestic sources), which leads to a 42,85% collection rate, with a target set at 45%. Target of the new directive, for the following years, is set at 65% which seems rather ambitious.

Whole furniture is mostly not considered EEE, but products containing an EEE. There are some cases, though, in which the electric function is necessary for the main function of the product, or the electric part is bound into the product in a way that it's impossible to separate, that lead to the conclusion that the whole piece of furniture could be considered a EEE.

4.1.3. Restriction of hazardous substances in Electrical and Electronic Equipment (ROHS)

The Directive 2011/65/EU was incorporated into the Italian law by the Legislative Decree n.27 on 4 March 2014 and then amended on April 15th 2019 to incorporate new rules for exceptions.



4.1.4. Energy related Products Directive (ErP or eco-design directive)

The eco-design Directive 2009/125/EC was transposed into Italian law through the legislative 16 February 2011, n. 15. At the moment, it seems that the EC does not intend to extend the Directive to products such as furniture

Ecodesign principle is pushed through other tools, like GPP.

4.1.5. Extended Producers Responsibility (EPR schemes)

Extended producer responsibility schemes are in place for packaging in Italy since 1998.

During the following years Italy implemented all the different directive about EPR.

The first schemes (packaging) were designed around a mandatory body that all companies had to join. The newest allow the producers to organize themselves in a plurality of different collection schemes.

The schemes nowadays operative in Italy are the following:

- Paper and cardboard packaging
- Glass packaging
- Batteries and accumulators
- Tyres out-of-use
- Used industrial Oil
- Waste of Electrical and Electronic Equipment. About 13 schemes, with a coordination body run by the collective schemes and supervised by the ministry.

There is not yet a specific EPR scheme for **furniture waste** in Italy, although a part of furniture waste is already collected and recycled with the help of the national scheme for wood packaging collection and recycling (Rilegno).

In 2020, within the process of implementation of the “circular economy package, namely the new waste and packaging directives (2018/851 and 2018/852) the government published a draft in which it asks for an EPR scheme for furniture, mattresses and textile by 2022. The text has to be finalized by the summer of 2020.

4.1.6. Hazardous substances / REACH Regulation

According to data from ECHA, it has received from Italy (2018 data):

- Registrations dossiers: 7365
- Unique Substances: 3805

Regarding national legislation, the Legislative Decree 133/09 establishes the sanction regime provided in the REACH and CLP Regulations.

Competent authority for Reach is the Health Ministry

The website of the Economic development Ministry hosts the national Reach Help Desk, a free resource for companies about the whole reach regulation

<http://reach.sviluppoeconomico.gov.it/>



4.1.7. Formaldehyde emissions

Decree of 10 October 2008 by the Health Minister declares Class E1 mandatory for all panels entering the Italian market.

<https://www.gazzettaufficiale.it/eli/id/2008/12/10/08A09225/sg>

More recently, the GPP criteria for furniture asked for a lower level (65% of E1) for furniture intended to be sold to the public administrations. Carb II / TSCA Panels are also accepted in case they fulfil the requirement. GPP criteria for furniture are now under revision.

On the occupational exposure side, there is no specific legislation in Italy but for a long time ACGIH recommended limit of 0,3 ppm (0,37 mg/mc). TLV–STEL has been used as a reference.

After the approval of the 2019/983/EC directive which amends the 2004/37/EC introducing a binding OEL of 0.3 ppm TWA for formaldehyde, the implementation process has begun.

4.1.8. EU's rules on “end-of-waste” criteria

The Waste Framework Directive 2008/98/EC has been transposed into Italian legislation through the law 205/2010 as an amendment of the so called “unique environmental law 152/06.

Italian environmental ministry worked on a lot of different end of waste criteria, and it published some of them with specific decrees but none of them was related to furniture industry.

Other specific criteria for end of waste (also for wood recycling) can be found on the old February 5 1998 decree.

The general rules in Italy says that if a recycling option is not addressed at European or national level with specific criteria, local authority can decide to authorize on the basis of their expertise case by case.

This approach worked for several years, but was challenged and blocked in 2017 by a court rule that stated that local authorities don't have such possibility. This problem completely blocked the authorization process for waste treatment for more than a year. Finally, in 2019 another law (n.128/19) passed, that made possible again, when no European or national criteria are available, the possibility to local authorities to act on their own on the single cases, but those cases are to be reviewed by the national environmental agency ISPRA to ensure a similar approach for similar cases in different regions.

4.1.9. Flame retardants

Fire prevention regulations in Italy require that upholstered furniture intended for use in many non-domestic areas pass a test (UNI 9175, class 11M) which is impossible to pass without treating the foam with flame retardant substances.

A new fire prevention code, entered gradually into force starting from 2015, has provided an alternative, and less prescriptive, path to compliance. The requirements for materials are dependent on the general risk assessment made by the designer of the entire building. In this case, class 11M furniture is not always necessary.

4.1.10. Renewable energy Directive (RED II)

Original target of 17% of renewable energy by 2020 was already met in Italy in 2015.

New targets set in the recently approved PNIEC call for a 30% by 2030 on total gross consumption (55% of electric consumption, 33,9% of thermal energy)



Target could be changed according to the new legislation on climate by the Commission. In the following table is a summary of the current targets on renewables.

| Renewable energy (FER) | TARGETS 2020 | | TARGETS 2030 | |
|---|--------------|-------|--------------|--------------|
| | EU | ITALY | EU | ITALY |
| FER share in gross final energy consumption | 20% | 17% | 32% | 30% |
| FER share in gross final energy consumption (transport) | 10% | 10% | 14% | 22% |
| FER share in gross final energy consumption for heating and cooling | | | +1.3% yearly | +1,3% yearly |

4.1.11. Illegal logging and illegal timber trade

In Italy, the EUTR has been implemented in Italy through legislative Decree n.178/2014, and entered into force 25 December 2014. Additional measures were added on 23 February 2015. Competent authority is ministry for agriculture and forestry.

Criminal penalties apply to operators placing illegal timber on the market and can include fines (ranging from € 2,000 to € 50,000) and/or detention (from one month to one year) and/or seizure of timber. Administrative penalties apply where an operator fails to put in place or maintain a due diligence system (fines ranging from € 5 to € 5,000 for each 100kg of merchandise with a minimum fine of € 300 and a maximum fine of € 1,000,000). In practice, such fines may be combined with administrative penalties applying to operators for lack of record keeping (ranging from € 1,500 to € 15,000).

“In Italy in 2019 55 checks were carried out on the "importing Operators", 609 “Domestic operator” were checked and 45 “Merchants” were checked.

FLEGT regulation is linked to Ministerial decree n. 18799 of the 27.12.2012.

4.2. VOLUNTARY INSTRUMENTS:

4.2.1. Green Public Procurement

With a view to adopting the European GPP program, Italy has adopted The Minimum Environmental Criteria (CAM), which are the environmental requirements defined for the various stages of the purchase process, aimed at identifying the best design solution, product or service from an environmental point of view throughout the life cycle, taking into account availability market.

The CAM are defined within the framework of the Plan for the environmental sustainability of consumption in the public administration sector and are adopted by Decree of the Minister of the Environment for the Protection of the Territory and the sea.

Their systematic and homogeneous application allows the spread of environmental technologies and environmentally preferable products and produces a leverage effect on the market, inducing less virtuous economic operators to adapt to the new demands of the public administration. In Italy, the effectiveness of CAM has been ensured thanks to art. 18 of Law 221/2015 and, subsequently, art. 34 containing "Energy and environmental sustainability criteria" of Legislative Decree 50/2016 "Procurement Code" (amended by Legislative Decree 56/2017), which made it **mandatory for all contracting stations to apply it.**

This obligation ensures that the national green public procurement policy is incisive not only in the objective of reducing environmental impacts, but in the objective of promoting more



sustainable, "circular" production and consumption models and in spreading employment "green".

In addition to the enhancement of environmental quality and compliance with social criteria, the application of the Minimum Environmental Criteria also responds to the need of the Public Administration to rationalize its consumption, reducing spending where possible.

CAM has now been adopted for 17 categories of supplies and assignments.

The PAN GPP refers to specific decrees issued by the Ministry of the Environment for the Protection of the Territory and the Sea, the identification of the CAM for purchases and supplies relating to each of the following "product categories":

- furniture (office furniture, school furniture, storage and reading room furniture)
- building (construction and renovation of buildings with particular attention to building materials, construction and maintenance of roads)
- municipal and similar waste management
- urban and local services (management of public green spaces, urban furniture)
- energy services (lighting, heating and cooling of buildings, public lighting and luminous signs)
- electronics (electrical and electronic office equipment and related consumables, telecommunication equipment)
- textiles and footwear
- stationery (paper and consumables)
- catering (canteen service and food supplies)
- building management services (cleaning services and hygiene materials)
- transport (means and services of transport, sustainable mobility systems)

During the 2020, as regards the wood-furniture sector, the Ministry of the Environment has already started the third revision of the CAM criteria for Furniture which is expected to be published later in the year

4.2.2. Environmental management in organizations

The situation of these environmental standards in Italy is the following:

EMAS in Italy

Number of registered organisations: 967

Number of Sites: 4839

Number of registered organisations related to furniture (NACE 31): 5

(Mobilferro srl, Lasaidea Spa, Nicoline Salotti srl, Ares Line and DVO Spa)

(<http://www.isprambiente.gov.it/it/certificazioni/emas/elenco-organizzazioni-registrate-emas/>)

ISO 14001 in Italy

Number of registered organisations: 14,571

Number of registered organisations related to furniture (manufacture of wood and wood products): 40 Italian companies registered in the ISO 14001 Database for 67 productive sites,



4.2.3. Eco design methodology

The standard is intended to be used by those organizations that have implemented an EMS in accordance with ISO 14001, but can help integrating eco-design in other management systems. The guidelines are applicable to any organization regardless of its size or activity.

There is not too much information about the use of ISO 14006 certification in Italy and there's no evidence of using it in the furniture sector.

4.2.4. Eco labels (Type I, II, and III)

According to <http://ec.europa.eu/ecat>, one Italian manufacturer of furniture, Mobilferro srl, have got the EU ecolabel with 35 products awarded.

The EPDs published on (www.epditaly.it) have increased significantly from 46 in 2018 to 75 in 2019 thus increasing by 63% in the last 12 months. The main sectors involved are concrete and cement, ceramics, steel, insulating materials and bricks, but remember that the Program Operator is open to all other sectors, for example food, chemistry, cosmetics, etc.

If we look to EPD System, there is 1 EPDs based in Italy registered, associated to the category Furniture & other goods, from the company Arper Spa, Italian company that creates seats, tables and furnishing accessories for the community, work and home: Arper Spa it is the first design company in Italy, and the second in Europe, to obtain the EPD Environmental Process Certification for the product category Seats and Furniture, which today has 5 EPD certified sessions. (<https://www.environdec.com/>)

Arper which, by the way, was the first company to take action for develop the guidelines for the product category relating to the tables (Product Category Rules, PCR) for the related Environmental Product Declarations.

About Product Environmental Footprint (PEF) the Italian ministry for environment launched a scheme for a national labelling based on PEF methodology called Made Green in Italy. Furniture industry is testing the PEF methodology within the Life Project Effige in which rules to perform PEF on office furniture are developed.

4.2.5. Chain of custody certification

The following table summarises the data (Total Area (ha) and Chain of Custody Certificates) for Italy, considering the previous information:

| Scheme | Date | Total Area (ha) | Chain of Custody Certificates |
|--------|---------------|-----------------|-------------------------------|
| FSC | January 2019 | 65.433 | 2294 |
| PEFC | February 2020 | 881.068,93 | 1095 |

4.2.6. Green building certification

The following table summarises the data for Italy, considering the previous information:

| Scheme | Date | Number of Certified Projects |
|--------|----------------------------------|------------------------------|
| BREEAM | Web-based database (August 2019) | 185 |
| LEED | Web-based database (August 2019) | 388 |



4.3. OTHER POLICIES AND STRATEGIES

4.3.1. Cascading use of wood

Regarding the theme of the cascade use of wood The Italian wood furniture industry is first in Europe in circular economy: 93% of the chipboard panels produced in Italy is made of recycled wood, thus aligning with the 4R Framework of the European Commission and the Communication at the end of 2018 on the update of the European Bioeconomy Strategy, which explicitly asked to prefer the cascade use of the wood resource.

In Italy, unlike the Northern European countries, less than 30% of the wood biomass is used for energy purposes:

In 2019 a study "The circular system of the wood sector for a new economy" was presented by the Politecnico di Milano in collaboration with Rilegno, the Italian consortium that since 1997 has been involved in the recovery and collection of post-consumer wood packaging: the research puts in evidence how the activity of the Consortium for the recovery and reuse of post-consumer wood material during 2018 instead of sending it for energy recovery generated the creation of an added value of 1.38 billion euros and a production value 4 times less carbon dioxide than the energy recovery activity of the woody material.

4.3.2. EU industry policy for Forestry

The objective of the Italian government, in line with the European Commission's New Forestry Strategy 2030, is to enhance the role of the supply chain and the national wood-furniture sector by placing it as a central player in the fight against climate change, as a supply chain that uses renewable raw materials and capable of exercising a CO2 storage function, such as wood.

Consolidate the potential of local supply chains of the wood raw material, in particular in the areas of the Alpine Region and in the market failure areas, where the wood raw material processing and transformation chain can be an important driver of employment.

Enhance the share of sustainable managed forests not only with a view to forest conservation but with the economic enhancement of the timber present on the national territory is one of the objectives set by the Ministry of Forestry Policies in the Legislative Decree 34/2018

At the same time, it is necessary to create more supply chain continuity between the first transformation phase of the raw material and the sale phase of the final product on the market: state incentives on the creation of a national wood hub as an element not only of natural contrast to climate change, thanks to the use of a natural raw material such as wood, but intended as the main subject in the creation of employment, especially in areas particularly subject to demographic depopulation.

4.3.3. Forest-based Industries Blueprint

In April 2018, with the ministerial decree Legislative Decree 34/2018, the Consolidated Law on forests and forestry chains was published: a document that aims not only to safeguard the existing forest heritage on the national surface with a significant action of mapping of existing forest areas, but at the same time aims to enhance and spread the practice of sustainable forest management of the raw material wood.

The new Legislative Decree focuses on the role of forests and their sustainable management as one of the key elements for the fight against climate change and for the strengthening of the national economy: The forestry production sector creates in Italy jobs for over 400 thousand people. The management of the forest and its socio-cultural enhancement could develop an induced over 300 thousand jobs, in particular for the rural and internal areas of the country.



The productive role of the forest remains fundamental for Italy and for its transformation industries but today this historical role is increasingly supported by the recognition of the environmental, social and cultural services that proper management can provide to today's society and to future generations.

Italy imports wood and timber from abroad and uses little of the national forests, remaining well below European utilization rates.

The objective of the Italian government, in line with the European Commission's New Forestry Strategy 2030, enhance the role of the supply chain and the national wood-furniture sector by placing it as a central player in the fight against and against climate change, as a supply chain that uses renewable raw materials and capable of exercising a CO₂ storage function, such as wood.

4.3.4. Bioeconomy

During the high-level conference "The Italian Bioeconomy: a revised strategy and a new roadmap to intensify the contribution to the sustainable growth of the country", held in Rome on 14 May 2019 at the Presidency of the Council of Ministers, the new strategy for the bioeconomy ("BIT Bioeconomy in Italy. A New bioeconomy strategy for a sustainable Italy") was drawn up by the national coordination table launched within the National Committee for Biosafety, Biotechnology and Life Sciences.

The Bioeconomy Strategy, a sector which in Italy is worth € 330 billion in annual turnover and 2 million jobs, has to be adapted according to the EU strategy and to the new investments foreseen by the next Horizon 2021-2027 Program.

Its adaptation is a consequence of the new Strategy adopted by the EU Commission last October, and also from the new priorities identified in the new European research framework program Horizon Europe 2021-2027, as well as from the consequent new investments foreseen by the Joint Undertaking for the Bioindustrie (BBI JU) for the development of a sustainable industrial sector based on bio-based in Europe.

The Strategy aims to offer a shared vision of economic, social and environmental opportunities and the challenges connected with the implementation of an Italian Bioeconomy rooted in the territory. It also represents an important opportunity for Italy to strengthen its role in promoting sustainable growth in Europe and in the Mediterranean basin.

The public-private interconnection, emerged from the Conference, must touch every area of the Bioeconomy: from waste water as a resource to biomethane, up to new packaging systems and digitization aimed at improving production efficiency and product quality.

5. ROMANIA

5.1. VOLUNTARY INSTRUMENTS

5.1.1. Circular Economy package of the EC

The framework for the transition to the Circular Economy in Romania looks as it follows:

- Romania has engaged in promoting a public policy towards circular economy by the Senate Decision 3/2016¹⁴ on the Circular Economy Package of the EU.
- The country does not specifically have a Circular Economy Strategy and Action Plan yet, but it has taken its first steps towards a future Action Plan for the Circular Economy, towards forbidding non-biodegradable plastic bags and the introduction of EPR schemes.
- The European Institute in Romania (IER)¹⁵ finalized in October 2019 in the framework of SPOS 2018 (2018 Project for Strategy and Policy Studies) a dedicated study on the Circular Economy. The study is part of a series of 5 studies, each one treating up-to-date matters in relation to European policies in key areas. Study No.3¹⁶ - The Transition Towards a Circular Economy. From Waste Management To the Green Economy in Romania analyses the current status of the national legislation on waste management and formulates 32 recommendations for a national Circular Economy Strategy and the National Plan for the Circular Economy. The report is by far the most extensive work on Circular Economy in Romania. The objective of the study has been “to reduce the existing knowledge gap regarding the: waste valorisation in a circular model, the operationalization of the transition to circular economy and the development of a Romanian model of the circular economy, taking into account the challenges and the opportunities associated with this process.” The work cites plenty of good practice examples from EU, as well as private initiatives or public-private partnerships in Romania, such as:
 - ColectareDeseuri.Ro - an online platform that promotes and supports the selective collection of waste, waste recycling and reuse. It provides information on: “waste recycling (biodegradable waste, plastics, paper, glass, textiles, construction and demolition waste, WEEE, used oils, **old furniture**, used tyres, hazardous chemicals etc”, waste collectors by location and collected waste type, announcement of donations of goods by which platform users can donate items to people that need them and which otherwise could become waste, etc.
 - PlastiCircle 32 (Improvement of the plastic packaging waste chain from a circular economy approach) - is a project funded by Horizon 2020 Programme of the EC which runs through June 2017 - May 2021. It aims to develop and implement a holistic process by which to increase the recycling rates of packaging waste across Europe. This approach will allow reprocessing of plastic materials waste within the same value chain by collecting plastic packaging, transport of packaging to reduce costs of the recovered plastic materials, sorting to increase the quality of the recovered plastic materials and valorisation into value-added products such as, among others, **urban furniture**. Two

¹⁴ www.ipex.eu/IPEXL-WEB/dossier/files/download/082dbcc5529f48410152a222e51202f8.do

¹⁵ The European Institute in Romania (IER) is a public institution (legal entity also) under the direct authority of the Romanian Government and coordinated by the European Affairs Department, with the aim to support the formulation and application of the Romanian governmental policies which derive from the fact that Romania is a Member State of the EU. As a general observation it is important to note that studies that are carried out by IER represent policy priorities on the Government Agenda.

¹⁶ Study No. 3: The Transition Towards a Circular Economy. From Waste Management To the Green Economy in Romania, Valentina Elena TĂRȚIU (Coordinator), Mihaela ȘTEFĂNESCU, Ana-Maria PETRACHE, Cătălin Răzvan GURĂU, The European Institute in Romania, Strategy and Policies Studies SPOS 2018, Bucharest, October 2019, p.73



important Romanian cities are involved in the project: Alba Iulia, as a pilot city in this project, which can be counted to promote the replication of the proposed solutions through training and awareness-raising activities for citizens, institutions and private companies, and Constanta by means of a private sanitation company (location is important as the two cities are located close to the Western and, respectively Eastern border of the country, which allow for a good synergic dissemination across the country of any good practice that will emerge as a result of the project).

- A lot of the abroad examples cited in the study have included the furniture industry in their envisioned synergies with other sectors, which makes it very likely that any upcoming national policy regarding the transition to the Circular Economy will include references to the furniture sector as well. Additionally, the report have special public policy recommendations regarding the social dimensions of the transition towards the circular economy, such as: “promoting measures to increase the productivity of resource efficiency through diversification, technological modernization and innovation, enabling the specialization of the labour force for the circular and the green economy” and “updating the Occupation Classification in Romania (COR) by including new classifications such as ‘circular economy expert’ or ‘resource efficiency expert’”, as well as “supporting professional reconversion of unemployed people, along with training of young people with the new skills specific to the circular and green economy.”
- Although no clear reference to the circular economy has been previously made in the document through 2008-2018, some of the actions proposed in the Romanian National Sustainable Development Strategy *Horizons 2013-2020-2030* were first step approaches towards circular economy. However, in 2018 the strategy was significantly updated in order to be aligned with UNO Sustainable Development Agenda 2030. Renamed Romanian *National Sustainable Development Strategy 2030*, it “proposes the step-by-step transition to a new development model by introducing elements of the circular economy, increasing resource productivity, reducing food waste and waste, by: reducing consumption generation at all levels; recycling and reuse; encouraging companies to adopt sustainable practices and integrate information on the sustainability of their activities into the reporting cycle; promoting sustainable procurement practices; raising the awareness of citizens about what a lifestyle means in harmony with nature¹⁷. The document enumerates the industrial policy, the transition towards circular economy, EU Eco-labeling, the Environmental Management and Audit System (EMAS), Green Public Procurement and integrated waste management as the major mechanisms to attain sustainable consumption and production patterns. Five of its 2020 targets are particularly significant for the engagement towards the transition to circular economy:
 - “Continuing efforts at national level to improve the productivity of resource use by including precise, rigorously monitored targets, in all sectoral and development strategies in territorial profile, in order to align with European standards and to prepare for the transition to the circular economy model.
 - The transition from the current economic model based on production and consumption to the circular economy by changing the mindset through education, changing consumer behaviour and developing financial mechanisms to support the transition period.
 - Promote the tools that lead to the improvement of the environmental performance, through information and awareness campaigns regarding the benefits of obtaining the

¹⁷ The National Strategy for the Sustainable Development of Romania 2030, adopted by the Government of Romania during its meeting of November 9, 2018, by Government Decision no. 877/2018, was developed under the direct coordination of the Department for Sustainable Development (<https://www.edu.ro/sites/default/files/Strategia-nationala-pentru-dezvoltarea-durabila-a-Rom%C3%A2niei-2030.pdf>)



- EU eco-label for products and services, as well as obtaining the registration in EMAS by public or private organizations
- Completion of the legislative framework regarding the promotion of green public procurement
 - Increasing the readiness of the society for reuse and recycling by applying the waste management hierarchy.”¹⁸
- While for 2030 the targets are even more ambitious, pursuing to cover the gaps in meeting the targets related to recycling and selective collection of waste:
 - “The step-by-step transition to a new development model based on the rational and responsible use of resources with the introduction of elements of the circular economy, the elaboration of a roadmap
 - 55% recycling of municipal waste by 2025 and 60% by 2030
 - 65% recycling of packaging waste by 2025 (plastics 50%; wood 25%; ferrous metals 70%, aluminum 50%, glass 70%, paper and cardboard 75%) and 70% by 2030 (plastics 55%; wood 30%; ferrous metals 80%, aluminum 60%, glass 75%, paper and cardboard 85%)
 - Separate collection of hazardous household waste by 2022, of biological waste by 2023 and of textile materials by 2025
 - Establishing mandatory Extended Producer Responsibility schemes for all packaging by 2024
 - Implement sustainable green public procurement practices, in line with national priorities and European policies”¹⁹
 - The Romanian National Waste Management Plan sets the 2020 target regarding the increased readiness for reuse and recycling to 50% of the amount of waste from paper, metal, plastic, glass and **wood** from household and similar waste, including from public services, but no data for further specific estimation of waste furniture are (publicly) available.

5.1.2. Waste Electrical and Electronic Equipment Directive (WEEE)

- Directive 2012/19/EU on Waste Electrical and Electronic Equipment is transposed into the Romanian national legislation by the Government Emergency Ordinance no. 5/2015 of 2 April 2015 regarding the waste of electrical and electronic equipment and its subsequent modifications and supplements (such as the Government Emergency Ordinance no. 44/2019);
- Romanian National Agency for Environment Protection is in charge with the monitoring of the alignment of EEE producers to the requirements of the Government Emergency Ordinance no. 5/2015. The minimum of 4 kg of WEEE per inhabitant at national level has been successively replaced since the 1st January 2016 by the target of 45% of minimum collection rate (calculated based on the minimum 45% by weight of EEE put on the market on the 3 previous years), while starting from the 1st January 2021 the target minimum collection rate will be 65%. The absolute values of the targets are calculated based on the self-registration data of each EEE producer. Registration of these data is mandatory in order to be allowed to place EEE on the market. Romanian National Agency for Environment Protection manages

¹⁸ <https://www.edu.ro/sites/default/files/Strategia-nationala-pentru-dezvoltarea-durabila-a-Rom%C3%A2niei-2030.pdf> , p. 80

¹⁹ <https://www.edu.ro/sites/default/files/Strategia-nationala-pentru-dezvoltarea-durabila-a-Rom%C3%A2niei-2030.pdf> , p. 81



the National Registry of EEE Producers and the data that are self-registered by producers represent the base for the calculation of the tax for the Administration of the Environmental Fund (AEF). Both AEF and the Control Body of the Environmental Guard are empowered to carry out on-spot checks (without any prior notice) of the compliance of producers with the environmental legislation including the accuracy of producers' registration and to apply severe law infringement-related penalties.

5.1.3. Restriction of hazardous substances in Electrical and Electronic Equipment (ROHS)

The Directive 2011/65/EU was transposed into the Romanian law by the Government Decision no. 322/2013 regarding the restrictions on the use of certain hazardous substances in electrical and electronic equipment of 25 May 2013 and the subsequent amendment legislation:

- Order of the Minister of the Environment and Climate Change no. 1601/2013 for the approval of the list of applications that benefit from derogation from the restriction provided in art. 4 paragraph (1) of the Government Decision no. 322/2013 regarding the restrictions on the use of certain hazardous substances in electrical and electronic equipment, as subsequently amended and supplemented. It transposes into the national legislation the provisions of Annexes III and IV to Directive 2011/65 / EU, the Delegated Directive 2012/50 / EU of 10 October 2012 amending, for the purpose of adapting Annex III to Directive 2011/65 / EU of the European Parliament and of the Council as regards an exemption for applications containing lead to reflect technical progress, and the Delegated Directive 2012/51 / EU of 10 October 2012 amending Annex III to Directive 2011/65 / EU , in order to adapt it to technical progress.
- The Joint Order of the Minister of the Environment, Waters and Forests and of the Minister of Economy, Trade and Relations with the Business Environment no. 1494/846/2016 for approving the procedure and criteria for granting the operating license, review, annual approval and cancellation of the operating license of the collective organizations and approving the operating plan for the producers who individually fulfil their obligations, granting the license to authorized representatives, as well as the composition and attributions of the authorization commission, for the management of the waste of electrical and electronic equipment, with the subsequent modifications and completions.

5.1.4. Energy related Products Directive (ErP or eco-design directive)

Directive 2009/125/EC on ecological design requirements applicable to energy related products, with its subsequent additions and amendments has been transposed into the Romanian legislation by the Government Decision 55/2011, the framework being completed by Government Decision 580/2011, and Government Decision 1090/2013 (regarding the eco-design requirements published in the European subsequent Regulations). Through these regulations, the final consumers aimed to achieve a 1.5% energy saving through 1 January 2014-2020.

Although information is rather scarce about the practical implementation of eco-design requirements in energy related products manufactured by the Romanian industry, the principles as further developed by the project of the Nordic Council of Ministers to extend to non-energy related products have been taken up by the Faculty of Wood Engineering of the "Transilvania" University of Brasov. Two scientific research centers – one on *Furniture Eco-design and restoration and certification in the wood industry* and one on *Innovative technologies and advanced products in the wood industry* operate within the Faculty of Wood Engineering. At the same time, the faculty currently provides a 2-year *Master of Science Study Programme on Furniture Eco-Design and Restoration*.



5.1.5. Extended Producers Responsibility (EPR schemes)

EPR collective systems for the majority of post-consumer waste flows, such as packaging, used batteries, WEEE, and tyres out-of-use are already in place in Romania.

Government's Emergency Ordinance no. 74/2018 transfers the responsibility of financing the post-consumer waste management solely to the producers and establishes clear rules regarding their operation. It modifies and complements several important legislative instruments for the Circular Economy such as Law 211/2011 on waste regime, Law 249/2015 on the management of packaging and packaging waste and the Government Emergency Ordinance 196/2005 on the Environmental Fund, and is aimed at facilitating the transition to a efficient waste management system. GEO 74/2018 clearly separates 2 waste categories – packaging waste from the trade and industry and municipal waste, which is also separated into waste collected from households and waste collected from other sources. Within the household waste category, **wood waste, mattresses and furniture** are clearly pointed out, too, as municipal waste.

A breakdown by domain of the EPR schemes identified in Romania so far looks as it follows:

- 8 collective EPR schemes on WEEE registered and licensed by the Ministry of Environment
- 6 collective EPR schemes on battery and accumulator waste-to-energy
- 13 collective EPR schemes on packaging and packaging waste

Lists are published and updated on the Environment Central Public Authority – the Ministry of Environment, Water and Forests nowadays.

As in the case of other countries, there is not a specific EPR scheme for **furniture waste** in Romania. Selective yet still very limited collection is ensured via municipality services or, more often than not specialised organisations (NGOs or similar) that use this furniture for donations, re-selling or recycling.

5.1.6. Hazardous substances / REACH Regulation

Two major legislative measures in Romania support the correct implementation of REACH Regulation (EC 1907/2006):

- The Government Decision 822/2007 of the 1st of August 2007 on the competent authorities entitled to implement REACH Regulation in Romania. According to this law the Ministry of Environment and Sustainable Development (environmental central authority) is the qualified authority to coordinate the measures needed for the direct implementation of REACH Regulation in the country. The Ministry sets the National Agency for Hazardous Substances and Chemical Compounds as the qualified authority in charge with the application of REACH Regulation on the national territory. Since 2010 the National Agency for Hazardous Substances and Chemical Compounds has been incorporated as a Directorate General within the Environment Protection National Agency.
- The Government Decision 477/2009 of the 22nd of April 2009 on the sanction regime provided in REACH Regulation
- Additionally, there are several Orders of the Ministry of Defense along with their respective Methodological Rules regarding the granting of some exceptions within the competence of this Ministry.

A dedicated informative website and help desk support companies in the REACH registration process - <http://reach.anpm.ro/Default.aspx?id=55>. Regional support is provided by means of the county offices of the Environment Protection Agency (41 offices).

According to ECHA database, the European Chemical Agency has received from Romania:



- Registrations dossiers: 477 (0%)
- Unique Substances: 304 (1%)
- Companies: 124 (0%)

5.1.7. Formaldehyde emissions

Romania does not have any particular legislation regarding the formaldehyde emissions in wood-based boards. The common practice regarding the wood-based boards placed on the market is to offer E1 type wood-based boards, but wood-based boards producers are also able to provide on demand lower formaldehyde emission wood-based boards such as:

- CARB2, TSCA (Kastamonu SA, www.kastamonu.ro)
- JP F0,3 F****, Japanese standards JIS-(Egger Romania SRL, www.egger.ro)

In Romania the General Normative for Work Safety updated in 2011 establishes by its Annex 31 the limit values for occupational exposure to more than 500 industrial chemicals. The limit values for formaldehyde set in the regulatory document are: 1.20 mg/cbm (for 8-hour occupational exposure) and a maximum of 3 mg/cbm for short term exposure (15 minutes).

5.1.8. EU's rules on "end-of-waste" criteria

The Waste Framework Directive 2008/98/EC has been partially transposed in the Romanian national legislation by the Law 211/2011 on waste, which was later on modified and supplemented by the Government Emergency Order 68/2016 of 12th October in order to fully transpose the Waste Framework Directive 2008/98/EC. The major change that GEO 68/2016 introduced has been the end of waste criteria. Article 6 of the updated Romanian Law 211/2011 on waste establishes the central environmental authority as the authority qualified to decide based on current EU and national legislation, and on social/economic and environmental impact assessment studies on the end of waste criteria whenever there are no such criteria in place at the EU level.

Currently, in Romania such initiatives to define norms for certain waste flows emerge only by means of different projects as the Ministry of Environment try to promote good practices and foster capacity building within its directorates generals and departments. A good example is the methodology to define end of waste criteria for specific construction waste flows which was employed in the project LIFE10 ENV/RO/000727 „The VALorisation of Construction and Demolition waste in Buzau county/VAL-C&D”.

Additional similar efforts are expected from the Environment Ministry within the next 3 months after the Draft of the Compost Law, currently analyzed in the different specific commissions of the Parliament, will be approved.

5.1.9. Flame retardants

No specific legislation regarding the use of flame retardants in Romania. General fire safety legislation applies to wooden houses and wooden elements used in construction, such as the Romanian Law 10/1995 on the quality of constructions and Law 307/2006 on fire safety, C58 -1996 -Norme tehnice privind ignifugarea materialelor și produselor combustibile din lemn și textile utilizate în construcții; together with the general applicable norms for fire safety and C 58-196 Technical Norms regarding the Fire-Proofing of Wooden Materials and Products and of Textiles Employed in Constructions.



5.1.10. Renewable energy Directive (RED II)

Since 2014, Romania has exceeded its target set for 2020 on renewable energy (24% of final energy consumption), registering a percentage of 24.8%. The 2016 structure of the electricity production is provided in proportion of 42.39% from renewable sources, with hydro-energy being the main driver (28.86%). According to its UNO-submitted Voluntary National Review²⁰, Romania managed to reach and surpass expectation regarding its target for 2020 of reduction by 19% of primary energy consumption, as envisaged in the scenario based on the reference model PRIMES 2007. This was supposed to save of 10,000 ktoe in 2020, reaching 53,000 ktoe along this period of time. It is estimated that the target has been already reached (a 43,000 ktoe consumption limit enforced by the Article (3)1 of the Directive regarding energy efficiency), achieving just 30,320 ktoe as final consumption.

5.1.11. Illegal logging and illegal timber trade

FLEGT Regulation has been implemented in Romania by means of two major documents:

- The Government Decision 668/2011 designates the qualified authorities to carry out the implementation of the Regulation 2010/995/EU defining the obligations of operators selling or distributing timber and timber products on the EU market. The central environmental public authority, i.e. the Environment Ministry is the coordinator. The Ministry of Environment, Water and Forests exercises the powers of competent authority provided by means of the direction with control powers in forestry, the Territorial Inspectorates of Forestry and Hunting Regime and the National Environmental Guard, which control the operators, traders and the monitoring organizations.
- The Government Decision 470/2014 on the wooden material transport and trade and EUTR 2010/995 implementation and the subsequent legislation (Government Decision 787/2014) provides the national legal framework for the implementation of FLEGT Regulation (2010/995/EU). It sets the detailed legal norms for the implementation of the FLEGT Regulation and introduces SUMAL, the Integrated National Information System to provide harvested wood ongoing traceability right from the harvest place by GSM data integration. SUMAL provides online standardized information registration and allows complex cross-checks to verify the legality of the wood harvested. Starting with the 1st January 2015 only operators with a “due diligence” system in place are allowed to operate in timber trade.

5.2. VOLUNTARY INSTRUMENTS:

5.2.1. Green Public Procurement

Green Public Procurement in Romania is regulated by Law 69/2016 of 25th of April 2016 on Green Public Procurement, which promotes sustainable consumption and production and resource efficiency among its specific objectives. The central public authority that is legally in charge of the development of the national policy in the GPP area and of the National GPP Plan is the Ministry of Environment. Despite having had a specific law since 2016, Romania is still among the EU countries that does not yet officially have a National Plan for GPP, but official information confirms a 2nd version of this Plan is currently under peer review. It has, however, had since October 2018 the Guide for green public procurement that includes the minimum requirements regarding the

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https://sustainabledevelopment.un.org/content/documents/19952Voluntary_National_Review_ROMANIA_with_Cover.pdf, p. 47



environmental protection for certain groups of products and services that are required at the level of the specifications. The guide was officially approved by the Joint Order 1.068 / 1.652 / 2018 of the Ministry of Environment and the National Public Procurement Agency of the 15th of October 2018. An update of the GPP Law is still needed in order to include circular economy references as well as standard specification conditions (standard tender books).

Several public authorities such as the Ministry of Environment and the Romanian North-Eastern Regional Development Agency have taken some steps lately in order to strengthen training and build capacity towards the implementation of GPP. They are partners into 2 large European projects GPPbest (<https://www.gppbest.eu/>; best practices and capacity building through EU-funded LIFE Programme) and GPP-Stream (an interregional cooperation project that has run through 1 June 2018-31 May 2022), with the aim of improving experience and setting examples for other public authorities as well. According to project website (<https://www.interregeurope.eu/gpp-stream/>) "GPP-STREAM would be the first project to focus on how the governance and implementation of GPP can be improved by encouraging the interaction of different policy instruments within one administration and across different government levels". As a result of participation in GPPbest several public authorities in Romania organized GPP tenders, but none focused on furniture procurement yet.

5.2.2. Environmental management in organizations

EMAS in Romania

Number of registered organisations: 6

Number of Sites: 10

Number of registered organisations related to furniture (NACE 31): 1 (EUROSTAR FURNITURE S.R.L.)

The implementation of EMAS in companies is actively promoted by the Romanian Ministry of Environment.

ISO 14001 in Romania

Number of registered organisations: 5,555

Number of registered organisations related to furniture (manufacture of wood and wood products): 39

5.2.3. Eco design methodology

No information on the number of companies that are ISO-14006 certified is available in Romania.

The Faculty of Wood Engineering of the "Transilvania" University of Brasov currently provides a 2-year *Master of Science Study Programme on Furniture Eco-Design and Restoration*. A rich curricula supports woodworking engineers in developing skills, mind sets and professional behaviour that will support "cradle-to-grave" approaches on furniture products design, as well as a holistic view of the new furniture products that have the potential to change consumer perception and to educate them.

5.2.4. Eco labels (Type I, II, and III)

21 Romanian companies have been awarded EU Eco-Label through 2015 - January 2002, out of which one company is a manufacturer of outdoor furniture (Rainbow Company Production S.R.L.). The large majority of those companies are paint producers, out of which some are suppliers for the furniture sector.



There are only 4 companies in Romania that account together for 11 EPD Systems, but none of them is associated to furniture. Three of these companies are associated with construction materials.

5.2.5. Chain of custody certification

FSC-certified forest area of 2,829,263 ha represents about 42% of the total forest area in Romania, which makes FSC the main forest certification partner for the moment.

| Scheme | Date | Total Area (ha) | Chain of Custody Certificates |
|--------|--------------|-----------------|-------------------------------|
| FSC | August 2019 | 2,829,263 | 724 |
| PEFC | January 2020 | 0 | 48 |

There is currently no PEFC-certified forestry area in Romania due to technical issues related to accreditation. However, there were 48 PEFC Chain of Custody Certificates in the country. (Source: PEFC)

5.2.6. Green building certification

The following table summarises the data for Romania, considering the existing information:

| Scheme | Date | Number of Certified Projects |
|--------|----------------------------------|------------------------------|
| BREEAM | Web-based database (August 2019) | 169 |
| LEED | Web-based database (August 2019) | 93 |

5.3. OTHER POLICIES AND STRATEGIES

5.3.1. Cascading use of wood

In Romania certain companies identified correctly the potential of the true cascading use of wood. It happens in the furniture suppliers industry lately, where Egger company, a well-known wooden-based boards manufacturer (chipboard, OSB and MDF), has started collecting wood waste from every possible source – from municipality to households, retail, beverage and logistic sectors – to use in the manufacturing process of its products. Additionally, a biomass thermal power plant with co-generation supports the whole process. EGGER Romania has developed in Rădăuți an integrated loop for collecting and reusing recyclable wood: damaged pallets, old furniture, chipboard waste, wood packaging, wood waste from construction and demolition, municipal wood waste or biomass. According to a representative of the management team, the quantities of recyclable wood processed and recycled in 2016 by Egger Romania, have replaced the potential of using 35,000 hectares of forest. At European level, Egger uses on average 30% recycled wood for the production of wood-based boards. Their declared goal for 2020 is to recycle more than 150,000 tons of materials annually. Egger has developed similar locations in the UK and Germany and collects 480,000 tonnes of recyclable wood annually.



5.3.2. EU industry policy for Forestry

The National Forestry Strategy 2018 - 2027 (available on the website of the Ministry of the Environment) was developed following the principles of sustainable development and has the role of providing benchmarks and predictability to the forestry sector for a 10 year period. It is the outcome of a large collaboration and consultation process involving many of the stakeholders and having in view not only the domestic economic context, but also the European trends and progress made by other countries. Correlation of its elements with other areas and policies such environment, agriculture, rural development, energy, education and tourism was closely followed during its development process. Its objective: - harmonizing the forest functions with the present and future requirements of the Romanian society through the sustainable management of the national forest resources.

Its self-declared strategic medium-term objectives have been as follows:

- An institutional and regulatory framework of the activities of the forestry sector that would be more efficient than in the past
- Sustainable management of the national forestry fund
- Increased competitiveness and sustainability of the forest industries, of the bioenergy and bioeconomy as a whole
- Developing an effective system to raise awareness and enhance communication with the public
- Development of scientific research and forestry-related education,

Concrete and measurable measures and sub-measures will allow monitoring and intermediate and final evaluation of their performance and represent an outline of a future detailed Plan of Action.

The main law that regulate the forestry sector is Law 46/2008 – The Forestry Code (republished), with its subsequent modifications and supplements. It is complemented by three major laws: Law 171/2010 on forestry infringement sanctions and penalties, Law 289/2002 on forest protection curtains, Law 100/2010 on afforestation of degraded lands and the Government Decision 617/2016 for the approval of the Regulation of valorisation of the wood mass from the public property forestry fund.

5.3.3. Forest-based Industries Blueprint

The Law 46/2008 – The Forestry Code specifically state as objective ensuring sustainable supply of raw materials. However, a targeted framework for the implementation of forest-based industries blueprint has not been identified.

According to a recent study of PWC²¹ “direct contribution of the timber industry to GDP formation in Romania has been relatively constant over the last decade (ranging from 1.1% to 1.5%). From this point of view, Romania ranked 2014 in the 9th place in the European Union (1.1% compared to the EU average of 0.4%). If we consider the indirect and induced effect on the economy, the forestry and wood processing industry in Romania contributes 3.5% to the GDP.”

However, the forestry sector is still marked by the low funding within the last three decades which makes it extremely challenging to try to implement more ambitious goals, although all professionals of the sector are quite aware of the increased pressure on forestry resources. The large majority of the forestry support still gets into the sector not by direct targeted support, but

²¹ https://www.pwc.ro/en/press_room/assets/2016/wood-industry-ro.pdf



as part of other programmes and policies such as the National Programme for Rural Development and the Environment Operational Programme. Although the National Forestry Strategy 2018-2027 formulated a more coherent vision on the forestry sector goals and a plan of measures, concrete detailed plans need to be established.

Private initiatives such as having had a National FSC Standard for Romania (FSC-STD-ROU-01-2017-EN) since the 15th of April 2019 seem more significant in the direction of the forest-based industries blueprint implementation at the moment.

5.3.4. Bioeconomy

Romania has made significant progress in bioeconomy in recent years. These were stimulated by the maturation of the Romanian scientific offer in this field, including due to the opportunities for investments in laboratories and equipment, human resources training and the creation of partnerships. Although a national strategy on bioeconomy is not yet available, important steps have been made through the involvement of the scientific community in a series of research projects aimed at developing a healthy outline of the steps to be taken in order to ensure long term success of this sector due to the fact that high potential is foreseen for the country (Romania has almost a quarter of its occupied population working in agriculture). Bioeconomy has been the among the main topics of several large projects in the Operational Programme for the Strengthening of Administrative Capacity where the Ministry of Business Environment, Trade and Entrepreneurship, the National Authority for Scientific Research and Innovation (ANCSI) and the Ministry of Education and Research cooperated with various research institutes. The research has been particularly concerned by the accurate assessment of economic and competitive potential as well as for generation of knowledge on efficient applications and increased outcome of the bioeconomy, which constitutes sound prerequisite for further appropriate action.



6. SPAIN

6.1. VOLUNTARY INSTRUMENTS

6.1.1. Circular Economy package of the EC

Spain has developed the following frameworks to support the transition to a more Circular Economy:

- **Spanish Circular Economy Strategy.** Circular Spain 2030. In order to promote the transition towards a more circular economy model in Spain, the Government is preparing this strategy, under the coordination and leadership of the Ministry of Agriculture and Fisheries, Food and Environment and the Ministry of Economy, Industry and Competitiveness, in collaboration with the other ministries involved, the Autonomous Communities and the Spanish Federation of Municipalities and Provinces.

All the related stakeholders will be involved in their elaboration to achieve the maximum possible coverage.

The Strategy has a long-term vision, Circular Spain 2030, which will be achieved through successive short-term action plans that will allow the integration of the necessary adjustments to complete the transition in 2030. To this end, the strategy is accompanied by the first action plan 2018-2020.

Five priority sectors of activity are identified: the construction, agri-food, industry, consumer goods, and tourism sectors.

The 2018-2020 action plan has five main lines of action: production, consumption, waste management, secondary raw materials, and water reuse. In addition, on a transversal basis, three more are incorporated: Awareness and participation, Research, innovation and competitiveness, and Employment and training.

This first Action Plan includes 70 actions to be implemented during the 2018-2020 period, and for this, it has a budget of more than 836 million euros.

The Strategy has passed the public consultation step, and it has received more than 1.800 remarks, which are nowadays under analysis.

Some Autonomous Communities have already developed their own strategies, such as Extremadura, Catalonia or the Basque Country.

- **Agreement for the Circular Economy,** signed by economic and social representatives, has already received more than 280 subscription supports among associations, entities and companies.

The signatories commit themselves to promote the transition to a more circular economy through ten actions, including the reduction of the use of non-renewable raw materials, promote the use of the life cycle assessment and eco-design, apply the waste hierarchy, increase the processes efficiency, promote the sustainable consumption, the use of ecolabels, information interchange, dissemination of the circular economy relevance, use of common indicators and promote the use of social and environmental indicators inside the companies.

On the other hand, the Spanish Waste Plan 2016-22 sets a 50% target for waste to be recycled or prepared for re-use. In this framework, **2% of all furniture**, textiles, electricals, and other suitable goods, must be redirected from recycling or landfill and sent **for repair and resale**.



6.1.2. Waste Electrical and Electronic Equipment Directive (WEEE)

In Spain, the WEEE Directive was incorporated to national law through the Royal Decree 110/2015 of 20 February.

Regarding the actual situation in Spain, the Ministry for Ecological Transition published the targets for selective collection of WEEE for 2019. These targets are:

- Minimum quantity of WEEE collected in a separated way: 436,941,261 kilograms (calculated based on the minimum 65% by weight of EEE put on the market on the 3 previous years), considering a minimum of 373,946,238 kg of domestic WEEE and 62,995,022 kg of professional WEEE.
- A minimum of 9,35 kg of WEEE per inhabitant at national level

The mentioned Ministry defined these targets for each Autonomous Community (based on their population) and for manufacturers (collective schemes of extended producer responsibility), based on their market quota.

6.1.3. Restriction of hazardous substances in Electrical and Electronic Equipment (ROHS)

The Directive 2011/65/EU was incorporated to the Spanish law by the Royal Decree 219/2013 of 22 March.

The Royal Decree 1364/2018, of 2 November modifies it to incorporate the Directive (EU) 2017/2102 and the Delegated Directive (UE) 2017/1975, which modifies the Annex III of exceptions to adapt it to the scientific and technical progress.

6.1.4. Energy related Products Directive (ErP or eco-design directive)

The eco-design Directive 2009/125/EC was transposed to Spanish law through the Royal Decree 187/2011 of 18 February.

There is little information available about the level of implementation of this directive in Spain. Some public administrations developed specific websites for this issue, for example IHOBE (public society of the Basque Government) and the Basque Ecodesign Center (<http://www.basqueecodesigncenter.net>).

6.1.5. Extended Producers Responsibility (EPR schemes)

The Law 22/2011 of 28th of July, about waste and contaminated soils has a specific title about Extended Product Responsibility.

The Law defines the scope of this responsibility, establishing the obligations to which, through the corresponding regulatory development, producers may be subject, both in the design and production phase of their products and during the management of waste derived from their use and it includes how to deal with these obligations, either individually or through collective systems.

The schemes nowadays operatives in Spain are the following²²:

- Light packaging and paper-cardboard (ECOEMBES)
- Glass packaging (ECOVIDRIO)
- Phytosanitary products packaging (SIGFITO)

²² Source: <https://www.miteco.gob.es>

- Phytosanitary and fertiliser products packaging (AEVAE)
- Medicines and expired medicines packaging (SIGRE)
- Batteries and accumulators (European Recycling Platform and Fundación Ecopilas)
- Tyres out-of-use (SIGNUS ECOVALOR SL and Tratamiento Neumáticos Usados SL)
- Used industrial Oil (SIGAUS and SIGPI)
- Waste of Electrical and Electronic Equipment. There were 11 schemes (AMBILAMP, ECOASIMELEC, ECOFIMÁTICA, ECOLEC, ECOLUM, ECO-RAEE'S, ECOTIC, ERP, REINICIA FUNDACIÓN CANARIA PARA EL RECICLAJE Y EL DESARROLLO, and SUNREUSE). After the publication of the Royal Decree 110/2015, these schemes have to adapt to the new requirements, and nowadays most of them are under this adaptation process.

There is not a specific EPR scheme for **furniture waste** in Spain. Similar to other countries, the selective collection of this type of waste is done via municipality services or specialised organisations (NGOs or similar) that use this furniture for re-selling or recycling. In most of the cases, these organisations are associated to social activities or donations.

Some examples are:

- Fundación Valora (<https://www.fundacionvalora.org/>)
- Dona Muebles (<http://www.donamuebles.com/>)
- Rastro Betel (<https://www.rastrobetel.org/>)
- Pont Solidari (<http://pontsolidari.org/>)
- Asociación Reto (<http://www.asociacionreto.com/>)

6.1.6. Hazardous substances / REACH Regulation

According to data from ECHA, it has received from Spain:

- Registrations dossiers: 7 094 (7%)
- Unique Substances: 3 889 (17%)
- Companies: 1 040 (6%)

Regarding national legislation, the Law 8/2010 establishes the sanction regime provided in the REACH and CLP Regulations.

The Ministry of Ecological Transition has a dedicated website to support the different agents in the application of REACH and CLP regulation (<https://www.miteco.gob.es/es/calidad-y-evaluacion-ambiental/temas/productos-quimicos/portal-reach-clp/>).

At regional level, there also exist some supporting websites, for example in Catalonia (http://empresa.gencat.cat/ca/treb_ambits_actuacio/seguretad_industrial/si/inforeach/).

6.1.7. Formaldehyde emissions

There is not specific legislation in Spain regarding formaldehyde emissions from wood-based panels. However, some manufacturers offer wood-based panels with low formaldehyde emissions. For example, FINSA (<https://www.finsa.com>) offers three types of panels:

- E1 <8mg/100g
- Without added formaldehyde (NAF)
- (EZ) (CARB-II) <3mg/100g



Regarding occupational exposure, the Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT), published in December 2016 a guide about the use of formaldehyde in the wood-based boards.

In Spain, the occupational exposure limit in short period (VLA-EC®) for the formaldehyde is 0.3 ppm (0.37 mg/m³) since 1999.

6.1.8. EU's rules on "end-of-waste" criteria

The Waste Framework Directive 2008/98/EC has been transposed to Spanish legislation through the law 22/2011 of 28th of July. Its article 5 grants the Ministry of Agriculture and Fisheries, Food and Environment the power to establish, through ministerial order, the specific criteria that certain types of waste, which have undergone a recovery operation, have to meet so that they can no longer be considered as a waste.

Differently than in the case of by-products, it is not foreseen a procedure for requesting the application of the end concept of waste condition from individuals. The Ministry makes the decision on the waste streams for which it is more appropriate to evaluate the possible establishment of criteria for the end of the residue condition. Currently, those waste streams that may have a greater environmental relevance are being prioritized, considering the type of waste, the incidence in broad sectors of economic operators and the quantities of waste affected.

Nowadays, the Ministry has published two orders for doing that:

- Order APM / 205/2018, of February 22, which establishes the criteria to determine when the used processed oil coming from the treatment of used oils to be used as fuel ceases to be waste according to Law 22/2011, of July 28, of contaminated waste and soil.
- Order APM / 206/2018, of February 22, which establishes the criteria to determine when the fuel recovered from the treatment of MARPOL type c waste for use as a fuel in ships ceases to be waste in accordance with Law 22 / 2011, of July 28, of contaminated waste and soil.

And has two more in preparation:

- Draft order establishing the criteria for determining when fatty acid methyl esters (biodiesel), produced from used cooking oils or animal fats to be used as a biofuel in automotive or as a biofuel in heating equipment, cease to be waste in accordance with Law 22/2011, of July 28, on contaminated waste and soil.
- Draft order establishing the criteria to determine when paper and cardboard for recycling ceases to be waste in accordance with Law 22/2011, of July 28, on contaminated waste and soil.

6.1.9. Flame retardants

Similar than occurs in Europe, there is not a specific legislation regarding the use of flame retardants in Spain.

However, some activities are being developed in this issue, for example:

- The Spanish Ministry of Science, Innovation and Universities founded a project, called FlameRISK, with the general objective to understand how and to what extent flame retardants (FR) are released from consumer products in Spanish indoor environments (e.g. electronic components, furniture, etc.) and to assess the human exposure and the associated health risks. The project will be focused not only on restricted FRs but also on



the new emerging ones such as organophosphate flame retardants (OPFRs). The project will be developed by the TecnATox²³ group of the Rovira i Virgili University and it will end in December 2021.

- Some producers in Spain are investigating about the use of substitutes for flame-retardant, for example Interplasp²⁴, which is one of the best European flexible polyurethane foam manufacturers. Interplasp, in collaboration with CETEM, has worked in different projects with the objective of analysing the improvement of the flammability reaction of flexible polyurethane foam through the addition of nanoparticles. Due to the results of the different projects, Interplasp currently offers among its products the “contact BS” type of foam.

6.1.10. Renewable energy Directive (RED II)

The targets originally fixed for renewable energy use in Spain where the following.

| | |
|---|--------|
| A) Share of energy from renewable sources in gross final consumption of energy in 2005 (S2005) (%) | 8.7% |
| B) Target of energy from renewable sources in gross final consumption of energy in 2020 (S2020) (%) | 20% |
| C) Expected total adjusted energy consumption in 2020 (ktoe) | 97,041 |
| D) Expected amount of energy from renewable sources corresponding to the 2020 target (ktoe) | 19,408 |

According to Eurostat data (2017), the Spanish evolution since 2009 has been the following:

| | Electricity generation all sources | Fuel Used in transport | Fuel consumed for heating and cooling | Overall energy |
|------|------------------------------------|------------------------|---------------------------------------|----------------|
| Year | RES-E [%] | RES-T [%] | RES-H&C [%] | RES [%] |
| 2009 | 27,84% | 3,71% | 13,27% | 12,96% |
| 2010 | 29,78% | 5,02% | 12,55% | 13,81% |
| 2011 | 31,56% | 0,82% | 13,58% | 13,22% |
| 2012 | 33,47% | 0,94% | 14,09% | 14,29% |
| 2013 | 36,73% | 1,05% | 14,09% | 15,32% |
| 2014 | 37,77% | 1,12% | 15,72% | 16,13% |
| 2015 | 36,95% | 1,26% | 16,99% | 16,22% |
| 2016 | 36,61% | 5,31% | 17,14% | 17,36% |

²³ <https://www.tecnatox.cat>

²⁴ <http://interplasp.com/>



| | | | | |
|-------------|--------|--------|--------|--------|
| 2017 | 36,34% | 5,92% | 17,52% | 17,51% |
| Target 2020 | 39,00% | 11,30% | 17,30% | 20,80% |

According to this data, the main difference against target is related to fuel used in transport.

Regarding this issue, AFABIOR²⁵ (National Association of Manufacturers of BIOFuels and Renewable Fuels) is the first National Association that promotes the bio-fuels of 2nd generation from waste derived from biomass, such as pruning scraps, or bio fraction of urban waste (paper, wood, textile, etc.); and renewables: waste destined for landfill.

The process uses solid recovered fuel (SRF). With a high quality SRF (cleaner flow, with 85% plastic and 15% biomass: paper, wood, textile ...) 60% of renewable liquid is obtained (fuel similar to heating diesel) and 15% of powdered coal. With a lower quality SRF (equal amount of plastic than biomass), 40% renewable liquid and 30% carbon are obtained.

6.1.11. Illegal logging and illegal timber trade

In Spain, the EUTR and the FLEGT Regulation is related to the Royal Decree 1088/2015, of December 4, to ensure the legality of the commercialization of wood and wood products. The objective of this Royal Decree is to establish the needed regulation regarding the fight against the commercialisation of illegally obtained wood by means of:

- The designation of the competent Spanish authorities for the application of these regulations and the distribution of functions among them.
- The establishment of the procedure for the validation of FLEGT licenses.
- The minimum requirements applicable to the control of the due diligence system.
- The basic content of the responsible statement that must be presented by the agents that sell wood and wood products.
- The content of the national plan to control the legality of commercialized wood.
- This royal decree additionally creates the State Information System for timber trade in Spain.

This State Information System, called LIGNUM²⁶ supplies information about statistical data on EUTR and FLEGT management in Spain, for example about validation process for FLEGT licenses, Responsible declarations, etc.

In 2017, the number of agents that presented responsible declaration in Spain is presented in the following table:

| Type of agent | Number (2017) |
|--|---------------|
| Owners and auctioneers | 567 |
| Importers | 302 |
| Mixed agents (owners, auctioneers and importer): | 18 |
| TOTAL | 887 |

²⁵ <http://www.afabior.es/>

²⁶ https://www.mapa.gob.es/ca/desarrollo-rural/temas/politica-forestal/Madera_Legal_FLEGT_EUTR/sistema/



6.2. VOLUNTARY INSTRUMENTS:

6.2.1. Green Public Procurement

Spain published its last National Action Plan on GPP in February 2019 (Orden de Presidencia PCI/86/2019), titled: “Plan de Contractación Pública Ecológica” (2018-2025)

The scope of the Plan covers all Public Administrations. It will be applied to the General State Administration, its Autonomous Organizations and the Social Security Management Entities. The Plan establishes some objectives, such as: promoting the acquisition by the public administration of goods, works and services with the least environmental impact; serve as an instrument to boost the Spanish Circular Economy Strategy; guarantee a more rational and economic use of public funds; promote environmental clauses in public procurement; and publicize the possibilities offered by the legal framework for green public procurement.

It determines a group of 20 priority goods, works and services, in accordance with the EU ecological contracting criteria.

- Food and catering services
- Interior lighting of buildings
- Outdoor public lighting and traffic lights
- Electrical and electronic devices used in the healthcare sector
- Water based heaters
- Design, construction and management of office buildings
- Design, construction and maintenance of roads
- Electricity
- Printing equipment.
- Events
- Sanitary faucet
- Toilet and urinal discharge
- Furniture and wall panels
- Computers and monitors
- Paper for copies and graphic paper
- Textile products
- Garden products and services
- Cleaning products and services
- Combined systems of heat and electricity. HVAC systems
- Transportation

It includes a series of general environmental contracting criteria with voluntary nature, which may be incorporated into the contract documents as selection, award criteria, technical specifications and special conditions of execution.

The validity of the Plan is 7 years (2018-2025), notwithstanding that it can be reviewed and updated when agreed by the Inter-ministerial Commission for the incorporation of environmental criteria in public procurement.

Together with the Plan, a table with the selection criteria, technical specifications and award criteria that can be taken into account by the contracting body for the group of 20 goods, works and services that is included in the annex.

Different working groups and a biannual report for the evaluation and monitoring of the Plan are planned.



At regional level, there are some regions that are very active on the implementation of Green Public Procurement in their administrative processes, for example the Basque Country (<https://www.ihobe.eus/compra-publica-verde>).

6.2.2. Environmental management in organizations

The situation of these environmental standards in Spain is the following:

EMAS in Spain

Number of registered organisations: 842

Number of Sites: 1,030

Number of registered organisations related to furniture (NACE 31): 1 (YUDIGAR, S.A.)

ISO 14001 in Spain

Number of registered organisations: 13,053

Number of registered organisations related to furniture (manufacture of wood and wood products): 49

At regional level there are some active organisations that promote the implementation of EMAS in companies, for example in Catalonia (<http://clubemas.cat/>).

6.2.3. Eco design methodology

There is not too much information about the use of ISO 14006 certification in Spain. The following table presents the distribution of registered organisations in Spain²⁷:

| Sector | % |
|--------------------------|-----|
| Edification | 61% |
| Furniture | 18% |
| Electrical-electronic | 6% |
| Design | 4% |
| Building material | 2% |
| Chemical | 2% |
| Equipment | 2% |
| Research Centres | 2% |
| Services | 2% |
| Transport and automotive | 1% |

This source mentioned that there are 126 companies certified by this standard in Spain. About 18% of them belong to **the furniture sector**.

There are also some public organisations that published specific eco-design guidelines for the furniture sector. One example could be IHOBE, and the Ecodesign Guidelines published for

²⁷ Source: <https://www.ik-ingenieria.com/en/ecodesign>



various sectors, including furniture and street furniture. These guidelines include LCA analysis of representative products, eco-design guidelines and cases studies²⁸.

6.2.4. Eco labels (Type I, II, and III)

According to <http://ec.europa.eu/ecat>, one manufacturer of furniture have got the EU ecolabel (i.e. ASTIGARRAGA KIT LINE, S.L.), with 9 products awarded.

If we look to EPD System, there are 2 EPDs based in Spain registered, associated to the category **Furniture & other goods**, from the company Burdinola S. COOP.

Some regions have their own ecolabelling system, such as Catalonia, with a specific category for **Wood Products**. However, there are not products certified within this specific category.

6.2.5. Chain of custody certification

The following table summarises the data for Spain, considering existing information:

| Scheme | Date | Total Area (ha) | Chain of Custody Certificates |
|--------|---------------|-----------------|-------------------------------|
| FSC | August 2019 | 297,533 | 1,042 |
| PEFC | December 2018 | 2,208,827 | 888 |

6.2.6. Green building certification

The following table summarises the data for Spain, considering the existing information:

| Scheme | Date | Number of Certified Projects |
|--------|----------------------------------|------------------------------|
| BREEAM | Web-based database (August 2019) | 442 |
| LEED | Web-based database (August 2019) | 623 |

6.3. OTHER POLICIES AND STRATEGIES

6.3.1. Cascading use of wood

Specific relevant information for Spain about this topic was not identified.

6.3.2. EU industry policy for Forestry

In accordance with Law 43/2003, of November 21, on Forestry, the forest planning in Spain is articulated, at different scales. At the strategic level through the Spanish Forest Strategy, the Spanish Forest Plan, and the Autonomous Forest Plans and at the tactical level, the so-called Forest Resources Management Plans (PORF) whose minimum content is indicated by law 43/2003 of forests and are drafted and approved by the forest administrations of the Autonomous Communities.

²⁸ Source: <https://www.ihobe.eus/publicaciones>



The Spanish Forest Strategy was approved in 1999, and it is available on the Ministry of Agriculture website²⁹. Its objectives are to planning the forest policy at national level and to involve in the process international forest organizations and forums.

The Spanish Forest Plan, application in time and space of the Spanish Forest Strategy, aims to structure the actions necessary for the development of a Spanish forest policy based on the principles of sustainable development, multifunctionality of the mountains, contribution to territorial and ecological cohesion and public and social participation in the formulation of policies, strategies and programs, proposing the co-responsibility of society in the conservation and management of forests. It was approved by the Council of Ministers in July 2002, and an upcoming revision is planned.

The Forest Resources Management Plans (PORF), regardless of their specific denomination, is constituted as a fundamental instrument of forest planning, within the framework of land management. The aforementioned plans are elaborated and approved by the Autonomous Communities.

6.3.3. Forest-based Industries Blueprint

According to the report done by the former Ministry of Agriculture, title “Diagnosis of the Spanish Forest sector”, published in 2014, Spain is the second country in Europe in forest area (55% of its land surface), but the sector has a low weight in the GDP (0,63 % in 2009).

These figures reflect that there is a significant potential for improvement in the forest-based industry in Spain. However, it was not possible to find specific information about the implementation of the mentioned Blueprint in Spain.

6.3.4. Bioeconomy

The Ministry of Economy and Competitiveness published the “Spanish strategy on Bioeconomy. Horizon 2030” in March 2016. This strategy aims to boost economic activities and improve the competitiveness and sustainability of productive sectors that are linked to the use of biological-based resources, promoting the generation of knowledge and its use for the development and application of derived technologies, through the collaboration within the science and technology system and the public and private Spanish entities. Likewise, the competitive development of new industrial sectors and new professional training are included.

We can find some website dedicated to this issue, for example <http://bioeconomia.agripa.org/>, which aims to promote bioeconomy in Spain.

²⁹ https://www.mapa.gob.es/es/desarrollo-rural/temas/politica-forestal/planificacion-forestal/politica-forestal-en-espana/pfe_estrategia_forestal.aspx



7. SWEDEN

7.1. VOLUNTARY INSTRUMENTS

7.1.1. Circular Economy package of the EC

Sweden has developed the following framework to support the transition to a more circular economy:

The government has prepared the strategy: A unified climate policy - climate policy action plan Prop. 2019/20:65, under the coordination of the ministry of Environment and Climate.

The strategy has a long term vision, that by 2045, Sweden should have no net greenhouse gas emissions to the atmosphere, in order to achieve negative emissions thereafter.

Through the climate policy framework, Parliament has sent a clear signal to the entire society that Sweden will reduce its emissions drastically and by 2045 have no net greenhouse gas emissions. In this way, the conditions are given for the way forward and the actors in society are given opportunities to plan and invest for a fossil-free future.

On behalf of the Government, the Swedish Environmental Protection Agency has analysed the conditions for converting society to fossil fuels. On the basis of the analysis carried out by the Swedish Environmental Protection Agency and the roadmaps submitted by industry organizations to the Government through the Fossil-free Sweden initiative, the Government considers that there are reasons to highlight some particularly important areas that create conditions for the transition to a fossil-free society:

1) conditions for electrification, 2) a growing bioeconomy within a sustainable framework, 3) fossil-free accessibility, 4) an investment climate and a financial market that facilitates conversion, 5) increased circularity and resource efficiency, 6) an innovation policy for tomorrow's solutions and 7) an inclusive changeover.

The starting point is that the climate change adaptation should be carried out in a way that does not jeopardize the possibility of achieving other global goals for sustainable development. Agenda 2030 has a clear message of coherence and the importance of exploiting synergies. The Government intends to illuminate and better utilize synergies for coherence between different policy areas. Government control in this area must be based on what opportunities exist to contribute effectively to the climate goals, but also on what is sustainable in the long term from a social, economic and environmental perspective.

• Agreement for the circular economy

Based on the decision by the parliament to make Sweden climate neutral by 2045, the Fossil Free Sweden initiative has encouraged business sectors to draw up their own roadmaps as to how they will be fossil free while also increasing their competitiveness.

In these roadmaps, the industries describe when and how they will be fossil free, what technological solutions need to be developed, what investments need to be made and what obstacles need to be removed. The roadmaps also contain proposals regarding commitments for the stakeholders and political solutions.

The roadmaps are managed by either industry associations or companies in an open process that aims to include the entire sectors. Thirteen roadmaps have been handed over to the Government and more are in progress. One of the roadmaps covers the forest sector.

<http://fossilfritt-sverige.se/wp-content/uploads/2018/02/roadmap-for-fossil-free-competitiveness-forest-sector.pdf>



7.1.2. Waste Electrical and Electronic Equipment Directive (WEEE)

An overall conclusion is that the Swedish system works very well today. The collection level is among the highest in Europe with 16,3 kg collected per inhabitant per year. The cooperation between municipalities and manufacturers, the recycling centres as well as the Swedish waste culture with a great awareness of refuse sorting provides the intense vigour. There is potential for improvement within the areas of information, collection of small electric waste, collection in blocks of flats and small businesses, collection points at the manufacturers, marking and follow-up, harmonised treatment requirements, more contact between manufacturers and recyclers and mapping of hidden flows of collected products and waste. There is a need for better knowledge on hidden flows in order to demonstrate where these occur. Illegal export of these products also needs to be prevented.

A Swedish producer's responsibility for electric and electronic products came into existence in 2001, as a result of a process which started at the beginning of the nineties. It is in this context that the success of the Swedish system must be viewed. During the entire process period the participation of administrative agencies and individual manufacturers has contributed to public effort design. It has created a legitimacy which facilitated the implementation of directive and ordinance. The implementation did not result in any change in direction.

Source <https://www.naturvardsverket.se/Documents/publikationer/978-91-620-5969-9.pdf>

7.1.3. Restriction of hazardous substances in Electrical and Electronic Equipment (ROHS)

The directive has been introduced into Swedish legislation by Regulation (2012: 861) on hazardous substances in electrical and electronic equipment and by the Swedish Chemicals Agency's regulations (KIFS 2017: 7).

It is important to remember that there are chemical requirements for electronics in several other regulations. These requirements apply in parallel with the requirements of the RoHS Directive.

Source <https://www.kemi.se/en/rules-and-regulations/additional-eu-rules/electric-and-electronic-equipment-rohs> (cards of electronics rules)

The regulation complements both EU and Swedish rules. Here are rules for the storage of hazardous chemical products, notification to the product register including nanomaterials, permit requirements for particularly dangerous products, chlorinated solvents, volatile organic compounds in certain colours and lacquers, mercury and mercury-containing products, formaldehyde in wood-based boards, electrical and electronic equipment and GMO .

Source <https://www.kemi.se/lagar-och-regler/kifs--kemikalieinspektionens-foreskrift/kifs-20177>

7.1.4. Energy related Products Directive (ErP or eco-design directive)

The Swedish Energy Agency controls products with the support of the law.

The Swedish Energy Agency is the responsible market control authority for eco-design and energy labelling. They make sure that the requirements of the legislation are followed to protect consumers and users from incorrect products.

In order to improve market control efficiency, the Swedish Energy Agency's staff collaborates with their European counterparts, but also with Swedish authorities that monitor other product requirements, such as electrical safety. In addition, the Energy agency also participates in a number of international market control projects to strengthen market control.



7.1.5. Extended Producers Responsibility (EPR schemes)

The Swedish system shifts the waste management cost or physical collection fully from local governments to producers. The policy applies to different goods such as packaging, newsprint, electronic products, batteries, tires, end-of-life vehicles, pharmaceutical waste, stray radioactive products and radioactive sources.

The purpose of EPR is to shift the responsibility for the waste away from the municipality to the producer and provide incentives for producers to incorporate environmental considerations in the design of their product with the end of life in mind and take a “cradle to cradle” approach to product life cycles. EPR places the responsibility for the proper end-of-life management of the waste products on the individual producers. In reality, however, producers work collectively to exert this responsibility by setting up Producer Responsibility Organisations (PROs).

Source <https://smartcitysweden.com/best-practice/337/extended-producer-responsibility-in-sweden-towards-better-waste-management/>

7.1.6. Hazardous substances / REACH Regulation

The Swedish Chemicals Agency has the main responsibility for the REACH regulation in Sweden.

Several authorities are responsible for exercising supervision of REACH and ensuring compliance with the law. For example, when supervising extended safety data sheets (safety data sheets that also contain exposure scenarios), the Swedish Chemicals Agency has a shared responsibility with the Swedish Work Environment Authority, the Swedish Environmental Protection Agency, municipalities and county boards. When it comes to supervision of the parts of an exposure scenario that deals with the working environment, the Swedish Work Environment Authority is the responsible authority. The Swedish Chemicals Inspectorate is the responsible authority when it comes to questions about what should be included in exposure scenarios and how to design them. The Swedish Environmental Protection Agency provides supervision guidance to municipalities and county boards that oversee the parts of the exposure scenario that aim to protect the external environment.

The product registers in numbers

About 2,500 notifiable companies reporting information to the product register.

In 2017, the companies registered a total of about 100,000 products.

In total, the register contains information on more than 200,000 chemical products.

Source: <https://www.kemi.se/lagar-och-regler/reach-forordningen/kort-om-reach>

7.1.7. Formaldehyde emissions

Swedish rules on formaldehyde in wood-based boards:

Wood-based boards manufactured in Sweden or imported into Sweden must not emit more than 0.124 milligrams of formaldehyde / cubic meter of air. Boards that give more than the limit value must also not be sold, transferred or used professionally. The purpose of the ban is to reduce the presence of formaldehyde in indoor air.

Prohibition of formaldehyde in wood-based boards

Formaldehyde is a substance that can cause several serious health effects, such as cancer and allergies. Therefore, it is important to reduce exposure to the substance.

In Sweden, there is a ban which means that wood-based boards manufactured or imported into Sweden must not emit more than 0.124 mg of formaldehyde / m³ air. Discs that give more than the limit value must also not be sold, transferred or used professionally.



The Swedish ban applies to raw, wood-based boards containing formaldehyde-based additives. By wood-based boards is meant chipboard, plywood, fiberboard, laminated wood and the like. In the manufacture of this type of board, adhesives are used to join the wood fibers together. The binder may contain formaldehyde which can be released from the finished wood-based board.

Source <https://www.kemi.se/lagar-och-regler/regler-som-endast-galler-i-sverige/nationella-begransningar-och-forbud/svenska-regler-om-formaldehyd-i-trabaserade-skivor>

7.1.8. EU's rules on "end-of-waste" criteria

Swedish law contains provisions on hazardous waste in the Waste Ordinance (2011: 927). The waste regulation is adapted to the new EU regulation.

But wood is not included. However, there are recycling stations in each municipality. There, Furniture (wood) is sorted as wood waste.

ENERGY RECOVERY The sorted wood waste is chipped and used for biofuel. It replaces fossil fuels, which helps reduce the greenhouse effect.

7.1.9. Flame retardants

The Swedish Civil Contingencies Agency (MSB) is responsible for issues concerning civil protection, public safety, emergency management and civil defence as long as no other authority has responsibility. Responsibility refers to measures taken before, during and after an emergency or crisis.

There are no detailed rules or recommendations in Sweden regarding fire requirements for loose furnishings. In the case of new construction or after a renovation, the building shall be provided with the correct surface layers on floors, walls and ceilings, in accordance with building regulations.

Flame retardants

There are connections between fire protection and environmental protection. One of Sweden's environmental quality goals is a non-toxic environment and in this context, certain brominated flame retardants are questioned. For more information about flame retardants and the risks of certain substances, please refer to the Swedish Chemicals Agency.

There are no requirements for flame retardants to be used. What may be relevant is to set requirements for a product's flammability and combustion properties. Flame retardants are a way of improving the properties of a material that would otherwise not meet a certain fire requirement.

MSB supports the work to get away from hazardous flame retardants and there are alternative ways to achieve fire protection. In the debate on brominated flame retardants, there have been opinions that these are irreplaceable and that a ban can jeopardize fire safety. This is wrong because there are a number of well-functioning alternatives.

Source <https://www.msb.se/en/>

7.1.10. Renewable energy Directive (RED II)

On the basis of the EU burden-sharing agreement, Sweden is required to achieve a renewable energy share of 49% by 2020. Sweden has further raised this goal so that its renewable energy share should be at least 50% of the total energy use.

The green electricity certificate system is the major policy measure in increasing the share of renewables in Sweden. From 2011, a green electricity certificate system between Norway and Sweden is in place.



The share of renewable energy at EU level must, by 2020, constitute at least 10% of the total motor fuel use in the transport sector. Liquid biofuels should meet the sustainable criteria according to the Directive.

7.1.11. Illegal logging and illegal timber trade

Nearly 70% of Sweden's land area is forested, almost half of which is plantations. Forest cover has remained unchanged between 1990 and 2015 (FAO, 2015).

Illegal logging is not a significant problem in Sweden. The country has a voluntary public procurement policy for legal timber (Brack, 2014). As an EU Member State, Sweden is required to implement the EU Timber Regulation, which came into force in March 2013.

Source <https://www.illegal-logging.info/regions/SWEDEN>

Timber regulation

The EU timber regulation is intended to counteract trade in illegally harvested timber and timber products from such timber within the EU.

The Timber Regulation prohibits trade in timber and timber products from illegal logging in the EU's internal market. It applies to both imported and Swedish products.

Anyone placing timber or timber products on the EU market for the first time is, according to the regulation, an operator and must comply with the requirements of the regulation. This means that both importers and buyers of standing Swedish forest must comply with the provisions of the regulation. Anyone who resells products that have been imported must also comply with certain provisions of the regulation.

The timber regulation applies to imports from countries outside the EU. EEA countries Norway, Iceland and Liechtenstein are counted as EU countries. If you import products from any of these countries, you are not considered an importer under the Timber Regulation.

If a company are unsure whether the company is an importer of a particular product, they can check if the company is listed as a declarant in box 8 of the customs declaration. If the company is a declarant, it is also an importer. For more information the company can contact customs representative or the Customs Administration.

In Sweden, the Swedish Forest Agency is the authority that monitors compliance with the regulations.

Products with FLEGT license and products covered by CITES are exempt from the requirements of the Timber Regulation. From November 2016, FLEGT license is required for imports of wood and timber products from Indonesia. Read more about FLEGT licenses on the Swedish Agricultural Agency's website. There you will also find information on trade in endangered tree species covered by the CITES rules.

https://www.skogsstyrelsen.se/globalassets/lag-och-tillsyn/timmerforordningen/bestammelser/timmerforordningen-995_2010.pdf

Source <https://www.skogsstyrelsen.se/lag-och-tillsyn/timmerforordningen/>

7.2. VOLUNTARY INSTRUMENTS:

7.2.1. Green Public Procurement

The public sector has responsibility for helping to achieve the generational goal and the 16 national environmental quality objectives. Green public procurement (GPP) of goods and services has been identified as an important policy instrument for achieving these goals.



The aim of stipulating environmental requirements in the purchasing of goods and services is to reduce environmental overload and contribute to sustainable consumption and production patterns.

The Swedish Environmental Protection Agency (SEPA) has conducted a survey with the aim of periodically monitoring how government agencies, municipalities, county councils and government companies are working to establish environmental requirements in connection with the purchasing of goods and services.

<https://www.naturvardsverket.se/Om-Naturvardsverket/Publikationer/ISBN/6600/978-91-620-6600-0/>

The Swedish Environmental Protection Agency (SEPA) has conducted surveys on a regular basis to follow up on the extent to which environmental requirements are stipulated in public procurement in Sweden. Surveys have been carried out in 2004, 2007 and 2009. The target group for the surveys has been people responsible for procurement in municipalities, county councils and government agencies.

SEPA conducted a new survey in 2013. The target group was not only people responsible for procurement in municipalities, county councils and government agencies, but also responsible personnel in government companies and embassies associated with the Swedish Ministry for Foreign Affairs.

In comparison with previous surveys, the method, target group and questions in the survey questionnaire have been altered so correlations with previous surveys are very few and general.

Conclusions drawn from the workshop and results of the survey are that environmental requirements stipulated in procurements have increased, and as a result there has been improvement in knowledge of environmental requirements and efforts to incorporate them. Among other things, the survey indicates that the majority of the organisations responding to the survey have governing documents, such as purchasing policies, that specify that purchases should be environmentally compliant. Despite the existence of these documents, the study indicates that environmental requirements are not stipulated in purchasing to the extent desired. One conclusion that can be drawn is that management at different levels of the organisation needs to be better at following up and demanding that environmental requirements actually are stipulated in the purchases. The survey also shows that most organisations have both a centralised and decentralised purchasing organisation, which also can have a significant impact on how environmental requirements are stipulated in connection with purchases.

There is a tendency for many people to believe that it costs more and takes a longer time to carry out procurement if environmental requirements are included. Despite this, the majority of organisations want to stipulate environmental requirements, and what is being requested are more and simpler tools – i.e., concrete help in individual cases with formulating environmental requirements for different types of purchases.

To achieve this, better training is required, and those who provide training need to have the right background and expertise. There is also a need for better internal collaboration between people knowledgeable about the environment and purchasers. To help reduce environmental impacts, organisations should first of all stipulate environmental requirements on the basis of some prioritised areas, such as within energy, the construction sector, transportation, food products, chemicals and information technology.

Environmentally compliant purchasing is an important policy instrument for helping to achieve the generational goal and national environmental quality objectives. In order for environmentally compliant purchases to have the desirable impact, the issue must be followed up and demanded at the political level to a much greater extent than what is happening today.

The most important results from this year's survey have been divided up into the areas listed below (2009 results are in parentheses when they are comparable).



Leadership and control

- 31 percent have conducted an environmental review that includes work with environmentally compliant purchases
- 72 percent took the 16 national environmental quality objectives into consideration in the environmental review
- 54 percent of the organisations regard environmentally compliant purchases as a strategic tool for achieving the generational goal and national environmental quality objectives
- 84 (82) percent responded that their organisations have procurement/purchasing policies or some central guidelines that include environmental considerations in purchasing
- 66 percent responded that the organisation has an environmental policy that includes questions about environmentally compliant purchases
- 53 (52) percent of the organisations have internal environmental objectives and/or action plans for environmentally compliant purchases
- 56 percent of the organisations that have internal environmental objectives have measurable environmental objectives that are followed up and evaluated by management
- 55 percent of the organisations have procurement organisations and/or procedures for ensuring that environmental considerations are observed in connection with carrying out purchases

Purchasing expertise

- 21 percent responded that people in management positions have undergone some training in GPP and 18 percent in environmentally compliant purchasing
- 34 percent responded that people who carry out purchasing have undergone some training in GPP and 29 percent in environmentally compliant purchasing
- 59 percent responded that there are personnel with environmental expertise who can help formulate environmental requirements and 53 percent who can evaluate tenders and follow up the agreement during the term of the agreement Implementation of purchasing
- 39 percent always or usually conduct a needs/market analysis from an environmental perspective before a purchase
- 86 percent of the organisations include the environmental perspective when the requirements for the product/service are drawn up
- 70 (57) percent of the organisations always or usually stipulate environmental requirements when purchasing
- 78 (52) percent choose the products/services that are best for the environment on the basis of specifications in the framework agreement
- 12 percent responded that they think it is easy to stipulate environmental requirements in connection with purchases
- 60 (57) percent responded that they use the Swedish Environmental Management Council's procurement criteria Opportunities and obstacles
- 64 percent responded that the greatest obstacle for environmentally compliant purchasing is a lack of knowledge

<https://www.naturvardsverket.se/Documents/publikationer6400/978-91-620-6600-0.pdf?pid=10069>



7.2.2. Environmental management in organizations

The situation of these environmental standards in Sweden is the following:

EMAS in Sweden

Number of registered organisations: 13

Number of Sites: 13

ISO 14001 in Sweden

Number of registered organisations: 4829

Number of registered organisations related to furniture (manufacture of wood and wood products): 68

At national level the main promoter of ISO 14001 is

<https://www.svenskcertifiering.se/>

Responsible in Sweden for EMAS is Swedish Environmental Protection Agency

<https://www.naturvardsverket.se/emas#>

7.2.3. Eco design methodology

The Swedish Institute for Standards SIS work with standards in this area.

Eco-design

Standardization in the area of eco-design aims to develop requirements, frameworks, guidance and supporting tools for implementing eco-design. The standards developed in this area will be useful to all organizations, projects or groups of organizations that want to apply the eco-design component of the circular economy to their business, e.g. commercial organizations, government agencies and non-profit organizations. The Environmental Management Committee has links to the work carried out internationally within the framework of ISO / TC 323 Circular Economy, through SIS / TK 616 Circular Economy.

Circular economy

The world faces major challenges in achieving the sustainability goals of Agenda 2030 and adapting communities for the future. An important tool for achieving this is circular economy. But what is it, how do we measure it and how do we implement it in business models? In SIS / TK 616, we work actively in global standardization to answer these questions and influence the standards of the future.

Circular economics is more current than ever and the need is great to learn from each other and build consensus around, among other things, how it is defined, implemented and measured. Circular economics will affect all different industries and some type of adjustment will be required from all players who want to remain relevant in times of rapid change.

At SIS, we work with standardization in this area in SIS /TK 616 Circular Economics. The committee brings together companies, authorities and organizations in a unique network that together represents Sweden. We represent Sweden within the global standardization.

By bringing together industries within the standardization, we make it possible for the agreements on standards to be broadly entrenched and for all countries to be involved in deciding what should be included in tomorrow's standard.

Work in progress

Right now, standard proposals for terminology in circular economics are being drawn up to agree on a common definition of e.g. circularity. Parallel to this, standard proposals are made regarding



how it should be measured and how we can enable implementation in, and adaptation of, business models. The standardization that is going on in the circular economy is divided into four area-specific working groups:

Group 1: Principles, Framework, Terminology, Management Systems standards

Group 2: Guidance for implementation and sectoral applications

Group 3: Measuring Circularity

Group 4: Specific Issues

The Committee actively monitors and participates in the work of the International Committee ISO / TC 323 Circular Economy. Sweden is very active in its work and works to ensure that Swedish interests are taken into account and that the quality of the standards is kept at a high level.

7.2.4. Eco labels (Type I, II, and III)

According to <http://ec.europa.eu/ecat>, there is not Swedish manufacturers of furniture that have got the EU ecolabel.

7.2.5. Chain of custody certification

The following table summarises the data for Sweden, considering the previous information:

| Scheme | Date | Total Area (ha) | Chain of Custody Certificates |
|--------|---------------|-----------------|-------------------------------|
| FSC | August 2019 | 13,314,529 | 393 |
| PEFC | December 2018 | 15,927,847 | 195 |

7.2.6. Green building certification

The following table summarises the data for Sweden, considering the previous information:

| Scheme | Date | Number of Certified Projects |
|--------|----------------------------------|------------------------------|
| BREEAM | Web-based database (August 2019) | 668 |
| LEED | Web-based database (August 2019) | 351 |

7.3. OTHER POLICIES AND STRATEGIES

7.3.1. Cascading use of wood

There was not much valid information about reuse of wood in Sweden. But can emphasize the reuse of wood products. Wooden packaging, such as pallet collars and pallets, is a good example of products that are re-used time after time in logistics and transport.

7.3.2. EU industry policy for Forestry

The forest policy decided by the Riksdag 1993 is characterized by two equal goals - one environmental goal and one production goal. The Government Bill 1992/93: 226 describes the two objectives as follows.



ENVIRONMENTAL GOAL

The forestry's natural production capacity must be preserved. A biological diversity and genetic variation in the forest must be ensured. The forest should be used so that plant and animal species that naturally belong in the forest are given the conditions to survive under natural conditions and in viable populations.

Endangered species and habitats must be protected. The forest's cultural environment values and its aesthetic and social values should be safeguarded.

PRODUCTION TARGET

The forest and forest land should be utilized efficiently and responsibly so that it provides a consistently good return. The focus of forest production should give freedom of action regarding the use of what the forest produces.

These goals will be achieved through the forest owners' own efforts and through cooperation between different forest policy resources. The forestry legislation sets out the framework and the basic requirements for how forestry should be conducted. Normally, measures beyond the requirements of the regulations are both economically and socially economically justified.

Source: <https://www.skogsstyrelsen.se/globalassets/lag-och-tillsyn/skogsvardslagen/skogsvardslagstiftning-2019-.pdf>

7.3.3. Forest-based Industries Blueprint

The 2018 government has decided on Sweden's first national forest program. The forest program has goals for five focus areas that will help achieve the program's vision, work and organization. The vision for the forest program is that "The forest, the green gold, will contribute to jobs and sustainable growth throughout the country as well as to the development of a growing bioeconomy".

- Sweden needs forest and forestry in a transition from an oil-based to a fossil-free society and to create jobs and sustainable growth throughout the country. A long-term forest program is important in promoting sustainable, competitive and bio-based industries with the forest as a base, within the framework of achieving the national environmental goals, says Rven Minister Sven-Erik Bucht.

The starting point for the continued work on the forest program is that the foundation of Swedish forest policy, which rests on two equal goals of production and the environment, is firm. This also applies to the principles of ownership and the principle of freedom under responsibility.

In order to achieve the vision for the forest program where "The forest, the green gold, contributes to jobs and sustainable growth throughout the country and to the development of a growing bioeconomy", the government has set targets for five focus areas:

1. Sustainable forestry with increased climate benefit.
2. Use of forest for more jobs and sustainable growth throughout the country.
3. Innovations and refined world-class forest raw materials
4. Sustainable use and conservation of the forest as a profile issue in Swedish international cooperation.
5. A life of knowledge for sustainable use and conservation of the forest.

The government will also decide on a couple of concrete measures based on the forest program's vision and goals, in support of the forest program's strategy. These measures will then be brought together in an upcoming action plan. The first version of the action plan will mainly include measures where the state has a primary responsibility.



The Government has previously, within the framework of the forest program, decided on initiatives to promote wood construction and commissioned SLU on improved climate forecasts from forest land.

Source: <https://www.regeringen.se/pressmeddelanden/2018/05/sveriges-forsta-nationella-skogsprogram/>

7.3.4. Bioeconomy

The government's decision and focus on the bio economy is described in Sweden's National Forest Program described in the above question.

<https://www.government.se/48f05c/contentassets/859bb18d50494ec9b5b988a28ef99ae8/fact-sheet-swedens-national-forest-programme>



8. THE NETHERLANDS

8.1. VOLUNTARY INSTRUMENTS

8.1.1. Circular Economy package of the EC

In the Netherlands the Government is very active when it comes to transforming our economy into a circular economy. In 2017 the Dutch Government signed a National Raw Materials Treaty with more than 180 stakeholders, like employers organisations, trade unions, municipalities, NGO's, environmental organisations, governments (national, regional, municipalities), etc. Goal of this treaty is to transform The Netherlands into a 100% circular economy by the year of 2050. On the 14th September 2016 the government signed the action plan 'The Netherlands circular in 2050.' <https://www.rijksoverheid.nl/onderwerpen/circulaire-economie/nederland-circulair-in-2050>

The Dutch society has to deal with what the earth is offering us. We use raw materials for food, shelter, clothing, electrical appliances, mobility and so on. In the years to come the need for raw materials will increase, in the Netherlands as well as in the rest of the world. On one side we still waste a lot of raw materials, and unnecessarily lose valuable resources, while on the other side we pollute the environment and the climate. By the year 2050 the population of the Netherlands will be over nine billion people in a relatively small country. They all need clean water, want to live healthy and safe and in good prosperity, within the frontiers of our - relatively small - country and the boundaries the planet sets us ('Sustainable Development Goals). To make that possible we must take the necessary actions minimise the use of virgin materials and re-cycle and re-use raw materials over and over again. Doing nothing is no option. In the Netherlands there is a vast majority who support the transition to a more circular economy. That's why they all undersigned the National Raw Materials Treaty.

As a result of this treaty the Dutch Government installed 5 tables of transition (1. Biomass and food, 2. Manufacturing industry, 3. Construction, 4. Plastics, and 5. Consumption goods). Each table of Transition must create a made to measure action plan for the years to come, to ensure a successful transition within the different sectors, up to 2050.

Furniture industry is part of the table of transition for 'Consumption Goods.' Within this table the Dutch Furniture Industry Federation (www.cbm.nl) has developed its own 'Sectoral Strategy and Action plan.' Taking into account all the necessary actions, we need to take, to transform our own industry into a 'Circular Furniture Industry.' Our starting point is that we take two perspectives. Firstly we take the perspective of the raw materials that are being used and wasted in the furniture industry. Secondly we take the perspective of design for re-use.

Our first challenge is to stop the incineration of mattresses. Each year more than 1,5 million mattresses are being incinerated in the waste incinerators. That must stop. CBM and the most important stakeholders voluntarily developed a proposal for an EPR scheme for mattresses. We presented our proposal to the Dutch Government and in April 2020 there will be a formal presentation of our EPR scheme for mattresses by the Dutch Government.

Furthermore we want to do something about the incineration of used panels, wood based materials, and plastics of furniture and interiors. Once again CBM is working together with a group of stakeholders to recycle and re-use all kinds of panels, (particle board, MDF, HPL etc.), wood based furniture, plastics and composites that are being used in the furniture industry. We already have developed an action plan to recycle and re-use particle board in the Netherlands. Now we are working on the recycling of MDF, which is much more difficult challenge. Since it is difficult to re-cycle MDF we are doing research to the possibilities of chemical recycling and pyrolysis.



8.1.2. Waste Electrical and Electronic Equipment Directive (WEEE)

In The Netherlands, the WEEE Directive was incorporated into national law on 14th of February 2014. Since 15 august 2018 there are 6 categories defined: 1. Temperature exchange equipment, 2. screens monitors etc, 3. lamps, 4. large equipment (more than 50 cm), 5. small equipment (no more than 50 cm), 6. small IT and telecommunication equipment (no more than 50 cm).

The EWRN is an independent network of national registers at the heart of the national implementation of Directive 2012/19/EU ("WEEE2") in the respective EU Member States.

In the Netherlands we have our own national WEEE register where our members can find all the necessary information dealing with WEEE. <https://www.nationaalweeeregister.nl/>

8.1.3. Restriction of hazardous substances in Electrical and Electronic Equipment (ROHS)

The Directive 2011/65/EU was incorporated into Dutch law in 2013. In July 2019 the Dutch government modified the Directive by adding 4 softeners on plastics in the RoHS list. For medical appliances and measuring and control equipment's it will be modified in 22 July 2021.

All Dutch regulations are put together in one national web site where our members can find all the relevant information concerning hazardous substances in Electrical and Electronic Equipment. <https://wetten.overheid.nl/BWBR0032405/2019-06-12>

8.1.4. Energy related Products Directive (ErP or eco-design directive)

The eco-design Directive 2009/125/EC was incorporated in the Dutch law by 2005 and revised in 2009. It consists of a frame work of obligatory ecological demands for all energy consuming and energy related products.

There is little information available about the level of implementation of this directive in the Netherlands. No specific actions have been identified for the application of the eco-design directive to furniture sector.

8.1.5. Extended Producers Responsibility (EPR schemes)

In the Netherlands we have some sectors where the Government introduced legally binding EPR schemes. We have legally binding EPR schemes for Electrical and Electronic equipment, batteries, car wrecks, car tires, and packaging. These EPR schemes are legally and generally binding. AN EPR scheme is generally binding for all companies in a sector, when the companies that support the EPR scheme represent more than 66% of the total sales in that specific sector.

We also have EPR schemes that are not generally binding, for example for paper and card board, and for flat glass.

In the Netherlands there is a federation for sectors that are dealing with (generally binding) EPR schemes. It is called the Federation for Producer Responsibility <https://www.producenten-verantwoordelijkheid.nl/>-Here you can find all the sectors that use EPR schemes in the Netherlands.

In 2019 CBM the employers' organisation for furniture industry (www.cbm.nl) has taken the initiative to develop a generally binding EPR scheme for mattresses. Since more than 66% of the mattress-manufacturers support this EPR scheme, the government can make it generally binding (obligatory) for all companies in the sector. To create a level playing field, this EPR scheme is also generally binding for importers of mattresses. In due course the Dutch government will formally accept our proposal for this EPR scheme (April 2020). Furthermore the government has announced the that there will be more EPR schemes for all kinds of domestic and office furniture. Since CBM is pro-active in creating these EPR-schemes, we proactively influence the government



and make EPR schemes that fit our members. The Dutch government supports sectors to take the initiative to develop their own EPR schemes.

The government is pushing more EPR schemes to be realised for all kinds of sectors. It is the most important instrument for the government to realise the goal of 100% circularity in 2050.

8.1.6. Hazardous substances / REACH Regulation

The Reach Regulation is written down in chapter 9 of the Law that deals with the environment

<https://www.rijkswaterstaat.nl/water/wetten-regels-en-vergunningen/natuur-en-milieuwetten/wet-milieubeheer.aspx>

In the Netherlands there are all kinds of websites that inform manufacturers, and consumers about hazardous substances in products. And substances that fall under the REACH regulation. There are specific regulations for products that are being used by children, for example for the production of children's beds.

8.1.7. Formaldehyde emissions

In the Netherlands we have adopted national legislation. There is a special law that deals with labour conditions in the workplace

<https://www.rijksoverheid.nl/onderwerpen/arbeidsomstandigheden>

In this law (article 4.19, attachment XIII) the threshold limit for formaldehyde is set to 0,15, mg/m³ (0,12 ppm).

Most of our furniture manufacturers and interior builders buy and use E1 panels that have low emission levels and are compliant with the above mentioned threshold limits.

On EU level there is a debate about using panels that have even lower emission levels for example half E1 or carb 2. Since the bigger EU countries like Germany and France are using these standards, it is to be foreseen that one day it will alter the EU regulations on the threshold.

There are also initiatives in the Netherlands for panels that are completely bio based and have no emission levels at all. There are all kinds of initiatives such as Ecor board who produce cradle to cradle panels and other bio based materials. <https://ecorglobal.com/>

The biggest challenge with this and other bio based initiatives is that the scale on which these panels and materials are produced is very low. This means that there still is no sound business model yet, to process these environment friendly materials, with zero emissions of formaldehyde of whatever in the furniture and contracts. We need some venture capitalist how dare to invest in factory who produce these materials. And if they are not available than we need EU funds and subsidies to stimulate those very important initiatives.

8.1.8. EU's rules on "end-of-waste" criteria

In the Netherlands we have national legislation for waste management. It is written down in de national plan for waste management (LAP3). In the LAP3 there are written down all the demands and directives for all kinds of sectors. It also gives a framework for municipalities how to deal with waste management on regional level.

The most important focus of the National Waste management plan, the transformation into a society and an industry where we don't have waste, but raw materials. Waste is the old word. In the end we don't have waste anymore, waste becomes raw materials.



In our National Waste Management Plan we have developed all kinds of sector plans, where is being described how to deal with the different substances and waste. In this web site you can find in alphabetical order <https://lap3.nl/sectorplannen/sectorplannen-0/> all the sector plans that we have developed when it comes to the use of end of life waste management and criteria.

The Netherlands are very active on recycling. Each year the Netherlands recycle some 1.700 kilo per person average. On the other hand we also produce more waste in the Netherlands than in other European countries. In the Netherlands we produce 2.500 kilo per inhabitant. The European average is 1.800 kilo per habitant. Only Finland, Luxembourg, Belgium and Eastland produce more waste than the Netherlands.

In the Netherlands we have a great amount of 'Environmental Parks' where we assemble domestic waste. Most of the municipalities have such a kind of environmental park. In these parks we collect and separate the waste and prepare it for recycling and re-use.

8.1.9. Flame retardants

In the Netherlands flame retardants fall under the REACH regulation. Furthermore we have an National body for food and goods, that deals with the protection and safety of toxic and hazardous substances in food and all other kinds of consumption goods. <https://www.nvwa.nl/>

Another body in the Netherlands is the Institute of Physical Safety (<https://www.ifv.nl/>) They support the use of chemical flame retardants to prevent casualties by fire. Unfortunately they are not open to the fact that the use of chemical flame retardants is very bad for the environment, for the labour conditions of workers and for the safety of fire fighters. CBM supports a ban on chemical flame retardants (just like EFIC), because of the above mentioned risks. Furthermore furniture that is treated with flame retardants cannot be recycled and re-used. So the use of chemical flame retardants hinders the necessary development of a good functioning circular economy in the Netherlands, in Europe and all over the world.

Just like in other EU countries in the Netherlands there are also organisations where the used of flame retardants is obligatory. For example prisons, hospitals, retirement homes etc. Ikea is active in developing a solution with an interliner, that is being put between the textiles and foam of couches, chairs and mattresses.

8.1.10. Renewable energy Directive (RED II)

The Dutch government has set up a National action plan for energy from renewable sources, based on the Directive 2009/28/EC. In this website you can find the plan for the Netherlands as well as plans for the other European countries.

<https://ec.europa.eu/energy/en/topics/renewable-energy/national-renewable-energy-action-plans-2020>

We do have plans for developing wind energy parks in the North Sea. When it comes to energy from renewable resources The Netherlands is not a front runner. In 2018 we only produced 7% of our total energy from renewable sources. A big part of our sustainable energy we buy from Norway. On the other hand we are a front runner on the sales of electrical automobiles. In 2019 15% of all car sales consisted of electrical cars.

In 2019 we, as CBM, have been doing a project for solar panels on roofs of our members.

8.1.11. Illegal logging and illegal timber trade

The Netherlands is very active in this issue. We follow all the rules of the EUTR and we control of companies are living up to those demands and criteria.



The furniture and wood sector have come up with a Green Deal to support use of certified wood. After the Green Deal we signed a covenant to enlarge the awareness of the use of wood. We try to stimulate our members only to use wood that is being harvested from certified forests. In 2018 a research showed that of the 1,8 million m³ of the used wood in that year, 91,9% is originated from certified forests.

Furthermore the government is promoting the use of certified wood in the green public procurement. In spite of these positive developments we sometimes discover that governmental institutions still use the price mechanism instead of the quality approach of green public procurement.

8.2. VOLUNTARY INSTRUMENTS:

8.2.1. Green Public Procurement

Public procurement law in The Netherlands

On 1 July 2016 the amended Dutch Public Procurement Act entered into force. The amended Public Procurement Act implements the latest EU procurement directives (2014/23/EU, 2014/24/EU and 2014/25/EU). The Public Procurement Act applies to both national and European procurement procedures.

Further details: on Legal framework <https://www.pianoo.nl/en/public-procurement-law-netherlands>

Sustainable Procurement

The Dutch government, together with regional and local authorities, wants to stimulate the market for sustainable products. Sustainable public procurement means focussing on the environmental and social impact of procurement as well as the price of the products, services or works in question. The Dutch government have developed criteria and practical instruments to implement Sustainable Procurement within the organisation.

Further details: Sustainable Public Procurement (SPP) <https://www.pianoo.nl/en/public-procurement-in-the-netherlands/sustainable-public-procurement-spp>

PIANOO

PIANOO, the Dutch Public Procurement Expertise Centre, was set up to professionalise procurement and tendering in all government departments, with a view to improving efficiency and compliance with the rules. Professional procurement can contribute to successful policy and offers value for taxpayers' money.

Further details: About PIANOO <https://www.pianoo.nl/en/about-pianoo-0>

TenderNed

TenderNed is the Dutch government's online tendering system. All Dutch authorities are obliged to publish their national and European tenders on TenderNed's announcement platform, so businesses can access all public publications from a single webpage. Through TenderNed, all parties can digitally manage all steps throughout the entire tender process. This is determined by the contracting authority. TenderNed is a certified supplier of the European publication platform Tenders Electronic Daily (TED). TenderNed is a part of PIANOO.

8.2.2. Environmental management in organizations

The Environment Management Act (EMA) (Wet Milieubeheer) is the most important environmental law. This act determines which legal tools can be used to protect the environment.



The most important instruments are environmental plans and programs, environmental quality requirements, permits, general rules and enforcement. The EMA also contains the rules for financial instruments, such as levies, contributions and compensation. The EMA Act is the legal toolbox for protecting the environment. This Act provides general rules for various subjects, from substances and waste to enforcement, public access to environmental data and appeal options. The Act entered into force on 1 March 1993. It is a framework or framework law: it contains the general rules for environmental management. More specific rules are elaborated in decisions (general administrative measures in council) and ministerial regulations.

The EMA lays down broadly which legal instruments are available to protect the environment and what principles apply to this. For example, the EMA requires companies to have an environmental permit. It must contain rules that 'offer the environment the greatest possible protection'. The EMA also determines, for example, which government issues which permits and which plans the various governments must develop. The law is constantly being adjusted, among other things as a result of changes that follow from European regulations. The EMA will merge with the Environment Act in a number of years. The Environment Act integrates more than 20 laws, 120 ministerial regulations and 40 plans in the areas of space, housing.

The most important chapters from the Environmental Management Act are:

- environmental policy plans and programs
- environmental quality requirements
- environmental impact assessments
- establishments
- waste materials
- sound
- reporting, registration and measurement obligations
- procedures for permits and exemptions

8.2.3. Eco design methodology

There is not so much information available about the use of the ISO-14006 in the Dutch Furniture industry.

However there is legislation on eco-design in the Netherlands. There are 7 different groups of products that fall under the Eco-design Directive in the Netherlands. For example Consumer Electronics, domestic household machines, Industrial products, lighting, etc.

8.2.4. Eco labels (Type I, II, and III)

The use of eco labels is typically part of the strategy of individual companies. There is a great variety of different eco labels. Some companies use it as a marketing instrument, to show to their clients which philosophy they follow. In fact there are so many labels that it is difficult to distinguish them properly. First of all this goes for the consumers. The big variety of labels, can easily lead to a label-inflation. And that is not beneficial for the transparency to consumers and clients.

8.2.5. Chain of custody certification

A group of member companies in the Dutch furniture industry use eco labels for certified wood as FSC and PEFC. These labels are chain of custody labels. Recently there is a new eco label introduced in the Netherlands called STIP (Sustainable Timber In Products). This label is company



certificate and not a chain of custody certificate. A company that is certified for STIP, must proof that all the wood he uses in his company is 100% originated from sustainable forests. You must proof that the wood you bought is 100% certified wood. The great advantage of the STIP certificate is that companies can skip a lot of red tape. Since all the wood you buy is certified by one or the other eco label, you can mix wood with various certificates (like FSC and PEFC) in each piece of furniture, without have to fulfil the complex and administrative demands, that is being required by the single chain of custody certificates like FSC and PEFC. This makes it much easier for SME companies to show that they use 100% certified wood.

8.2.6. Green building certification

In the Netherlands we have a 'Dutch Green Building Council' (<https://www.dgbc.nl/>). This council has the objective to create a future proof and healthy built environment, where future generations can work and live in safe and comfortable buildings and houses. The DGBC is also responsible for the BREEAM certification in the Netherlands.

Another interesting organisation in the Netherlands is InsideInside (<https://www.insideinside.nl/>). This organisation calculates the environmental impact or footprint of pieces of furniture materials, and interiors. The footprint is calculated on the basis of a life cycle analysis. The environmental impact or footprint is displayed in an amount of euro's. The higher the amount of euro's the higher the environmental impact.

8.3. OTHER POLICIES AND STRATEGIES

8.3.1. Cascading use of wood

The situation in the Netherlands is similar to the rest of EU regarding the effects on the furniture sector.

8.3.2. EU industry policy for Forestry

The deforestation in the Netherlands is going on at a high pace. Between 2013 and 2017 we lost 1350 hectares of wood each year. To stop deforestation the Dutch government recently published the first draft of the forest strategy for the Netherlands. It still has to be debated in the Parliament.

8.3.3. Forest-based Industries Blueprint

The situation in the Netherlands is similar to the rest of EU regarding the effects on the furniture sector.

8.3.4. Bioeconomy

In the Netherlands we have some first initiatives on bio-economy. There is a federation for bioeconomy <http://www.bio-economie.nl/>.

As CBM we have our own action plan for the circular economy. We are developing initiatives for our members with a big group of stakeholders. We are trying to stimulate the use of biomaterials, which can easily be recycled and reused. There are already interesting new biological materials that can be used as alternative feedstock for the production of panels or mattresses (polyurethane), polyester etc. In spite of these beautiful initiatives the biggest challenge will be to invest in companies and plants who want to produce these bio materials on an industrial scale. Because the business models are not yet sound enough, it takes time to build up a big enough market demand. That's why investors ad first will have to face an unprofitable top. If we wait for private



investors we want be able to create a circular economy in time. We need public-private financing and EU funds to start the necessary circular initiatives.



Annex 1.- Summary of the status at different EU Countries

| Instrument | Country | Situation/Impact on the furniture sector |
|------------------------------------|----------|---|
| Legislative Instruments | | |
| Circular Economy Package of the EC | Bulgaria | According to the deputy minister of economy in Bulgaria the private investments in circular economy are about 0.18% which is higher than the average level in the EU and thus create over 60 000 workplaces. The government prepares strategies and directives for all sectors. The leading ministries are the Ministry of Economy, the Ministry of Environment and Water and the Ministry of Agriculture, Forestry and Food. Local district administrations also are involved. The main financial instrument in the Strategy is the OP “Innovations and competitiveness”. |
| | France | The anti-waste law for a circular economy was enacted very recently, in February 2020(n° 2020-105 of 10/02/2020). This law mobilises the four major levers of public action to bring about a transition to the circular economy: training, incentive, regulation and taxation. Regarding the furniture sector, the main modification concern 2 topics: 1) the perimeter of EPR scheme for the furniture is extended to home textile decoration products from 1 January 2022 and 2) the law provides for a reinforcement of the producers' obligations to inform the consumer about the environmental characteristics of their products, with regard to a large number of criteria (durability, reparability, reusability, recyclability, etc.). An obligation to inform the consumer on the availability or non-availability of spare parts is introduced for electrical and electronic products and furniture. |
| | Italy | Italy has developed the following frameworks to support the transition to a more Circular Economy. A broad national consultation was launched in 2017 to comment on a Circular Economy strategy that the environmental ministry drafted. Based on that process, different tools are being implemented - Green new deal Strategy Italian Government approved on 10 October 2019 the so called “Climate Decree” (DL 111/2019) as a first leg of a comprehensive Italian “Green new deal”. - New waste strategy with new EPR schemes A draft new regulation calls for an EPR scheme for Textiles, furniture and mattresses to be implemented in two years. - At the end of 2019 a plastic tax of 0.45 Euro/kilo on single use plastic has been approved, with some limitations. |
| | Romania | Romania has engaged in promoting a public policy towards circular economy by the Senate Decision 3/2016 ³⁰ on the Circular Economy Package of the EU. The country does not specifically have a Circular Economy Strategy and Action Plan yet, but it has taken its first steps towards a future Action Plan for the Circular Economy, towards forbidding non-biodegradable plastic bags and the introduction of EPR schemes. The European Institute in Romania (IER) finalized in October 2019 in the framework of SPOS 2018 (2018 Project for Strategy and Policy Studies) a dedicated study on the Circular Economy. The study is part of a series of 5 studies, each one treating up-to-date matters in relation to European policies in key areas. Study No.3 – The Transition Towards a Circular Economy. From Waste Management To the |

³⁰ www.ipex.eu/IPEXL-WEB/dossier/files/download/082dbcc5529f48410152a222e51202f8.do



| Instrument | Country | Situation/Impact on the furniture sector |
|---|-----------------|---|
| | | <p>Green Economy in Romania analyses the current status of the national legislation on waste management and formulates 32 recommendations for a national Circular Economy Strategy and the National Plan for the Circular Economy.</p> <p>The Romanian National Waste Management Plan sets the 2020 target regarding the increased readiness for reuse and recycling to 50% of the amount of waste from paper, metal, plastic, glass and wood from household and similar waste, including from public services, but no data for further specific estimation of waste furniture are (publicly) available.</p> |
| | Spain | <p>The Spanish Circular Economy Strategy. Spain Circular 2030, developed by the government, is under public consultation.</p> <p>Additionally, there is an Agreement for the Circular Economy, signed by economic and social agents.</p> <p>The Spanish Waste Plan 2016-2022 sets that 2% of all furniture must be redirected from recycling or landfill and sent for repair and resale.</p> |
| | Sweden | <p>Sweden has developed a unified climate policy - climate policy action plan Prop. 2019/20:65, under the coordination of the ministry of Environment and Climate. The strategy has a long term vision, that by 2045, Sweden should have no net greenhouse gas emissions to the atmosphere, in order to achieve negative emissions thereafter.</p> <p>The Fossil Free Sweden initiative has encouraged business sectors to draw up their own roadmaps as to how they will be fossil free while also increasing their competitiveness. The roadmaps are managed by either industry associations or companies in an open process that aims to include the entire sectors. Thirteen roadmaps have been handed over to the Government and more are in progress. One of the roadmaps covers the forest sector.</p> |
| | The Netherlands | <p>In 2017 the Dutch Government signed a National Materials Treaty with more than 180 stakeholders, like employers organisations, trade unions, municipalities, NGO's, environment organisations, government (national, regional, municipalities), etc. Goal of this treaty is to transform The Netherlands into a 100% circular economy by the year 2050. 14 September 2016 the government signed the action plan 'The Netherlands circular in 2050.'</p> <p>As a result of this treaty the Dutch Government installed 5 tables of transition (1. biomass and food, 2. manufacturing industry, 3. construction, 4. chemicals, and 5. consumption goods). Each table must create a mate to measure action plan to ensure a successful transition within the different sectors.</p> <p>Furniture industry is part of the table of transition for Consumer Goods. The furniture industry has made its own sectoral action plan as part of the action plan for consumption goods. First challenge is to create a EPR scheme for mattresses. We have presented our proposal for an EPR scheme. April 2020 there will be a formal presentation of our EPR scheme for mattresses by the government. We are now working on a circular challenge to recycle and re-use all kinds of panels, (particle board, mdf, HPL etc.) and plastics/composites that are being used in the furniture industry.</p> |
| Waste Electrical and Electronic Equipment | Bulgaria | <p>In Bulgaria, the WEEE Directive comes into power on the 01.01.2014 and it regulates the separate collection, transportation, storage, pre-treatment, re-use and recycling of obsolete electrical and electronic equipment. The Ministry of Environment and Water regularly updates a list of organizations and companies utilizing the old electrical and electronic equipment, list of companies selling electrical and electronic equipment, and a list of projects related to this matter.</p> |



| Instrument | Country | Situation/Impact on the furniture sector |
|------------------|-----------------|---|
| Directive (WEEE) | France | In France, the WEEE Directive (Directive 2012/19/EU of 4 July 2012 that became effective on 14 February 2014) has been incorporated to national law through the French Decree number 2014-928 of 19 August 2014 relatives to electrical and electronic equipment wastes, and to electrical and electronic equipment used. |
| | Italy | In Italy, the WEEE Directive was incorporated to national law through the Legislative Decree 14 march 2014 n. 49. In 2018 Italy WEEE collection system collected 983.611 ton of WEEE (75% of which from domestic sources), which leads to a 42.85% collection rate, with a target set at 45%. Target of the new directive, for the following years, is set at 65% which seems rather ambitious. |
| | Romania | Directive 2012/19/EU on Waste Electrical and Electronic Equipment is transposed into the Romanian national legislation by the Government Emergency Ordinance no. 5/2015 of 2 April 2015 regarding the waste of electrical and electronic equipment and its subsequent modifications and supplements (such as the Government Emergency Ordinance no. 44/2019); Romanian National Agency for Environment Protection is in charge with the monitoring of the alignment of EEE producers to the requirements of the Government Emergency Ordinance no. 5/2015. |
| | Spain | In Spain, the WEEE Directive was incorporated into national law through the Royal Decree 110/2015 and the targets for selective collection of WEEE for 2019 have been fixed. There is not an official position about the inclusion of furniture containing EEE in the "open scope". |
| | Sweden | Swedish system works very well today. The collection level is among the highest in Europe with 16,3 kg collected per inhabitant per year. A Swedish producer's responsibility for electric and electronic products came into existence in 2001, as a result of a process which started at the beginning of the nineties. It is in this context that the success of the Swedish system must be viewed. |
| | The Netherlands | In The Netherlands, the WEEE Directive was incorporated into national law in 14th of February 2014. Since 15 august 2018 there are 6 categories defined: Temperature exchange equipment, screens monitors etc., lamps, large equipment (more than 50 cm), small equipment (no more than 50 cm), small IT and telecommunication equipment (no more than 50 cm). EWRN is an independent network of national registers at the heart of the national implementation of Directive 2012/19/EU ("WEEE2") in the respective EU Member States. |

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| Restriction of use of hazardous substances in | Bulgaria | The Directive 2011/65/EU was incorporated to the Bulgarian law by a decree #55 of the Ministerial Council on the 6.03.2013. |
| | France | In France, the RoHS Directive (Directive 2011/65/EU of 8th June 2011, that became effective on 3rd January 2013) was incorporated to national law through the French Decree Nbr 2013-988 of the 6th of November 2013 relatives to the limitation of use of certain hazardous chemicals in electrical and electronic equipment. The regulation in this text is the same as the Directive 2011/65/UE ones. |



| Instrument | Country | Situation/Impact on the furniture sector |
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| Electrical and Electronic Equipment (ROHS) | | The Directive 2017/2102 that modifies the Directive 2011/65/EU has not been transposed yet into French law. |
| | Italy | The Directive 2011/65/EU was incorporated into the Italian law by the Legislative Decree n.27 on 4 March 2014 and then amended on April 15th 2019 to incorporate new rules for exceptions. |
| | Romania | The Directive 2011/65/EU was transposed into the Romanian law by the Government Decision no. 322/2013 regarding the restrictions on the use of certain hazardous substances in electrical and electronic equipment of 25 May 2013 and the subsequent amendment legislation: |
| | Spain | The Directive 2011/65/EU was incorporated to the Spanish law by the Royal Decree 219/2013, which has been modified by the Royal Decree 1364/2018 to incorporate the Directive (EU) 2017/2102 and the Delegated Directive (UE) 2017/1975, which modify the Annex III. Not additional requirements have been defined for furniture containing EEE. |
| | Sweden | The directive has been introduced into Swedish legislation by Regulation (2012: 861) on hazardous substances in electrical and electronic equipment and by the Swedish Chemicals Agency's regulations (KIFS 2017: 7). It is important to remember that there are chemical requirements for electronics in several other regulations. These requirements apply in parallel with the requirements of the RoHS Directive. |
| | The Netherlands | The Directive 2011/65/EU was incorporated to the Dutch law in 2013. In 22 July 2019 the Dutch government modified the Directive by adding 4 softeners on plastics in the RoHS list. For medical appliances and measuring and control equipment it will be modified in 22 July 2021. |
| Energy related Products Directive (ErP or eco design) | Bulgaria | The eco-design Directive 2009/125/EC was transposed to Bulgarian law by a decree #101 by the Ministerial Council on the 21.05.2010. Private companies try to comply with the directive. On Governmental level there is insufficient information. |
| | France | The Eco-design Directive 2009/125/EC was transposed into French law by the French Decree number 2011-764 of 28 June 2011. This Decree list all the executive Regulations that represents the executive measures of the frame Directive 2009/125. The more it explains the measures of market watching (evaluation of the conformity, declaration of conformity, products markings). |
| | Italy | The eco-design Directive 2009/125/EC was transposed into Italian law through the legislative 16 February 2011, n. 15. At the moment, it seems that the EC does not intend to extend the Directive to products such as furniture.. Ecodesign principles are pushed through other tools, like GPP. |
| | Romania | Directive 2009/125/EC on ecological design requirements applicable to energy related products, with its subsequent additions and amendments has been transposed into the Romanian legislation by the Government Decision 55/2011, the framework being completed by Government Decision 580/2011, and Government Decision 1090/2013 (regarding the eco-design requirements published in the European subsequent Regulations). Although information is rather scarce about the practical implementation of eco-design requirements in energy related products manufactured by the Romanian industry, the principles as further developed by the project of the Nordic Council of Ministers to extend to non-energy related products have been taken up by the Faculty of Wood Engineering of the "Transilvania" University of Brasov. Two scientific research centers - one on Furniture Eco-design and restoration and certification in the wood industry and one on Innovative technologies and advanced products in the wood industry operate within the Faculty of Wood Engineering. |
| | Spain | The eco-design Directive 2009/125/EC was transposed to Spanish law by the Royal Decree 187/2011. |



| Instrument | Country | Situation/Impact on the furniture sector |
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| | | <p>There is little information available about the level of implementation of this directive in Spain. Some public administrations developed specific websites for this issue, for example IHOBE (public society of the Basque Government) and the Basque Ecodesign Center.</p> <p>Not specific actions have been identified for the application of the eco-design directive to furniture sector.</p> |
| | Sweden | <p>The Swedish Energy Agency is the responsible market control authority for eco-design and energy labelling. They make sure that the requirements of the legislation are followed to protect consumers and users from incorrect products.</p> |
| | The Netherlands | <p>The eco-design Directive 2009/125/EC was incorporated in the Dutch law by 2005 and revised in 2009. It consists of a frame work of obligatory ecological demands for all energy consuming and energy related products.</p> <p>There is little information available about the level of implementation of this directive in the Netherlands. No specific actions have been identified for the application of the eco-design directive to furniture sector.</p> |
| Extended Producers Responsibility (EPR) | Bulgaria | <p>The Law for waste management (which came into power on the 13.07.2012) has a whole chapter on EPR in which are defined the obligations and responsibilities. The affected producers are obliged to report regularly to the Ministry of Environment and Water and they have to prove that they properly execute their obligations.</p> <p>There is not a specific EPR scheme for furniture waste in Bulgaria, but there are several NGOs that take the matter very seriously.</p> |
| | France | <p>In France the principle of the Extended Producer Responsibility (EPR) is developed in several products families exists since 1975. The EPR that concerns the furniture products came into force in the year 2012.</p> <p>In France several texts exist to regulate the furniture ERP.</p> <p>Two Eco-organisms, Éco-Mobilier and Valdélia, are agreed until the 31st of December 2023 to provide for furniture products waste prevention, collect end treatment.</p> <p>The Order of 29 October 2019 modified the prescriptions of the Order of 27 November 2017, with the provision of eco-modulations criteria for furniture products and other ones. As for the furniture products, the eco-organisms must implement modulations for the furniture products that include wooden particles panels that include recycled wood particles (12% in 2021, 15% in 2022 and 20% in 2023).</p> |
| | Italy | <p>Extended producer responsibility schemes are in place for packaging in Italy since 1998. During the following years Italy implemented all the different directive about EPR.</p> <p>The first schemes (packaging) were designed around a mandatory body that all companies had to join. The newest allow the producers to organize themselves in a plurality of different collection schemes.</p> <p>There is not yet a specific EPR scheme for furniture waste in Italy, although a part of furniture waste is already collected and recycled with the help of the national scheme for wood packaging collection and recycling (Rilegno).</p> <p>In 2020, within the process of implementation of the “circular economy package, namely the new waste and packaging directives (2018/851 and 2018/852) the government published a draft in which it asks for an EPR scheme for furniture, mattresses and textile by 2022. The text has to be finalized by the summer of 2020.</p> |
| | Romania | <p>EPR collective systems for the majority of post-consumer waste flows, such as packaging, used batteries, WEEE, and tyres out-of-use are already in place in Romania.</p> <p>Government’s Emergency Ordinance no. 74/2018 transfers the responsibility of financing the post-consumer waste management solely to the producers and establishes clear rules regarding their operation. It modifies and complements several important legislative</p> |



| Instrument | Country | Situation/Impact on the furniture sector |
|---|-----------------|---|
| | | instruments for the Circular Economy. It clearly separates 2 waste categories – packaging waste from the trade and industry and municipal waste, which is also separated into waste collected from households and waste collected from other sources. Within the household waste category, wood waste, mattresses and furniture are clearly pointed out, too, as municipal waste. As in the case of other countries, there is not a specific EPR scheme for furniture waste in Romania. Selective yet still very limited collection is ensured via municipality services or, more often than not specialised organisations (NGOs or similar) that use this furniture for donations, re-selling or recycling. |
| | Spain | The Law 22/2011 of 28th of July, about waste and contaminated soils has a specific title about Extended Product Responsibility. There are 9 schemes nowadays operatives in Spain, but they do not include furniture. Only voluntary actions for separated collection of furniture waste are implemented in Spain, via municipality services or specialised organisations (NGOs or similar). |
| | Sweden | The Swedish system shifts the waste management cost or physical collection fully from local governments to producers. The policy applies to different goods such as packaging, newsprint, electronic products, batteries, tires, end-of-life vehicles, pharmaceutical waste, stray radioactive products and radioactive sources. |
| | The Netherlands | In the Netherlands we have several generally binding EPR schemes. It is generally binding for all companies in a sector, when the companies that support the EPR scheme represent more than 66% of the total sales in that specific sector. There also is a federation for sectors in the Netherlands that are dealing with generally binding EPR schemes. It is called Federation for Producer Responsibility https://www.producenten-verantwoordelijkheid.nl/ . Here you can find all the sectors that use EPR schemes in the Netherlands. In 2020 the government will introduce an EPR scheme for matrasses . This EPR scheme was develop by the employers’ organisation for the furniture industry CBM (www.cbm.nl) and their stakeholders. It is to be expected that there will be more EPR schemes for (office) furniture and interiors. |
| Hazardous substances / REACH Regulation | Bulgaria | On the 5th of July 2016 the Ministry of Environment and Water ussies an “Instruction for cooperation between the Ministry of Environment and Water and the National Customs Agency. There is an Expert Council for the evaluation of priority substances founded on the 5.09.2014. All companies operating on the territory of Bulgaria have access to the ECHA data base and the Ministry of Environment and Water is ready to any additional information or advice. The number of registrations dossiers is 266. |
| | France | France has got the third place into the UE concerning the number of registration files, behind Germany and UK, with 8 000 registration files for 4 000 chemicals. There are concerned a lot of small factories in France (around 1 700 000 companies). There are several French authorities implicated in the implementation of REACH regulation in France. |
| | Italy | According to data from ECHA, it has received from Italy (2018 data): <ul style="list-style-type: none"> • Registrations dossiers: 7365 • Unique Substances: 3805 |



| Instrument | Country | Situation/Impact on the furniture sector |
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| | | Regarding national legislation, the Legislative Decree 133/09 establishes the sanctionatory regime provided in the REACH and CLP Regulations. Competent authority for Reach is the Health Ministry The website of the Economic development Ministry hosts the national Reach Help Desk, a free resource for companies about the whole reach regulation http://reach.sviluppoeconomico.gov.it/ |
| | Romania | Two major legislative measures in Romania support the correct implementation of REACH Regulation (EC 1907/2006): <ul style="list-style-type: none"> • The Government Decision 822/2007 of the 1st of August 2007 on the competent authorities entitled to implement REACH Regulation in Romania. • The Government Decision 477/2009 of the 22nd of April 2009 on the sanction regime provided in REACH Regulation • Additionally, there are several Orders of the Ministry of Defense along with their respective Methodological Rules regarding the granting of some exceptions within the competence of this Ministry. A dedicated informative website and help desk support companies in the REACH registration process - http://reach.anpm.ro/Default.aspx?id=55 Regional support is provided by means of the county offices of the Environment Protection Agency (41 offices). |
| | Spain | Regarding national legislation, the Law 8/2010 establishes the sanction regime provided in the REACH and CLP Regulations. The Ministry of Ecological Transition has a dedicated website to support the different agents in the application of REACH and CLP regulation. Not identified specificities regarding the furniture sector. |
| | Sweden | The Swedish Chemicals Agency has the main responsibility for the REACH regulation in Sweden. Several authorities are responsible for exercising supervision of REACH and ensuring compliance with the law. For example, when supervising extended safety data sheets (safety data sheets that also contain exposure scenarios), the Swedish Chemicals Agency has a shared responsibility with the Swedish Work Environment Authority, the Swedish Environmental Protection Agency, municipalities and county boards. |
| | The Netherlands | The REACH Regulation is written down in chapter 9 of the Law that deals with the environment https://www.rijkswaterstaat.nl/water/wetten-regels-en-vergunningen/natuur-en-milieuwetten/wet-milieubeheer.aspx In the Netherlands there are all kinds of websites that inform manufacturers and consumers about hazardous substances in products and substances that fall under the reach regulation. There are specific regulations for products that are being used by children, for example for the production of children's beds. |
| Formaldehyde emissions | Bulgaria | In Bulgaria all companies work under the EU emission standard EN 717. There is not enough data for the control procedure. Kronospan (https://bg.kronospan-express.com/bg)(the biggest producer of particleboards and MDF) opened a modern factory where they produce chipboards with formaldehyde emissions E05. |
| | France | In France, for furniture products containing wood-based panels, a project of regulation regarding to the products emissions exists. The origin of this project is the French Environmental Code issuing from the 2009 Grenelle law and it makes reference to an order, a decree |



| Instrument | Country | Situation/Impact on the furniture sector |
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| EU's rules on end of life waste criteria | | and a technical report on the labelling of furniture products regarding their emissions of volatile pollutants. Currently the project is still in standby by the French authorities. |
| | Italy | Decree of 10 October 2008 by the Health Minister declares Class E1 mandatory for all panels entering the Italian market. https://www.gazzettaufficiale.it/eli/id/2008/12/10/08A09225/sg . More recently, the GPP criteria for furniture asked for a lower level (65% of E1) for furniture intended to be sold to the public administrations. Carb II / TSCA Panels are also accepted in case they fulfil the requirement. GPP criteria for furniture are now under revision. On the occupational exposure side, there is no specific legislation in Italy but for a long time ACGIH recommended limit of 0,3 ppm (0,37 mg/mc). TLV–STEL has been used as a reference. After the approval of the 2019/983/EC directive which amends the 2004/37/EC introducing a binding OEL of 0.3 ppm TWA for formaldehyde, the implementation process has begun. |
| | Romania | Romania does not have any particular legislation regarding the formaldehyde emissions in wood-based boards. The common practice regarding the wood-based boards placed on the market is to offer E1 type wood-based boards, but wood-based boards producers are also able to provide on demand lower formaldehyde emission wood-based boards. In Romania the General Normative for Work Safety updated in 2011 establishes the limit values for formaldehyde in 1.20 mg/cbm (for 8-hour occupational exposure) and a maximum of 3 mg/cbm for short term exposure (15 minutes). |
| | Spain | There is not specific legislation in Spain regarding formaldehyde emissions from wood-based panels. However, some Spanish manufacturers are offering low emission products. Regarding occupational exposure, the INSHT, published in December 2016 a guide about the use of formaldehyde in the wood-based boards. |
| | Sweden | Wood-based boards manufactured in Sweden or imported into Sweden must not emit more than 0.124 milligrams of formaldehyde / cubic meter of air. Boards that give more than the limit value must also not be sold, transferred or used professionally. |
| | The Netherlands | In the Netherlands we have adopted national legislation. There is a special law that deals with labour conditions in the workplace https://www.rijksoverheid.nl/onderwerpen/arbeidsomstandigheden . In this law (article 4.19, attachment XIII) the threshold limit for formaldehyde is set to 0,15, mg/m ³ (0,12 ppm). Most of our furniture manufacturers and interior builders buy and use E1 panels that have low emission levels and are compliant with the above mentioned threshold limits. On EU level there is a debate about using panels that have even lower emission levels for example half E1 or carb 2. Since the bigger EU countries like Germany and France are using these standards, it is to be foreseen that one day it will alter the EU regulations on the threshold limits for panels. |
| | Bulgaria | Not provided specific information on this instrument |
| France | In France the Waste Framework Directive 2008/98/EC has been transposed to French regulation through the French Decree Nbr 2011-828 of 11 July 2011, which includes various provisions related to the wastes prevention and management. | |



| Instrument | Country | Situation/Impact on the furniture sector |
|------------|------------------|---|
| | | According to that text, some wastes can ceased to be wastes if they passed through a waste treatment facility, when that possibility is foreseen in a European regulation, or a ministerial order specific to this type of waste, and if the completeness of the criteria established by this regulation or this order, are respected. |
| | Italy | <p>The Waste Framework Directive 2008/98/EC has been transposed into Italian legislation through the law 205/2010 as an amendment of the so called “unique environmental law 152/06.</p> <p>Italian environmental ministry worked on a lot of different end of waste criteria, and it published some of them with specific decrees but none of them was related to furniture industry.</p> <p>Other specific criteria for end of waste (also for wood recycling) can be found on the old February 5 1998 decree.</p> <p>The general rules in Italy says that if a recycling option is not addressed at European or national level with specific criteria, local authority can decide to authorize on the basis of their expertise case by case.</p> |
| | Romania | The Waste Framework Directive 2008/98/EC has been partially transposed in the Romanian national legislation by the Law 211/2011 on waste, which was later on modified and supplemented by the Government Emergency Order 68/2016 of 12 th October in order to fully transpose the Waste Framework Directive 2008/98/EC. The major change that GEO 68/2016 introduced has been the end of waste criteria. Article 6 of the updated Romanian Law 211/2011 on waste establishes the central environmental authority as the authority qualified to decide on the end of waste criteria whenever there are no such criteria in place at the EU level. |
| | Spain | At Spanish level, other types of wastes are regulated (e.g. used oils) and other are under preparation (e.g. paper and cardboard), but not related to wood or similar. |
| | Sweden | Swedish law contains provisions on hazardous waste in the Waste Ordinance (2011: 927). The waste regulation is adapted to the new EU regulation. But wood is not included. However, there are recycling stations in each municipality, where furniture (wood) is sorted as wood waste. |
| | The Netherlands | In the Netherlands we have national legislation for waste management. It is written down in de national plan for waste management (LAP3). In the LAP3 there are written down the demands and directives for all kinds of sectors. It also gives a framework for municipalities how to deal with waste management on regional level. |
| | Flame retardants | Bulgaria |
| France | | <p>In France, the regulations for the treatment of upholstered furniture do not (or almost) apply to domestic furniture.</p> <p>On the other hand, there is a regulation, with AM 18 applying to row seating in public receiving facilities and for all seating in type P establishments (prisons). There is the decree of 6 March 2006 which requires an assessment of the fire behaviour of upholstery/envelope combinations used for upholstered seats when they are subjected to an ignition source equivalent to a 20g paper cushion ignited in accordance with standard NF D 60 013. Other regulations apply also to domestic and public furniture</p> |
| Italy | | Fire prevention regulations in Italy require that upholstered furniture intended for use in many non-domestic areas pass a test (UNI 9175, class IIM) which is impossible to pass without treating the foam with flame retardant substances. |



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| | | A new fire prevention code, entered gradually into force starting from 2015, has provided an alternative, and less prescriptive, path to compliance. The requirements for materials are dependent on the general risk assessment made by the designer of the entire building. In this case, class 11M furniture is not always necessary. |
| | Romania | No specific legislation regarding the use of flame retardants in Romania. General fire safety legislation applies to wooden houses and wooden elements used in construction, such as the Romanian Law 10/1995 on the quality of constructions and Law 307/2006 on fire safety, C58 -1996 -Norme tehnice privind ignifugarea materialelor și produselor combustibile din lemn și textile utilizate în construcții; together with the general applicable norms for fire safety and C 58-196 Technical Norms regarding the Fire-Proofing of Wooden Materials and Products and of Textiles Employed in Constructions. |
| | Spain | Spain, among other countries, has introduced fire requirements for loose furnishings, covering public areas such as hospitals, prisons, hotels, theatres etc., but not for domestic environment. |
| | Sweden | The Swedish Civil Contingencies Agency (MSB) is responsible for issues concerning civil protection, public safety, emergency management and civil defence as long as no other authority has responsibility. Responsibility refers to measures taken before, during and after an emergency or crisis. There are no detailed rules or recommendations in Sweden regarding fire requirements for loose furnishings. In the case of new construction or after a renovation, the building shall be provided with the correct surface layers on floors, walls and ceilings, in accordance with building regulations. |
| | The Netherlands | In the Netherlands flame retardants fall under the REACH regulations. Furthermore we have a National body for food and goods, that deals with the protection and safety of toxic and hazardous substances in food and all other kinds of consumption goods. https://www.nvwa.nl/ Another body in the Netherlands is the Institute of Physical Safety (https://www.ifv.nl/) They support the use of chemical flame retardants to prevent casualties by fire. Unfortunately they are not open to the fact that the use of chemical flame retardants is very bad for the environment, for the labour conditions of workers and for the safety of fire fighters. CBM support a ban on chemical flame retardants (just like EFIC), because of the abovementioned risks. Furthermore furniture that is treated with flame retardants cannot be recycled and re-used. So the use of chemical flame retardants hinders the necessary development of a good functioning circular economy in the Netherlands, in Europe and all over the world. |
| Renewable energy Directive (RED II) | Bulgaria | Consumption of wood-based fuels in Europe has been growing at a high and steady pace over the last 10 years or more. This trend is expected to continue in 2020. Bulgaria is no exception, even more so: there is a real boom in the construction of pelletizing plants, the demand for wood both for the domestic market and for export is growing strongly. |
| | France | In France, the objective of share of renewable energies of gross final energy consumption in 2030 is 32 %. In 2017 this value was 16.59%. |
| | Italy | Original target of 17% of renewable energy by 2020 was already met in Italy in 2015. New targets set in the recently approved PNIEC 2019 call for a 30% by 2030 on total gross consumption (55% of electric consumption, 33,9% of thermal energy). Target could be changed according to the new legislation on climate by the Commission. |
| | Romania | Since 2014, Romania has exceeded its target set for 2020 on renewable energy (24% of final energy consumption), registering a percentage of 24.8%. The 2016 structure of the electricity production is provided in proportion of 42.39% from renewable sources, with |



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| | | hydro-energy being the main driver (28.86%). According to its UNO-submitted Voluntary National Review, Romania managed to reach and surpass expectation regarding its target for 2020 of reduction by 19% of primary energy consumption. |
| | Spain | The situation is similar to the rest of EU. For example, AFABIOR is the first Spanish Association that promotes the bio-fuels of 2 nd generation from waste derived from biomass, such as pruning scraps, or bio fraction of urban waste (paper, wood, textile, etc.); and renewables: waste intended to landfill. |
| | Sweden | On the basis of the EU burden-sharing agreement, Sweden is required to achieve a renewable energy share of 49% by 2020. Sweden has further raised this goal so that its renewable energy share should be at least 50% of the total energy use. The green electricity certificate system is the major policy measure in increasing the share of renewables in Sweden. From 2011, a green electricity certificate system between Norway and Sweden is in place. The share of renewable energy at EU level must, by 2020, constitute at least 10% of the total motor fuel use in the transport sector. Liquid biofuels should meet the sustainable criteria according to the Directive. |
| | The Netherlands | The Dutch government has set up a National action plan for energy from renewable sources, based on the Directive 2009/28/EG https://ec.europa.eu/energy/en/topics/renewable-energy/national-renewable-energy-action-plans-2020 We do have plans for developing wind energy parks in the North Sea. When it comes to energy from renewable resources The Netherlands is not a front runner. In 2018 we only produced 7% of our total energy from renewable sources. A big part of our sustainable energy we buy from Norway. On the other hand we are a front runner on de sales of electrical automobiles. In 2019 15% of all car sales consisted of electrical cars. In 2019 we have been doing a project for solar panels on roofs of our members. |
| Illegal logging and illegal timber trade | Bulgaria | The annual volume of illegal logging in Bulgaria reaches 2.4 - 2.7 million cubic meters. This is one quarter or one third of the total production, which equals BGN 150 million a year. From November 2016 will be running an electronic timber sales system, which will save time and money for the bidders, increase competition and eliminate the possibility of corruption and reduce the illegal trades. |
| | France | In France, the circular DGPAAT/SDFB/C2013-3029 (from 14th march 2013) sets out the provisions of the EUTR Regulations that come into force on March 3, 2013. It is complemented by the DGPAAT/SDFB/2014-992 (2014) procedure for the control of operators responsible for the placing on the market of timber or timber products which have to comply with the obligations of the EU GBER. More recently, the French government has developed a national strategy to combat imported deforestation for the period 2018-2030 It aims to halt by 2030 the import of unsustainable forest or agricultural products. |
| | Italy | In Italy, the EUTR has been implemented in Italy through legislative Decree n.178/2014, and entered into force 25 December 2014. Additional measures were added on 23 February 2015. Competent authority is ministry for agriculture and forestry. Criminal penalties apply to operators placing illegal timber on the market and can include fines (ranging from € 2,000 to € 50,000) and/or detention (from one month to one year) and/or seizure of timber. • Administrative penalties apply where an operator fails to put in place or maintain a due diligence system (fines ranging from € 5 to € 5,000 for each 100kg of merchandise with a minimum fine of € 300 and a maximum fine of € 1,000,000). In practice, such fines may be combined with administrative penalties applying to operators for lack of record keeping (ranging from € 1,500 to € 15,000). |



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| | | FLEGT regulation is linked to Ministerial decree n. 18799 of the 27.12.2012 |
| | Romania | FLEGT Regulation has been implemented in Romania by means of two major documents: <ul style="list-style-type: none"> • The Government Decision 668/2011 designates the qualified authorities to carry out the implementation of the Regulation 2010/995/EU defining the obligations of operators selling or distributing timber and timber products on the EU market. • The Government Decision 470/2014 on the wooden material transport and trade and EUTR 2010/995 implementation and the subsequent legislation (Government Decision 787/2014) provides the national legal framework for the implementation of FLEGT Regulation (2010/995/EU). It sets the detailed legal norms for the implementation of the FLEGT Regulation and introduces SUMAL, the Integrated National Information System to provide harvested wood ongoing traceability right from the harvest place by GSM data integration. |
| | Spain | In Spain, the EUTR and the FLEGT Regulation is related to the Royal Decree 1088/2015, to ensure the legality of the commercialization of wood and wood products. The State Information System, called LIGNUM, supplies information about statistical data on EUTR and FLEGT management in Spain |
| | Sweden | Nearly 70% of Sweden's land area is forested, almost half of which is plantations. Forest cover has remained unchanged between 1990 and 2015 (FAO, 2015). Illegal logging is not a significant problem in Sweden. The country has a voluntary public procurement policy for legal timber and as an EU Member State, Sweden is required to implement the EU Timber Regulation, which came into force in March 2013. In Sweden, the Swedish Forest Agency is the authority that monitors compliance with the regulations. |
| | The Netherlands | The Netherlands is very active in this issue. We follow all the rules of the EUTR and we control of companies are living up to those demands and criteria. The furniture and wood sector have come up with a Green Deal to support used of certified wood. After the Green Deal we signed a covenant to enlarge the awareness of the use of wood. We try to stimulate our members only to use wood that is being harvested form certified forests. In 2018 a research showed that of the 1,8 million m3 of the used wood in that year, 91,9% is originated from certified forests. Furthermore the government is promoting the use of certified wood in the green public procurement. In spite of this positive development we sometimes discover that governmental institutions still use the price mechanism instead of the quality approach of green public procurement. |

Voluntary Instruments

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| | Bulgaria | Bulgaria developed a National Strategy for Development of the Public Procurement Sector in Bulgaria 2014-2020 and Action Plan 2014-2020 (the latter includes as a measure the elaboration of Guidelines on GPP - in progress). |
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| Green Public Procurement (GPP) | | In the National GPP Strategy have been developed criteria for 5 priority product groups, not including furniture: |
| | France | <p>France has published several green procurement guidelines. The first circular dated of 2008 establishes the concept of Exemplary State regarding the Sustainable Development, and particularly about the Green Public Procurement, with technical files by family of product. One of them is about furniture buying.</p> <p>In 2015, an Order about public market precise how to add sustainable goal before public tender. (Ordonnance n° 2015-899 du 23 juillet 2015 relative aux marchés publics)</p> |
| | Italy | <p>With a view to adopting the European GPP program, Italy has adopted The Minimum Environmental Criteria (CAM), which are the environmental requirements defined for the various stages of the purchase process, aimed at identifying the best design solution, product or service from an environmental point of view throughout the life cycle, taking into account availability market.</p> <p>The CAM is defined within the framework of the Plan for the environmental sustainability of consumption in the public administration sector and are adopted by Decree of the Minister of the Environment for the Protection of the Territory and the sea.</p> <p>Their systematic and homogeneous application allows the spread of environmental technologies and environmentally preferable products and produces a leverage effect on the market, inducing less virtuous economic operators to adapt to the new demands of the public administration. In Italy, the effectiveness of CAM has been ensured thanks to art. 18 of Law 221/2015 and, subsequently, art. 34 containing "Energy and environmental sustainability criteria" of Legislative Decree 50/2016 "Procurement Code" (amended by Legislative Decree 56/2017), which made it mandatory for all contracting stations to apply it. Furniture criteria third revision is undergoing during 2020</p> |
| | Romania | <p>Green Public Procurement in Romania is regulated by Law 69/2016 of 25th of April 2016 on Green Public Procurement, which promotes sustainable consumption and production and resource efficiency among its specific objectives. The central public authority that is legally in charge is the Ministry of Environment. Despite having had a specific law since 2016, Romania is still among the EU countries that does not yet officially have a National Plan for GPP, but official information confirms a 2nd version of this Plan is currently under peer review. It has, however, had since October 2018 the Guide for green public procurement that includes the minimum requirements regarding the environmental protection for certain groups of products and services.</p> <p>Several public authorities such as the Ministry of Environment and the Romanian North-Eastern Regional Development Agency have taken some steps lately in order to strengthen training and build capacity towards the implementation of GPP, including their involvement into 2 large European projects GPPbest and GPP-Stream.</p> |
| | Spain | <p>Spain published their last National Action Plan on GPP in February 2019, for the period (2018-2025). It determines a group of 20 priority goods, works and services, including Furniture and wall panels.</p> <p>At regional level, there are some regions that are very active on the implementation of GPP in their administrative processes, for example the Basque Country.</p> |
| Sweden | <p>The Swedish Environmental Protection Agency (SEPA) has conducted surveys on a regular basis to follow up on the extent to which environmental requirements are stipulated in public procurement in Sweden. Surveys have been carried out in 2004, 2007 and 2009. The target group for the surveys has been people responsible for procurement in municipalities, county councils and government agencies. SEPA conducted a new survey in 2013. The target group was not only people responsible for procurement in municipalities, county councils and government agencies, but also responsible personnel in government companies and embassies associated with</p> | |



| Instrument | Country | Situation/Impact on the furniture sector |
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| | | the Swedish Ministry for Foreign Affairs. Conclusions drawn from the workshop and results of the survey are that environmental requirements stipulated in procurements have increased, and as a result there has been improvement in knowledge of environmental requirements and efforts to incorporate them. |
| | The Netherlands | Green Public Procurement is well developed in the Netherlands. We do have an institution to support socially responsible procurement. https://www.pianoo.nl/nl/themas/maatschappelijk-verantwoord-inkopen-mvi-duurzaam-inkopen |
| Environmental management in organizations | Bulgaria | In Bulgaria, the implementation of EMAS in the furniture sector is low (only 1 company under de NACE code 31). Regarding ISO 14001, in 2017 there were 33 certified organisations related to furniture (manufacture of wood and wood products). At regional level there are some active organisations that promote the implementation of EMAS in companies, for example in Consejo (https://www.consejo.bg/). |
| | France | In France, the number of registered organisations on ISO-14001, related to furniture (manufacture of wood and wood products), is 17. |
| | Italy | In Italy, the implementation of EMAS in the furniture sector is medium-low (5 company under de NACE code 31). Regarding ISO 14001, in 2020 there were 40 certified organisations related to furniture (manufacture of wood and wood products) for 67 certified sites |
| | Romania | In Romania, the implementation of EMAS in the furniture sector is low (only 1 company under de NACE code 31). Regarding ISO 14001, in 2017 there were 39 certified organisations related to furniture (manufacture of wood and wood products). |
| | Spain | In Spain, the implementation of EMAS in the furniture sector is low (only 1 company under de NACE code 31). Regarding ISO 14001, in 2017 there were 49 certified organisations related to furniture (manufacture of wood and wood products). |
| | Sweden | In Sweden, the implementation of EMAS in the furniture sector is low (no companies under de NACE code 31). Responsible in Sweden for EMAS is Swedish Environmental Protection Agency. Regarding ISO 14001, in 2017 there were 68 certified organisations related to furniture (manufacture of wood and wood products). |
| | The Netherlands | In the Netherlands companies use the ISO 14001 for milieu management. The implementation and use of the 14001 in the furniture sector is not wide spread amongst the SME companies. Some of the biggest companies use it. In the Netherlands we have an Environmental Law that is the most important guideline for all environmental measures to be taken by companies. |
| | Eco-design methodology | Bulgaria |
| France | | No quantitative data was encountered regarding the ISO 14006 management system. It is considered in France as non-certifiable. |
| Italy | | The standard is intended to be used by those organizations that have implemented an EMS in accordance with ISO 14001, but can help integrating eco-design in other management systems. The guidelines are applicable to any organization regardless of its size or activity. There is not too much information about the use of ISO 14006 certification in Italy and there is not evidence of using it in the furniture sector |
| Romania | | No information on the number of companies that are ISO-14006 certified is available in Romania. |



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| | | The Faculty of Wood Engineering of the “Transilvania” University of Brasov currently provides a 2-year <i>Master of Science Study Programme on Furniture Eco-Design and Restoration</i> . |
| | Spain | It is estimated that there are 126 companies certified by this standard in Spain. About 18% of them belong to the furniture sector. There are also some public organisations that published specific eco-design guidelines for the furniture sector (e.g. IHOBE in the Basque Country). |
| | Sweden | Standardization in the area of ecodesign aims to develop requirements, frameworks, guidance and supporting tools for implementing ecodesign. The Environmental Management Committee has links to the work carried out internationally within the framework of ISO / TC 323 Circular Economy, through SIS / TK 616 Circular Economy. |
| | The Netherlands | See above on Ecodesign Directive legislative instrument |
| Eco labels (Type I, II, and III) | Bulgaria | Not provided specific information on this instrument |
| | France | There are 47 company NF Environment certified furniture products in France whereas there are not products with the EU ecolabel certification. Within the EPD System, there are no furniture products registered for France. In the new circular economy law (dated of 2020 February) an environmental labelling or an environmental and social labelling is featured. Currently this environmental display is voluntary. |
| | Italy | The situation in Italy is similar to the rest of Europe. Only one company of the furniture sector have the EU ecolabel and also only one with EPD System in the Furniture Sector: Arper Spa it is the first design company in Italy, and the second in Europe, to obtain the EPD Environmental Process Certification for the product category Seats and Furniture, which today has 5 EPD certified sessions. |
| | Romania | 21 Romanian companies have been awarded EU Eco-Label through 2015 - January 2002, out of which one company is a manufacturer of outdoor furniture (Rainbow Company Production S.R.L.). The large majority of those companies are paint producers, out of which some are suppliers for the furniture sector. There are only 4 companies in Romania that account together for 11 EPD Systems, but none of them is associated to furniture. Three of these companies are associated with construction materials. |
| | Spain | The situation in Spain is similar to the rest of Europe. Despite some Spanish regions have their own eco-labelling system, the implementation in the furniture sector is low. For example, only one company of the furniture sector have the EU ecolabel and also only one with EPD System. |
| | Sweden | According to http://ec.europa.eu/ecat , there is not Swedish manufacturers of furniture that have got the EU ecolabel. |
| | The Netherlands | The use of eco labels is typically part of the strategy of individual companies. There is a great variety of different eco labels. Some companies use it as a marketing instrument, to show to their clients which philosophy they follow. In fact there are so many labels that it is difficult to distinguish them properly. First of all this goes for the consumers. The big variety of labels, can easily lead to a label-inflation, which is not beneficial for the transparency to consumers and clients. |
| | Bulgaria | In Bulgaria there were 469 Global FSC Chain of Custody certificates in August 2018 and 6 PEFC Chain of custody certificates in 2018. |



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| Chain of custody certification (FSC / PEFC) | France | In France, there were 768 Global FSC Chain of Custody certificates in February 2020 and 2,065 (1,079 for wood based product manufacturers) PEFC Chain of custody certificates in 2018. |
| | Italy | The situation in Italy is similar to the rest of Europe. There were 2,294 Global FSC Chain of Custody certificates in January 2019 and 1095 PEFC Chain of custody certificates in 2020. The Total Area (ha) in Italy certified FSC is amount 65,433 ha and 881.068,93 ha certified PEFC |
| | Romania | FSC-certified forest area of 2,829,263 ha represents about 42% of the total forest area in Romania, which makes FSC the main forest certification partner for the moment and with 724 Chain of Custody Certificates. There is currently no PEFC-certified forestry area in Romania due to technical issues related to accreditation. However, there were 48 PEFC Chain of Custody Certificates in the country. |
| | Spain | The situation in Spain is similar to the rest of Europe. There were 1,042 Global FSC Chain of Custody certificates in August 2019 and 888 PEFC Chain of custody certificates in 2018 |
| | Sweden | In Sweden there were 393 Global FSC Chain of Custody certificates in August 2019 and 195 PEFC Chain of custody certificates in December 2018 |
| | The Netherlands | A group of member companies in the Dutch furniture industry use eco labels for certified wood as FSC and PEFC. These labels are chain of custody labels. Recently there is a new eco label introduced in the Netherlands called STIP (Sustainable Timber In Products). This label is company certificate and not a chain of custody certificate. A company that is certified for STIP, must proof that all the wood he uses in his company is 100% originated from sustainable forests. You must proof that the wood you bought is 100% certified wood. The great advantage of the STIP certificate is that companies can skip a lot of red tape. Since all the wood you buy is certified by one or the other eco label, you can mix wood with various certificates (like FSC and PEFC) in each piece of furniture, without have to fulfil the complex and administrative demands, that is being required by the single chain of custody certificates like FSC and PEFC. This makes it much easier for SME companies to show that they use 100% certified wood. |
| Green building certification (BREEAM / LEED) | Bulgaria | At August 2019 in Bulgaria there're 27 buildings/projects BREEAM certified (0,1% of total) and 39 LEED certified. (1% of total) |
| | France | The French HQE™ certification created in 2004 is a voluntary approach for the construction, renovation or operation of all buildings. Whereas in France the first LEED certification arrived in 2010 and the first BREEAM certification arrived in 2011, the first HQE™ was obtained in 2005. At August 2019 in France there're 1,878 buildings/projects BREEAM certified and 125 LEED certified, Around 1,300 are certified by HQE™ (2018). |
| | Italy | At August 2019 in Italy there're 185 buildings/projects BREEAM certified and 388 LEED certified. The number of LEED certified project in Italy account on the 10,3% of the all LEED projects in Europe. |
| | Romania | At August 2019, in Romania, there are 169 buildings/projects BREEAM certified and 93 LEED certified. |
| | Spain | The situation in Spain is similar to the rest of EU regarding the effects on the furniture sector. To mention that Spain represents the 16.5% of all LEED certifications in EU. |
| | Sweden | At August 2019, in Sweden, there are 668 buildings/projects BREEAM certified and 351 LEED certified. |



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| | The Netherlands | <p>In the Netherlands we have a 'Dutch Green Building Council' (https://www.dgbc.nl/). This council has the objective to create a future proof and healthy built environment, where future generations can work and live in safe and comfortable buildings and houses. The DGBC is also responsible for the BREEAM certification in the Netherlands.</p> <p>Another interesting organisation in the Netherlands is InsideInside (https://www.insideinside.nl/). This organisation calculates the environmental impact or footprint of pieces of furniture materials, and interiors. The footprint is calculated on the basis of a life cycle analysis. The environmental impact or footprint is displayed in an amount of euro's. The higher the amount of euro's the higher the environmental impact.</p> |
| OTHER POLICIES | | |
| Cascading use of wood | Bulgaria | <p>Campaign - a new life of used wood, through the collection, sorting, treatment and recycling of wood waste started in Burgas. It is part of the strategy for responsible and sustainable development of Kronospan.</p> <p>The initiative envisages the treatment of wood waste from packaging, households, construction and industry. The resulting raw material will be used in the production of particle board.</p> |
| | France | <p>Not specific information is provided because it was considered that this topic is closely related to the one regarding the Extended Producer Responsibility (EPR) scheme developed for furniture products 2012 (see previous point).</p> |
| | Italy | <p>Regarding the theme of the cascade use of wood The Italian wood furniture industry is first in Europe in circular economy: 93% of the chipboard panels produced in Italy is made of recycled wood, thus aligning with the 4R Framework of the European Commission and the Communication at the end of 2018 on the update of the European Bioeconomy Strategy, which explicitly asked to prefer the cascade use of the wood resource.</p> <p>In Italy, unlike the Northern European countries, less than 30% of the wood biomass is used for energy purposes:</p> |
| | Romania | <p>In Romania certain companies identified correctly the potential of the true cascading use of wood. It happens in the furniture suppliers industry lately, where Egger company, a well-known wooden-based boards manufacturer (chipboard, OSB and MDF), has started collecting wood waste from every possible source - from municipality to households, retail, beverage and logistic sectors - to use in the manufacturing process of its products. Additionally, a biomass thermal power plant with co-generation supports the whole process.</p> |
| | Spain | <p>The situation in Spain is similar to the rest of EU regarding the effects on the furniture sector.</p> |
| | Sweden | <p>There was not much valid information about reuse of wood in Sweden. But can emphasize the reuse of wood products. Wooden packaging, such as pallet collars and pallets, is a good example of products that are re-used time after time in logistics and transport.</p> |
| | The Netherlands | <p>The situation in the Netherlands is similar to the rest of EU regarding the effects on the furniture sector.</p> |

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| | Bulgaria | The main strategic document in the field of the forest sector of Bulgaria is the National Strategy for the Development of the Forest Sector in the Republic of Bulgaria for the period 2013 - 2020, adopted by the Council of Ministers (Council of Ministers) in November 2013. In |
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| EU industry policy for Forestry | | the Strategic Plan for the Development of the Forestry Sector in the Republic of Bulgaria, 2014-2023., which is in practice an action plan for the implementation of the National Strategy, has set operational objective for the sustainable production and consumption of biomass as a renewable energy source. |
| | France | The National Forest and Wood Programme (PNFB) has been designed in close consultation with all stakeholders in the forestry & wood sector as well as with several government ministries. It defines the focuses for forestry policy over the 2016-2026 period. 75% of the French forest is privately owned against 15% publicly locally owned and 10% by central government. 71% of the species constitute hardwood. |
| | Italy | The objective of the Italian government, in line with the European Commission's New Forestry Strategy 2030, is to enhance the role of the supply chain and the national wood-furniture sector by placing it as a central player in the fight against climate change, as a supply chain that uses renewable raw materials and capable of exercising a CO2 storage function, such as wood. Consolidate the potential of local supply chains of the wood raw material, in particular in the areas of the Alpine Region and in the market failure areas, where the wood raw material processing and transformation chain can be an important driver of employment. Enhance the share of sustainable managed forests not only with a view to forest conservation but with the economic enhancement of the timber present on the national territory is one of the objectives set by the Ministry of Forestry Policies in the Legislative Decree 34/2018. |
| | Romania | The National Forestry Strategy 2018 - 2027 was developed following the principles of sustainable development and has the role of providing benchmarks and predictability to the forestry sector for a 10 year period. Concrete and measurable measures and sub-measures will allow monitoring and intermediate and final evaluation of their performance and represent an outline of a future detailed Plan of Action. The main law that regulate the forestry sector is Law 46/2008 - The Forestry Code (republished), with its subsequent modifications and supplements. |
| | Spain | The forest planning in Spain is articulated, at different scales. At the strategic level through the Spanish Forest Strategy, the Spanish Forest Plan, and the Autonomous Forest Plans and at tactical level, the so-called Forest Resources Management Plans (PORF). However, this approach is only focused on forests management. |
| | Sweden | The forest policy decided by the Riksdag 1993 is characterized by two equal goals - one environmental goal and one production goal, described by the Government Bill 1992/93: 226. These goals will be achieved through the forest owners' own efforts and through cooperation between different forest policy resources. The forestry legislation sets out the framework and the basic requirements for how forestry should be conducted. |
| | The Netherlands | The deforestation in the Netherlands is going on at a high pace. Between 2013 and 2017 we lost 1350 hectares of wood each year. To stop deforestation the Dutch government recently published the first draft of the forest strategy for the Netherlands. It still has to be debated in the Parliament. |
| | Bulgaria | The situation in Bulgaria is similar to the rest of EU regarding the effects on the furniture sector. |
| | France | The French forest employs 440,000 people and generates a turnover of 60 billion euros per year, i.e. nearly 3% of GDP (source: Agreste). |



| Instrument | Country | Situation/Impact on the furniture sector |
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| Forest Based Industries Blueprint | | Introduced by the Energy Transition Law for Green Growth (LTECV), the National Low Carbon Strategy (SNBC) is France's roadmap to combat climate change. In order to achieve the carbon neutrality set out in the Climate Plan by 2050, an additional mobilization target of 12 million m ³ of wood from French forests per year by 2026 has been set by the National Wood Forest Program 2016-2026 (PNFB). |
| | Italy | <p>In April 2018, with the ministerial decree Legislative Decree 34/2018, <i>the Consolidated Law on forests and forestry chains was published</i>: a document that aims not only to safeguard the existing forest heritage on the national surface with a significant action of mapping of existing forest areas, but at the same time aims to enhance and spread the practice of sustainable forest management of the raw material wood.</p> <p>The new Legislative Decree focuses on the role of forests and their sustainable management as one of the key elements for the fight against climate change and for the strengthening of the national economy: The forestry production sector creates in Italy jobs for over 400 thousand people. The management of the forest and its socio-cultural enhancement could develop an induced over 300 thousand jobs, in particular for the rural and internal areas of the country.</p> <p>The objective of the Italian government, in line with the European Commission's New Forestry Strategy 2030, enhance the role of the supply chain and the national wood-furniture sector by placing it as a central player in the fight against and against climate change, as a supply chain that uses renewable raw materials and capable of exercising a CO₂ storage function, such as wood</p> |
| | Romania | <p>The Law 46/2008 - The Forestry Code specifically state as objective ensuring sustainable supply of raw materials. However, a targeted framework for the implementation of forest-based industries blueprint has not been identified.</p> <p>Although the National Forestry Strategy 2018-2027 formulated a more coherent vision on the forestry sector goals and a plan of measures, concrete detailed plans need to be established.</p> |
| | Spain | The situation in Spain is similar to the rest of EU regarding the effects on the furniture sector. |
| | Sweden | <p>The 2018 government has decided on Sweden's first national forest program. The forest program has goals for five focus areas that will help achieve the program's vision, work and organization. The vision for the forest program is that "The forest, the green gold, will contribute to jobs and sustainable growth throughout the country as well as to the development of a growing bioeconomy".</p> <p>The Government has previously, within the framework of the forest program, decided on initiatives to promote wood construction and commissioned SLU on improved climate forecasts from forest land.</p> |
| | The Netherlands | The situation in the Netherlands is similar to the rest of EU regarding the effects on the furniture sector. |
| Bioeconomy | Bulgaria | Bulgaria is still developing a National Bioeconomy Strategy. In 2017 Stara Zagora, which is ranked second in GDP per capita after Sofia region, published a strategy for developing the bioeconomy in the region. |
| | France | In 2015, the Ministries in charge of Ecology, Research, Industry, Agriculture and Forestry launched work to develop a bioeconomy strategy. The action plan for the period 2018-2020 translates the bio-economy strategy into operational actions divided into five areas. 1) improving |



| Instrument | Country | Situation/Impact on the furniture sector |
|------------|-----------------|--|
| | | knowledge; 2) promoting the bioeconomy and its products to the general public; 3) creating the conditions to meet demand; 4) producing, mobilizing and sustainably transforming bioresources; 5) lifting the brakes and mobilizing the financement |
| | Italy | <p>During the high-level conference "The Italian Bioeconomy: a revised strategy and a new roadmap to intensify the contribution to the sustainable growth of the country", held in Rome on 14 May 2019 at the Presidency of the Council of Ministers, the new strategy for the bioeconomy ("BIT Bioeconomy in Italy. A New bioeconomy strategy for a sustainable Italy") was drawn up by the national coordination table launched within the National Committee for Biosafety, Biotechnology and Life Sciences.</p> <p>The Bioeconomy Strategy, a sector which in Italy is worth € 330 billion in annual turnover and 2 million jobs, has to be adapted according to the EU strategy and to the new investments foreseen by the next Horizon 2021-2027 Program. The Strategy aims to offer a shared vision of economic, social and environmental opportunities and the challenges connected with the implementation of an Italian Bioeconomy rooted in the territory. It also represents an important opportunity for Italy to strengthen its role in promoting sustainable growth in Europe and in the Mediterranean basin.</p> |
| | Romania | Romania has made significant progress in bioeconomy in recent years. These were stimulated by the maturation of the Romanian scientific offer in this field, including opportunities for investments in laboratories and equipment, human resources training and the creation of partnerships. Although a national strategy on bioeconomy is not yet available, important steps have been made through the involvement of the scientific community in a series of research projects. |
| | Spain | In March 2016, the "Spanish strategy on Bioeconomy. Horizon 2030" was published. It aims to boost economic activities and improve the competitiveness and sustainability of productive sectors that are linked to the use of biological-based resources. Apart of this point, no major differences of the level of effects are identified compared with the rest of EU. |
| | Sweden | The government's decision and focus on the bio economy is described in Sweden's National Forest Program described in the above instrument. |
| | The Netherlands | <p>In the Netherlands there are some first initiatives on bio-economy, such as the Federation for Bioeconomy http://www.bio-econoie.nl/.</p> <p>CBM has its own action plan for the circular economy, developing initiatives for its members and trying to stimulate the use of biomaterials, which can easily be recycled and reused. There are already interesting new biological materials that can be used as alternative feedstock for the production of panels or mattresses (poly-urethane, polyester etc.). The biggest challenge will be to invest in companies and plants who want to produce these bio materials on an industrial scale. Because the business models are not yet sound enough, it takes time to build up a big enough market demand.</p> |

