Portugal Market Report 2023

Index

1 GENERAL ECONOMIC TRENDS [1]

1.1 NATIONAL ACCOUNTS

In 2022, the Portuguese Gross Domestic Product (GDP) grew 6,7% in volume, the highest since 1987, after the 5.5% increase in 2021, which followed the historic decrease of 8.3% in 2020, reflecting the adverse effects of the pandemic on economic activity (Statistics Portugal, 2023a).

Domestic demand presented a significant positive contribution (4.7 p.p.) to GDP growth, although lower than that observed in the previous year, with an acceleration of private consumption and a deceleration of Investment.

In 2022, private consumption grew by 5.8% in real terms (4.7% in 2021), while public consumption decelerated to a growth rate of 1.7% in volume terms (4.6% in the previous year). Investment increased by 3.3% in real terms, slowing down significantly from the 10.1% growth rate recorded in the previous year. Gross Fixed Capital Formation registered a less expressive increase compared to the previous year (from 8.7% to 3.1%), while the Change in Inventories recorded a null contribution to the annual growth rate of GDP (0.2 pp in 2021).

In 2022, private consumption increased by 5.8% in real terms (4.7% in 2021); and public consumption decelerated to a growth rate of 1.7% in volume terms (4.6% in the previous year). Investment augmented by 3.3% in real terms, slowing down significantly from the 10.1% growth rate recorded in the previous year. Gross Fixed Capital Formation registered a less expressive increase compared to the previous year (from 8.7% to 3.1%).

The contribution of net external demand to GDP turned positive in 2022 (2.0 pp), with an acceleration of Exports of Goods and Services (from 13.4% to 16.6%), while Imports of Goods and Services decelerated (from 13.2% to 11.1%). In a context of significant price increases, the loss of terms of trade was more intense in 2022, with the deflator of Imports of Goods and Services recording a rate of change of 18.6% (7.4% in the previous year) and the deflator of Exports of Goods and Services an increase of 14.7% (6.1% in 2021). This evolution partially reflected the more intense effect of the rise in the price of energy goods on the import deflator.

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[1] The overview of recent developments in Portuguese Socio-economic situation was mostly based on the official statistical data (Publications & Database) of Statistics Portugal (www.ine.pt). The main references were the annual Statistical Yearbook of Portugal, the international trade and economic accounts, construction and housing publications and databases (Statistics Portugal, 2023a. 2023b,2023c, 2023d)

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In nominal terms, GDP increased by 11.4% in 2022 (7.1% in 2021), reaching around 239 billion euros. In a context of high inflation, the implicit GDP deflator accelerated in 2022, to a rate of change of 4.4% (1.5% in the previous year).

In 2022, the Portuguese public debt (Statistics Portugal, 2023a) attained 113.9% of GDP (127.4%, in 2021). The net borrowing of the General Government sector was of GDP (2.9% in 2021). This positive trajectory was the result of an expenditure increase (+4.4%) that was more than compensated by the increase in revenue (+10.2%).

1.2   TRADE AND PRICES

In 2022 (Statistics Portugal, 2023b), exports of goods, in nominal terms, increased by 22.9% (+€14,589 million) compared to the previous year, amounting to €78,207 million. The evolution compared to 2021 reflects the increases in Intra-EU (+21.0%) and Extra-EU exports (+27.7%). Spain, France, and Germany remained the main clients of national exports of goods, concentrating 49.3% of the total (-1.6p.p. compared to 2021).

Imports of goods increased by 31.4% (+€26,098 million) compared to the previous year, amounting to €109,243 million. This evolution reflects both the increases in Intra-EU (+23.9%) and Extra-EU (+52.3%) countries. Spain, Germany, and France remained the main suppliers of goods, accounting for 49.3% of imports (-2.6 p.p. compared to 2021).

In 2022, the trade deficit in goods reached €31,036 million, which represents an increase around 11.5 thousand million euros compared to the previous year (figure 1).
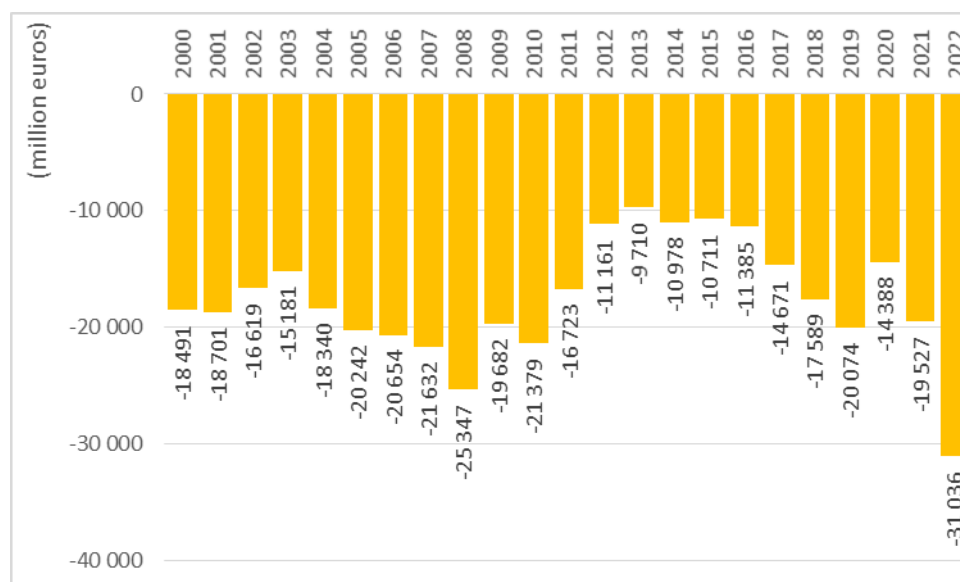

Figure 1 - National trade deficit.

In 2022, the average rate of change of the Portuguese Consumer Price Index (CPI) was 7.8%, 6.6 percentage points (pp) higher than in 2021 (Statistics Portugal, 2022a).

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Furthermore (Statistics Portugal, 2023a), the producer price index of agricultural products recorded an annual rate of change of 20.5% in 2022 (5.6% in 2021).The agricultural crop output prices increased by 14.9% (8.0% in 2021) and animal output prices increased by 29.6% (2.0% in 2021). The index of purchase prices of the means of agricultural production increased by 27.7% (12.8% in 2021). The annual rate of change in goods and services currently consumed in agriculture (input I) stood at 30.0% (14.2% in 2021), while goods and services contributing to agricultural investment (input II) increased by 10.7% (3.2% in 2021).

1.3   ENVIRONMENT AND ENERGY

Portugal is energetically dependent on the outside, importing a large share of its primary energy consumption (69.5%, in 2021). Renewable energy sources contributed 34% to the gross final energy consumption (Statistics Portugal, 2022a).

In 2021, greenhouse gas emissions without LULUCF (Land Use, Land-Use Change, and Forestry), including indirect CO_2 emissions, were estimated at 56.5 $MtCO_2$ eq., corresponding to a decrease of 2.8% in total emissions between 2020 and 2021.

The efforts of industrial enterprises to promote environmental performance standards in their production processes resulted in an investment of €132 million (+18.3% than in 2020).Expenditure totalled €363 million and income stood at €268 million (€158 million less than in 2020).

1.4   DEMOGRAPHY

As of 31 December 2022, the resident population in Portugal was estimated to be of 10,476,366 persons, 46,249 more than in 2021 (10,421,177), increasing for the fourth consecutive year.

The population increase in 2022 resulted from the growth in net migration (of 86,889 people (72,040 in 2021), which counterbalanced the negative natural balance of -40,640 (-45,220 in 2021). Thus, in 2022, there was a positive crude rate of net migration of +0.83% and a negative crude rate of natural increase of -0.39%. This resulted in a crude rate of increase of 0.44% (Statistics Portugal, 2022a).

1.5   LABOUR

In 2022, the active population in Portugal amounted to 5,222.6 thousand people, corresponding to an activity rate of the working-age population (16 to 89 years) of 60.1%, 1.5 percentage points (pp) higher than in the previous year.. The active population with at least upper secondary education in the total population aged 25 to 64 was 24.6 p.p. higher than in 2011 (from 31% to 55.6%).

The employed population was estimated at 4,908.7 thousand people, having increased by 96.4 thousand people (2.0%) in comparison to 2021, resuming the upward trend halted in 2020. In 2022, employees accounted for 84.8% of the total employed

population and 83.5% of those had permanent contracts (Statistics Portugal 2023a; Pordata 2023, 2020).

In 2020 the average monthly (gross) earnings of employees in Portugal were €1,250.8. This figure was 40.9 euros (3.4%) higher than in the previous year (Statistics Portugal 2022a; Pordata 2023).

1.6 CONSTRUCTION

The main indicators available for 2021 (Statistics Portugal, 2023c) show the resilience of the construction sector. The Portuguese housing stock was estimated at 3.6 million buildings and 6.0 million conventional dwellings, representing an increase of approximately 0.3% in both indicators compared to the previous year. That same year, 25,409 building permits were issued, an annual increase of 8.2%. The number of dwellings licensed in new constructions for family housing totalled 28,508, an annual growth of 11.0%.

2 POLICY MEASURES IMPACTING FOREST MANAGEMENT AND FOREST PRODUCTS TRADE[2]

2.1 CLIMATE CHANGE AND ENERGY

The Portuguese framework for climate and energy policy (APA, 2023) is aligned with the European Commission strategic package to tackle in different areas the Paris Agreement global challenge.

The European Green Deal envisage to tackle climate and environmental-related challenges setting the policy initiatives with the overarching aim of making Europe climate neutral in 2050.

The goal of zero net emissions is enshrined in the climate law. The European Green deal is the roadmap for the EU to become climate-neutral by 2050.

The concrete legislation that will allow Europe to reach the Green Deal targets is laid down in the Fit for 55 package that the Commission presented in July 2021. It will include the revision of existing legislation on emissions reduction and energy.

A new set of guidelines to assist Member States in updating and implementing comprehensive national adaptation strategies, plans and policies in line with the European Climate Law and the EU Strategy on adaptation to climate change.

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[2] Based on references disseminated by the National Authorities empowered within the policies of forests, environment, economy and energy, mainly: the Portuguese Agency for Environment (apambiente.pt), endorsed on Climate Change themes; the Directorate-General of Economic Activities (https://www.dgae.gov.pt/) with attributions on circular economy (https://eco.nomia.pt/); the Directorate-General of Energy and Geology (http://www.dgeg.gov.pt/), with competence on energy policies; the Institute for Nature Conservation and Forests (https://www.icnf.pt/), the National Authority for Nature Conservation and Biodiversity and the National Authority for Forests.

Those instruments are being or have been transposed to the Portuguese legal system, underlining for the direct or indirect application/impact on forest sector:

— Climate Basis Law (Law 98/2021) setting out the basis for the national climate policy;

— The Roadmap for Carbon Neutrality 2050-RNC2050 (Government Order 107/2019), establishing the vision and pathways to achieve carbon neutrality by 2050;

— The National Roadmap for adaptation 2100, a project aiming to evaluate de vulnerability of the Portuguese Territory to climate changes in the XXI century

— The National Strategy for Climate Change Adaptation, (approved by the Government Order 56/2015 and extended until 31 December 2025 by the Government Order n.º 53/2020), establishing objectives and the model for the implementation adaptation solutions in different sectors, comprising forestry, biodiversity and energy, to the effects of climate change;

— The National Integrated Energy and Climate Plan 2030 (Government Order n.º 53/2020),climate and energy keystone policy instrument towards a carbon neutral future, for 2021-2030 decade, ;

— The Climate Change Adaptation Action Program (Government Order 130/2019), complements and systematizes the work carried out in the context of the National Strategy for Climate Change Adaptation, foreseeing implementing adaptation measures (its second objective).

2.1.1 CLIMATE BASIS LAW

Portuguese Climate Basis Law recognizes the climate emergence situation, setting within the objectives of climate policy, namely:

— To promote the use of energy from renewable sources and their integration into the national energy framework system;

— To promote the circular economy, improving energy and resource efficiency;

— To develop and reinforce current sinks and other carbon sequestration services, strengthening national resilience and capacity to adapt to climate change;

— To foster prosperity, green growth and social justice, fighting inequalities and generate more wealth and employment;

— To protect and promote the regeneration of biodiversity, ecosystems and services;

— To stimulate sustainable financing and promote information on climate risks.

The climate policy governance is endorsed under:

— The Council of Climate Action, a specialized body, whose function is to elaborate studies, evaluations and opinions on climate action and related legislation;

— The Municipalities mandatory obligation to prepare and approve municipal climate action plans, which are to be incorporated, at regional level, under a regional climate action plan.

The sectoral climate policy encompasses the promotion of State policies envisaging the production of electricity from renewable sources.

The use of residual forest biomass for energy is to be articulated with the instruments of rural fires prevention and land management, namely with the system of Rural Fire Integrated Management and with the Regional Forest Management Plans;

Moreover, the subordinating principles of the energetic national policies covers, namely:

— The development of criteria to grant green certificates to attest the renewable electricity and gases sources;

— The certification of origin of residual forest biomass;

— The inspection on a regular basis of the biomass categories being used on electric production;

— The ban on the utilization of quality standard wood, biomass from dedicated energy crops and residual biomass from far away/distant origins on the production of energy from biomass;

2.1.2 ROADMAP FOR CARBON NEUTRALITY 2050

Portugal has committed internationally to reduce its greenhouse gas emissions so that the balance between emissions and removals from the atmosphere, namely through the use of forests, will be zero by 2050. The goal of a net zero carbon footprint has been labelled "carbon neutrality".

The main objective of the Roadmap for Carbon Neutrality 2050 is to identify and analyse the implications associated with technically feasible, economically viable and socially accepted alternative trajectories.

The roadmap will embark on alternative, low-carbon development paths until 2050 in four areas of intervention linked to those sectors mainly responsible for greenhouse gas emissions and carbon sequestration: energy; transport and mobility; waste; agriculture forest and land use. These will be based on three multifaceted aspects: socioeconomic scenarios; circular economy; societal participation.

The Roadmap consider and systematise the work done under the National Strategy for Adaptation to Climate Change, endorsing within its actions lines to tackle impacts and vulnerabilities the: prevention of rural wildfires; implementation of practices of soil conservation and fertility; increase the resilience of ecosystems, species and habitat's

to the effects of climate change; prevent the installation and expansion of invasive species, diseases transmitted by vectors, agricultural and forest pests and diseases. The financing instruments mobilized to implement the actions and measures of the roadmap are laid down on it.

2.1.3 THE NATIONAL ROADMAP FOR ADAPTATION 2100

The National Roadmap for Adaptation 2100 will set guidelines on adaptation to climate change for territorial and sectoral planning.

The preparation of the National Roadmap for Adaptation 2100 started in 2020 and is expected to end in 2023. The work underlying the preparation of the Roadmap aims to assess Portugal's vulnerability to climate change, as well as estimate the costs of economic sectors in adapting to the expected impacts of climate change by 2100.

2.1.4 NATIONAL STRATEGY FOR CLIMATE CHANGE ADAPTATION 2020

The National Strategy for Climate Change Adaptation 2020, now extended until 31 Dec 2025, sets goals and the model for the implementation of solutions for the adaptation of different sectors to the effects of climate change: agriculture, biodiversity, economy, energy and energy security, forests, human health, security of people and goods, transport, communications and coastal zones.

For this purpose, the Strategy aims to improve the level of knowledge about climate change and promote the integration of adaptation to climate change in sectoral policies and territorial planning instruments. Also intends to help central, regional and local administration and policy makers to find the means and tools to implement adaptation solutions based on technical-scientific knowledge and good practices.

This Strategy includes six thematic areas that cut across all sectors, including forestry: research and innovation, financing and implementation, international cooperation, communication and dissemination, adaptation in spatial planning and adaptation in water resources management.

2.1.5 NATIONAL INTEGRATED ENERGY AND CLIMATE PLAN 2030

The National Integrated Energy and Climate Plan 2030 integrates on its 2030 targets the reduction of greenhouse gases within -45% to -55% and the use of renewable sources to 47%.

The Plan recognise the role of forests and forest biomasses toward the measures of action to decarbonize economy, promote sustainable agriculture and enhance carbon sequestration, advocating the:

− Augmentation of the natural capacity of forest as carbon sinks;

− Promote more effective forest management with the reduce of burned area;

− Enhance the role of bioeconomy through the intensification of active afforestation, promotion of more efficient forestry practices and upgrading ecosystem services;

− Promotion of circular use of materials, including wood and non-wood forest productions and derived products, and the cascading use of energy, enabling the transition for circular economy;

− Progress with green taxation;

− Promotion of R&D projects that support the transition to a low carbon economy.

The Plan covers also actions to reinforce and promote renewable sources and reduce the country dependency on energy, endorsing within its measures the acceleration of the contribution of small renewable production in market mechanisms by promoting their aggregation and enhance the purchase and use of decentralized heat and cold production systems from renewable energy sources.

2.1.6 CLIMATE CHANGE ADAPTATION ACTION PROGRAM

The Climate Change Adaptation Action Program complements and systematizes the work carried out in the context of the previews National Strategy for Adaptation to Climate Change. The Program elects eight lines of action with direct intervention in the territory and infrastructures, complemented by a transversal line. These lines aim to address the main impacts and vulnerabilities identified for Portugal.

The Program lines of action and correspondent measures encompass:

− Rural fire prevention (e.g. economic valorisation of biomass; creation of discontinuity buffers and plots; reconfiguration of infrastructures and support systems);

− Conservation and improvement of soil fertility (e.g. erosion control; water retention; soil composition and structure);

− Diseases, pests and invasive species (e.g. enhancement of genetic material; disease control and invasive alien species; surveillance; information and communication);

− Capacity building, awareness raising and adaptation tools (e.g. monitoring and decision making; capacity building and planning; communication).

The operationalization of the Program is ensured through two parallel approaches to promote adaptation actions: one in the short term (by 2020); and one in the medium term (by 2030). These approaches embody guidelines to mobilize financial resources. Additionally, at medium term, policies and political instruments are also defined and, the Plan, promotes the implementation of structural actions to reduce the vulnerability of the territory and economy to climate change impacts.

2.2 DESERTIFICATION

The National Action Program to Combat Desertification (PANCD), approved in 2014 (Government order n.º 78/2014, of 24 of December), follows international agreements in the framework of the United Nations Convention to Combat Desertification (UNCCD). The first strategic objective of the PANCD concerning soil and water conservation is a consequence of UNCCD commitments. The map of susceptibility to desertification for mainland Portugal was drawn under the framework of this Program.

2.3 CIRCULAR ECONOMY AND CASCADING USE OF BIOMASS

Portugal is one of the EU member states that has come up with a Circular Economy strategy, roadmap and action plan, in line with the goals of the European Commission.

The ambition set out for Portugal 2050 was designed to leverage and spur development of work within the Action Plan for the Circular Economy (APCE), Government Order n.º 190-A/2017, which advocates on its elements (ECO.NOMIA, 2023):

- A carbon neutral economy that is efficient and productive in its use of resources encompassed by neutral GHG emissions and effective use of materials, with the significant fall in their extraction, importing and in final waste generated, attaining better management and value extraction from the resources in circulation;

- Knowledge as impulse, enhancing solutions in products, services, business models, consumption/use and behaviour with lower emissions and resource intensity, integrated into business models that spur job creation, efficient and effective use of mobilized resources, and their lasting economic value;

- Inclusive and resilient economic prosperity through economic development impacting all sectors of society and the resilience against price and risk volatility and gradually decoupled from negative environmental and social impacts;

- A flourishing, responsible, dynamic and inclusive society.

The plan considers three levels of actions:

- Macro, structural in scope, produces transversal and systemic effects which enable society to appropriate the principles of the circular economy;

- Meso, or sectoral, covering actions or initiatives defined and accepted by all players in the value chain of sectors relevant to raising productivity and the efficient use of resources, seizing the economic, social and environmental benefits;

- Micro, regional or local, related to actions or initiatives defined and accepted by all regional and/or local government, economic and social actors which incorporate a local economic aspect and which emphasise this in the approach to social challenges.

The different levels of actions are inter-related and reinforce each other positively, creating feedbacks that evolve the context iteratively and allow knowledge, policies, projects and results to be consolidated, spurring the actors involved.

The plan is based on the understanding and experience common to four areas of governance (science, technology and high education; economy; **environment, agriculture, forestry and rural development**), comprising the "inter-ministerial group" which drafted the APCE. This involved a survey of current performance, known measures, an analysis of the European action plan, and benchmarking against other circular economy plans, from which actions were proposed with their respective guidelines.

The example of Portuguese forest sector is reiterated by the long term practices under the principals of circular economy and cascading use, covering resources efficiency and reutilization of by-products and residues.

2.4 Sustainable Bioeconomy

Portugal is one of the EU member states that has come up with an Action Plan for Sustainable Bioeconomy – Horizon 2025 (Government Order 183/2021).

In line with EU policies, namely the 2018 EU bioeconomy strategy update, the European Green Deal and with the Development Goals of the United Nations 2030 Agenda, the Plan recognizes the central role of sustainable and circular bioeconomy as an efficient option to promote, deepen and facilitate the green transition.

It is assumed present challenges requires jointly actions in diversified and transformative strategic areas, entailing commitments and measures to promote sustainable production and new business models, research and innovation and priority access to financing.

The Plan cover five key intervention axis:

— Enhance sustainable production and the intelligent use of bio base regional resources;

— Promote research, development & Innovation, strengthening scientific capabilities and the national technological excellence;

— Develop sustainable circular bioindustries, innovating value chains and processes;

— At society level, promote knowledge and skills capabilities through education and training; and

— Monitoring Bioeconomy to assess developments, understanding the limits of ecosystems and promote certification

The Plan also cover the measures under the Portuguese Recovery and Resilience Plan (RRP) within the promotion of sustainable bioeconomy, endorsing public and private investments on textiles, clothing, footwear and the actions for natural resins valuing.

The bioeconomy potential of primary bio resources, resulting from well establish forestry chains, agriculture, fishing and aquaculture activities, is underlined and linked with the other sectors of economy, envisaging the promotion of new synergies. The plan vision is focused on processing and adding value to bio raw materials, accounting with the involvement of traditional sectors on establishing new productive chains.

2.4.1 FORESTRY AND FOREST BASED CHAINS

The Action Plan for Sustainable Bioeconomy – Horizon 2025 emphasizes the forestry key role as a contributor to bioeconomy.

Besides the forest territorial representation on Portuguese territory (36%), the bio resources based on forests, to be further processed, are integrated under a plethora of activities, comprising, timber for construction, wood furniture, textiles, clothing and footwear, bioplastics, paper, chemicals (as derived from resins), cork stoppers, bioenergy, etc..

On the bioeconomy perspective, the whole Portuguese forest sector has long demonstrative examples on the application of good practices:

— Resin, presently, natural resins are being valued as a bioproduct, potentiating larger applications on the market;

— Biocharcoal, its application to improve soil fertility is being considered as option instead of chemical fertilizers;

— Wood residues and post-consumer timber have been used largely, fallowing the circular economy principles, as raw by materials on wood panels and furniture industries.

The development of forest based biconomy faces several structural challenges, summarizing the large prevail of smallholding and absent forest owners, associated with the high risks linked to forest investments.

On this context, the Action Plan for Sustainable Bioeconomy – Horizon 2025 lines up on the measures to promote bioeconomy based on forest the structuring of primary activities through the :

— Promotion of active sustainable forest management;

— Scale up the unity of management areas (ex: from Integrated areas of Landscape Management to Forest Management Unities & land tenure reform);

Strengthening research, development & Innovation, envisaging the sustainability of raw materials supply and along the value chains, is too considered of outmost relevance to promote bioeconomy based on forests.

2.5 GENDER AND HUMAN RIGHTS RELATED TO FOREST SECTOR

In Portugal, since 2017, the economic activities directly related with forest chains are, on average, responsible for 72 thousand jobs, corresponding to 2.4% of the total

employment (Table 1). The sector employment is larger when wholesale and retail trade are included, with around 100 thousand employees (GEP 2023).

Employment in the forest sector is larger in coastal areas. Nevertheless, forest jobs are also significant in the remaining territory, having an essential role in the mitigation of economic structural fragilities in inland regions.

Table 1 - Forest sector employment.

(unity: number)	2017	2018	2019	2020	2021
Forestry, logging and related services	8 731	6 660	5 908	6 093	6 700
Manufacture of wood, wood products, except furniture; of cork and cork products	24 754	25 549	25 543	24 550	24 481
Manufacture of pulp, paper and paperboard and related products	11 561	12 847	12 747	13 114	13 211
Manufacture of furniture	24 202	33 185	28 159	26 277	27 700
Resins and resin products	302	172	205	208	216
Fruits and nuts	151	208	242	448	289
Forest sector (total)	69 701	78 621	72 804	70 690	72 597
Total	2 946 903	3 060 489	3 110 949	3 085 566	3 102 345

The Gender Employment Gap (EUROSTAT, 2023), defined as the difference between the employment rates of men and women aged 20-64, was on average 6.3%, since 2017 (5.6%, in 2022). In part, this is also reflected on the lower rates of occupational accidents (Table 2) observed in women in comparison to men (GEP 2023).

Table 2 - Occupational accidents in 2021 in total economy and forest related activities

	Total		Homens		Mulheres	
	(number)	(%)	(number)	(%)	(number)	(%)
Agriculture, Forestry and Fishing	5 875	3,5	4 896	4,2	979	2,0
Manufacture of wood, wood products, except furniture; of cork and cork products	2 283	1,4	1 987	1,7	296	0,6
Manufacture of pulp, paper and paperboard and related products	754	0,5	636	0,5	118	0,2
Manufacture of furniture	2 768	1,7	2 268	1,9	500	1,0
TOTAL	166 028	100	116 447	100	49 581	100

Gender inequality (Pordata, 2023) still prevails regarding the average gross monthly earnings of employees (Table 3). In 2021, the Gender Pay Gap (GPG) was on average 11.9% (GEP, 2023). In forest and forest based activities was observed as well a GPG>0.

Table 3 – Average monthly wage of employees: basic remuneration and earnings by sex.

(euros)	2017	2018	2019	2020	2021
Total	1 133	1 170	1 210	1 251	1 294
Men	1 237	1 274	1 312	1 349	1 396
Women	1 011	1 047	1 087	1 131	1 172

2.6 FORESTS POLICY

The Portuguese forest sector is subordinated to the instruments of political administration provided in the 1976 Portuguese Constitution and endorsed by the Forest Policy Act of 1996 (Law n.º 33/96), as well as other specific legislation.

The European commitments for forest policies are incorporated in the Portuguese National Strategy for Forests (NSF), which was approved in 2006 and updated in 2015, by the Government Order n.º 6-B/2015.

The NSF assumes the maximization of the total economic value of forest as its main purpose, and it's organized in the following strategic objectives: minimization of fire risks and biotic agents; specialization of the territory; enhancement of productivity through sustainable forest management; internationalization and increase in products value; to enhance efficiency in general and to improve the sector's competitiveness.

The NSF aims and targets are articulated within seven Regional Forest Plans (PROF).

The PROF (Decree-Law n.º 16/2009, in its present redaction) are national sectorial policy instruments, embodied under the scope of the Portuguese territorial planning legal system. At regional scale, they encompass the strategic framework, guidelines and specific norms regarding the use, occupation and forest management.

2.7 FOREST MANAGEMENT

The Forest Intervention Zones (ZIF) created by Decree-Law n.º 127/2005 (altered by Decree-Law n.º 15/2009, with Declarations of rectification n.º 10/2009, Decree-Law n.º 2/2011, n.º 27/2014 and n.º 67/2017) endorse the association of forest owners and/or forest producers for a common management, enabling the cooperative management of forest lands and mitigating their splitting up. This legal instrument permits the combination of forest properties to create larger management unities. The ZIF main objectives are: to promote sustainable management in forest spaces; to coordinate, in a planned way, the protection of forest and natural spaces; to reduce ignition and fire propagation conditions; to recover these spaces.

The Forest Management Plan (FMP) legislation (Decree-Law n. º 16/2009, in its present redaction) establish mandatory FMP on public and community forests, on private properties, above a size defined regionally under each PROF, and on the "forest intervention zones" (ZIF). In the Mainland, about 4,336 FMP are approved, which cover 1.996 million hectares, corresponding to 62% of the total forest area. Eucalyptus stands have a FMP coverage rate above the national average.

The small forest holdings, below the size of mandatory FMP and not integrated by a ZIF zone, are still subject to the minimum standards endorsed by each PROF. These standards entail:

- Preventive forestry standards;
- General forestry standards;

− Forestry models adopted within each PROF following the homogeneous division of the region in sub-regions.

2.8 HARVEST AND CUTTING LEGAL REGIME

The Decree-Law n. º 31/2020, establishes the mandatory declaration of cuts, extraordinary cuts, thinning or uprooting of forest trees to be commercialized or auto-consumed by industry, as well as the traceability of the wood for primary transformation. The declaration is to be made in digital format in the specific electronic Cutting Information System (SiCorte) located at the Institute for Nature Conservation and Forests (ICNF, I.P.), the National Forest Authority website.

The premature cutting of *Eucalyptus* and *Pinus* species in areas superior to two hectares requires the previews authorization by the National Forest Authority (Decree-Law n.º 173/88). In Eucalyptus the criteria defined by law to consider the felling as premature entail the stands with at least 75% of trees with less than 12 centimeters, of diameter, or 37.5 centimeters, of perimeter, at chest height.

2.9 AFFORESTATION

The legal regime of afforestation and reforestation actions is regulated by Decree-Law n-º. 32/2020, the third amendment to Decree-Law 96/2013. This legal regime establishes the essential technical standards to be considered in the scope of afforestation and reforestation project design, and the minimum qualifications required for project design and subscription.

2.10 TIMBER AND TIMBER PRODUCTS MARKETS

The Timber Regulation (Reg. EU 995/2010) to combat trade in illegally harvested timber was adopted in October 2010 by the EU. This regulation counters the trade in illegally harvested timber and timber products through key obligations:

− It prohibits the placing on the EU market of illegally harvested timber and products derived from such timber;
− It requires traders who place timber products on the EU market for the first time to exercise 'due diligence'.

The legislation to apply the timber regulation on Portugal (Decree-Law n.º 76/2013) establishes as mandatory the register of all the operators with activity in the country. The register is made electronically throw a system named «RIO system». The link to the digital platform of «RIO system» is located at the website of ICNF, I.P., the competent authority for the application of the Regulation, and is accessible since the 26 of July, 2013. The main indicators are also available in the same website (https://www.icnf.pt/florestas/fileirasflorestais/operadordemadeiraederivados).

It was considered that the register of the operators was a good instrument to verify the application in Portugal of the obligations laid down by the timber regulation. The

register was considered essential to identify the operators working in Portugal, enabling to plan the monitoring actions to verify the application of the "due diligence".

2.11 FOREST BIOMASS FOR ENERGY

The production and use of forest biomass for energy is regulated by the Decree-Law n.º 5/2011 (chanced by Decree-Law n.º 179/2012, Decree-Law n.º, 166/2015 and Decree-Law n.º 48/2019). Within its terms, in order to benefit the incentive established by the legislation, the promoters of forest biomass power plants are, namely, obliged to:

— Organize and maintain a system of data records that allows the identification of the type and characteristics of the biomass consumed at the plant;

— Present an action plan for 10 years developed in close articulation with forest producer and local authorities, aiming the sustainability of the supply of biomass on the long-run.

The legal regime of forest biomass for energy new centrals is endorsed by the Decree-Law n. º 73/2022 (which republishes Decree -Law n.º 64/2017) and Ordinance n. º 267/2022. This regime bound the definition of new biomass power centrals, entailing the installation for the production of electrical and thermal energy, with production in cogeneration or trigeneration, which uses biomass as fuel, and may incorporate a maximum percentage of 5% of fossil fuel as auxiliary and starter fuel. Other requirement is the installation of new biomass plants within the proximity to critical fire risk zones.

3 MARKET DRIVERS

3.1 GENERAL OVERVIEW

The Portuguese forest sector has long been export oriented. Forest products exports have been among the country's main exports, accounting in the current millennium for 9% of the total exports, while the sector is only responsible for 4% of the imports (figure 2). After 2012 the exports surpass the imports in more than 2.5 thousand million euros (table 4), making it one of the most international markets dependent sector of the Portuguese economy (Statistics Portugal, 2023b).

Portugal is a price-taker in international markets. The fact that a large share of forest production is exported and that Portugal is primarily a price taker makes it very vulnerable to market developments elsewhere (Rego *et al*, 2014).
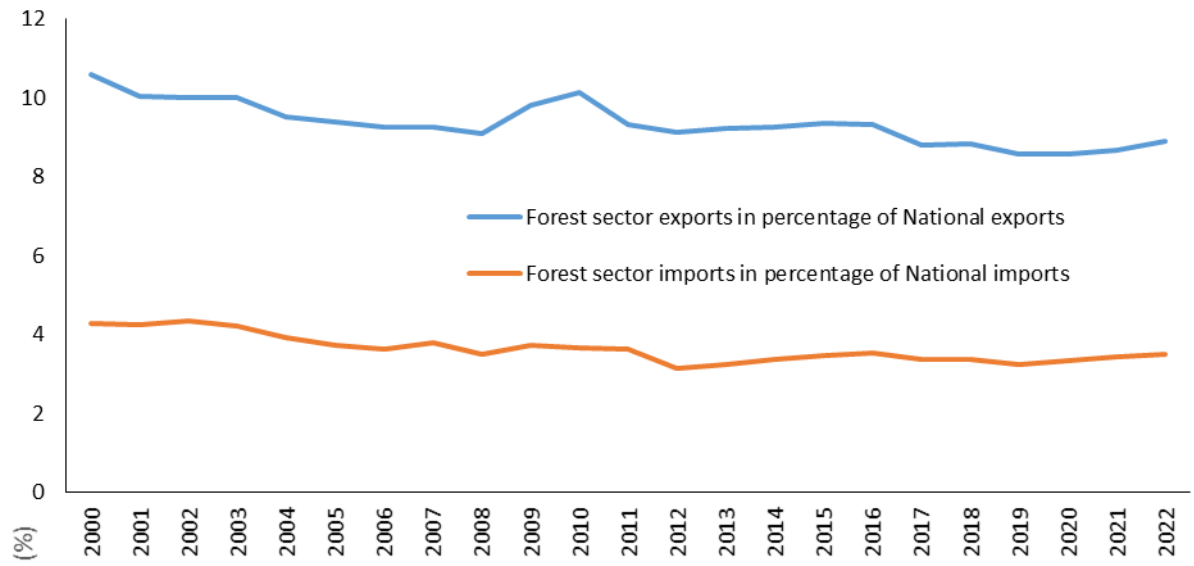
Figure 2 – Forest sector exports & imports in the context of the Portuguese international trade.

Table 4 - National and forest sector commercial balance.

Year	Commercial balance (million €)		Coverage rate of exports over imports (%)	
	Forest sector	National	Forest sector	National
2000	1 127	-18 491	158	60
2001	1 059	-18 701	153	60
2002	1 194	-16 619	161	63
2003	1 525	-15 181	182	66
2004	1 487	-18 340	177	63
2005	1 450	-20 242	176	61
2006	1 685	-20 654	183	63
2007	1 714	-21 632	175	64
2008	1 664	-25 347	174	61
2009	1 496	-19 682	178	62
2010	1 983	-21 379	192	64
2011	2 224	-16 723	204	72
2012	2 676	-11 161	251	80
2013	2 861	-9 710	254	83
2014	2 904	-10 978	246	81
2015	3 112	-10 711	250	82
2016	3 081	-11 385	243	81
2017	3 120	-14 671	234	79
2018	3 180	-17 589	226	77
2019	2 585	-20 074	201	75
2020	2 363	-14 388	205	79
2021	2 670	-19 527	194	77
2022	3 138	-31 083	182	72

3.2 CERTIFICATION SCHEMES

The export orientation of Portuguese forest sector is the dominant factor on the option for certification schemes. Presently two systems are followed:

– The Programme for the Endorsement of Forest Certification (PEFC) with 317 thousand hectares of certified area, 3,417 forest producers and managers, 214 Chain of Custody certificates related to 591 covered sites (PEFC Portugal, 2023).
– The Forest Stewardship Council (FSC) with 585,930 hectares of certified area, corresponding to 34 certificates of forest management, more than 3,350 forest owners and 527 Chain of Custody certificates (FSC Portugal, 2023).

4   DEVELOPMENTS IN FOREST PRODUCT MARKETS

4.1   WOOD AND TIMBER BASED PRODUCT MARKETS

The overview of timber production in current millennium as shown by the forestry accounts (table 5) done by Statistics Portugal (2023d) under the national economic accounts, indicates that the production, in value, of coniferous timber for industrial uses has been decreasing, observing the average annual variation of -2%, between 2000 and 2021. Even so, in the current decade (2010 to 2021) the positive change of 3%. Moreover, between 2020 and 2021 the 19% positive change is to be noted. The non-coniferous roundwood shows a positive shift since 2000 (3%) and between 2020 and 2021 (10%).

The comparison in cubic meters unities of volume of 2022 vis-à-vis 2000 (Faostat, 2023), as reported under the Joint Forest Sector Questionnaires (JFSQ), in the production of coniferous timber for industrial uses follows the reduction shift of -2% on average; whilst the non-coniferous timber has been rising on average 3%. In the present decade (between 2010 and 2021) the trends were similar, thought the average increase in non-coniferous was higher (5%), whereas in coniferous the decline was lower (-0.1%).

In 2022, wildfires incidence in Portugal alter the declining trend registered between 2020 and 2021 (figure 3), following the 2017 extreme impact of their severity. This year was registered a total burnt area of 541,491 hectares: comprising 501,668 hectares in forest space (330,172 hectares in forest stands and 171,496 hectares in scrublands); and 39,822 hectares in agriculture areas. In 2022, from 1 of January to 15 of October, the total burnt area was 110,087 hectares, with 99,070 hectares in forest space (55,309 hectares in forest stands and 43,761hectares in scrublands); 11,027 hectares of the total burnt area were in agriculture lands (ICNF, 2023).
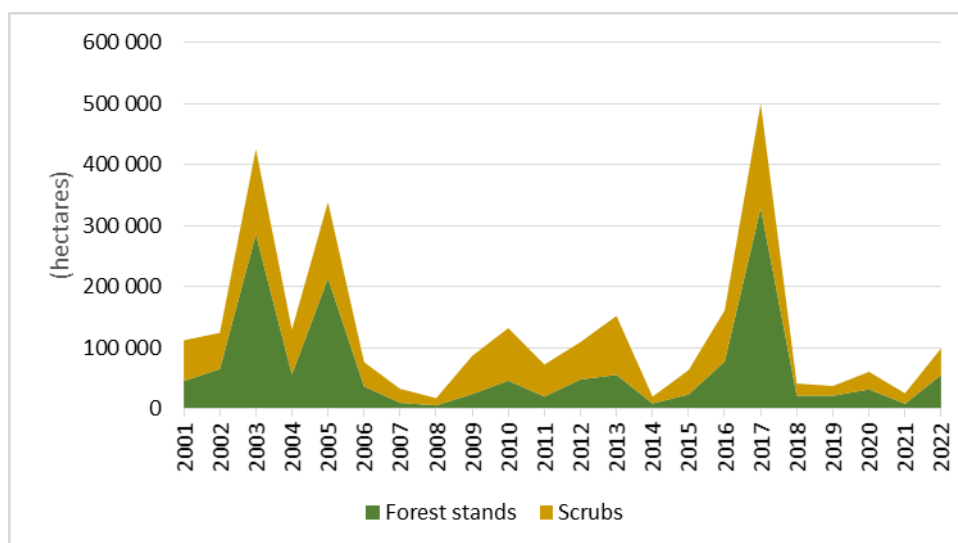

Figure 3 – Burnt areas in forest space, comprising forest stands and scrublands.

The quality of burnt wood is depreciated or even unappropriated for industrial uses. Thought, a part of the burnt wood can be used by wood base chains. On the short term, this evidence changes the patterns of the markets.

Table 5 – Forest production structure between 2000 and 2021.

	2000	2010	2020	2021	2020/2021	2000/2021		2010/2021	
					rate of change (%)				
	10⁶ euros				annual	annual average	total	annual average	total
Forestry and logging output at basic prices	1 538	1 105	1 312	1 333	2	-1	-13	2	21
Forestry goods at basic prices	1 190	791	802	826	3	-1	-31	0,40	4,4
Timber — Coniferous timber for industrial uses	270	122	140	167	19	-2	-38	3	37
Sawlogs and veneer logs - coniferous	220	99	123	147	19	-2	-33	4	48
Pulp wood (round & split) - coniferous	42	17	12	15	24	-3	-64	-1	-12
Other wood - coniferous	9	6	5	5	2	-2	-42	-1	-11
Non-coniferous timber for industrial uses	200	263	282	310	10	3	55	2	18
Sawlogs and veneer logs -non-coniferous	3	5	4	7	74	6	116	4	47
Pulp wood (round & split) - non-coniferous	194	256	277	301	9	3	55	2	18
Other wood - non-coniferous	3	2	1	1	1	-3	-55	-2	-24
Biomass for energy	88	47	54	57	6	-2	-35	2	23
Growing stock	112	135	60	61	2	-2	-45	-5	-55
Other products — Cork	491	205	226	186	-17	-3	-62	-1	-9
Nursery forest plants	8	4	4	4	-9	-2	-51	-1,1	-12
Other forestry products	21	16	36	40	13	4	92	14	152
Secondary non forest activities	64	59	86	90	4	2	41	5	52
Net added value	1 130	685	750	756	1	-2	-33	1	10

4.2 ESTIMATES FOR 2022 AND PROSPECTS FOR 2023

The estimates for 2023 and prospects for 2024 (annex) foresees the steady recovery trend into a "business as usual scenario" as no substantial changes on capacity are foreseen on the short term.

The core changing drivers of timber and derived products production and trade are considered to be:

— The extra supply of roundwood resulting from wildfires incidence affecting national production; and

— The limitations deriving from international supply chains restrictions and rising transport costs.

In tropical timber and derived products is also assumed a "business as usual", both on imports and exports, in spite of the restrictions on tropical wood markets related to the application of the timber regulation (Reg. EU 995/2010).

The new policy measures encompassing bioeconomy, circular economy and bio based cellulose products prospects a raising shift in end timber products demand, in particular wrapping products and recovered products, as well as forest biomass for energy.

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Table 6 - TIMBER FORECAST QUESTIONNAIRE, roundwood

	UNECE							
			Country: Portugal				**Date:** September 2023	
			Name of Official responsible for reply: Graça Louro					
	TF1							
			Official Address (in full):					
	TIMBER FORECAST QUESTIONNAIRE		Instituto da Conservação da Natureza e das Florestas, IP, Avenida da República, 16, 1050-191 LISBOA – PORTUGAL					
	Roundwood						**Note: Complete only if data for 2022 have been revised.**	
			Telephone: (+351) 213 507 900					
			E-mail: Graca.Louro@icnf.pt					

Product Code	Product	Unit	Historical data		Revised	Estimate	Forecast
			2021	2022	2022	2023	2024
1.2.1.C	**SAWLOGS AND VENEER LOGS, CONIFEROUS**						
	Removals	1000 m³ ub	1 701	1 682		1 710	1 700
	Imports	1000 m³ ub	226 #	130 #	241	230	240
	Exports	1000 m³ ub	30 #	40 #	43	35	40
	Apparent consumption	1000 m³ ub	1 897	1 772		1 905	1 900
1.2.1.NC	**SAWLOGS AND VENEER LOGS, NON-CONIFEROUS**						
	Removals	1000 m³ ub	370	356		330	360
	Imports	1000 m³ ub	594 #	120 #	663	580	590
	Exports	1000 m³ ub	30 #	30 #	22	25	25
	Apparent consumption	1000 m³ ub	934	446		885	925
1.2.1.NC.T	**of which, tropical logs**						
	Imports	1000 m³ ub	30 #	30 #	21	20	19
	Exports	1000 m³ ub	6 #	5 #		5	6
	Net Trade	1000 m³ ub	24	25		15	13
1.2.2.C	**PULPWOOD (ROUND AND SPLIT), CONIFEROUS**						
	Removals	1000 m³ ub	1 370	1 213		1 350	1 300
	Imports	1000 m³ ub	53 #	65 #	122	100	90
	Exports	1000 m³ ub	43 #	45 #	12	20	15
	Apparent consumption	1000 m³ ub	1 380	1 233		1 430	1 375
1.2.2.NC	**PULPWOOD (ROUND AND SPLIT), NON-CONIFEROUS**						
	Removals	1000 m³ ub	8 331	8 586		8 500	8 400
	Imports	1000 m³ ub	1 743 #	950 #	2 100	2 000	2 050
	Exports	1000 m³ ub	350 #	320 #	191	200	190
	Apparent consumption	1000 m³ ub	9 724	9 216		10 300	10 260
3	**WOOD CHIPS, PARTICLES AND RESIDUES**						
	Domestic supply	1000 m³	1 867 C	1 865 C		1 870	1 890
	Imports	1000 m³	1 731 C	2 435 C		1 900	2 000
	Exports	1000 m³	105 C	417 C	165	170	160
	Apparent consumption	1000 m³	3 493	3 884		3 600	3 730
1.2.3.C	**OTHER INDUSTRIAL ROUNDWOOD, CONIFEROUS**						
	Removals	1000 m³ ub	145	150		150	150
1.2.3.NC	**OTHER INDUSTRIAL ROUNDWOOD, NON-CONIFEROUS**						
	Removals	1000 m³ ub	285	249		290	280
1.1.C	**WOOD FUEL, CONIFEROUS**						
	Removals	1000 m³ ub	979	996		990	980
1.1.NC	**WOOD FUEL, NON-CONIFEROUS**						
	Removals	1000 m³ ub	1 318	1 387		1 390	1 320

Table 7 - TIMBER FORECAST QUESTIONNAIRE, forest products.

UNECE

TF2

TIMBER FORECAST QUESTIONNAIRE
Forest products

Country: Portugal		Date: September 2023
Name of Official responsible for reply: Graça Louro		
Official Address (in full): Instituto da Conservação da Natureza e das Florestas, IP, Avenida da República, 16, 1050-191 LISBOA – PORTUGAL		
Telephone: (+351) 213 507 900		Note: Complete only if data for 2022 have been revised.
E-mail: Graca.Louro@icnf.pt		

Product Code	Product	Unit	Historical data 2021	Historical data 2022	Revised 2022	Estimate 2023	Forecast 2024
6.C	SAWNWOOD, CONIFEROUS						
	Production	1000 m³	817	807		815	820
	Imports	1000 m³	123	130		130	125
	Exports	1000 m³	301	242		259	260
	Apparent consumption	1000 m³	639	696		686	685
6.NC	SAWNWOOD, NON-CONIFEROUS						
	Production	1000 m³	189	182		185	190
	Imports	1000 m³	232 E	120 E	287	200	190
	Exports	1000 m³	145 E	34 E	100	90	90
	Apparent consumption	1000 m³	276	268		295	290
6.NC.T	of which, tropical sawnwood						
	Production	1000 m³	14	12		13	12
	Imports	1000 m³	36 E	107 E		50	50
	Exports	1000 m³	38 E	69 E		40	40
	Apparent consumption	1000 m³	12	50		23	22
7	VENEER SHEETS						
	Production	1000 m³	50 C	20 C		30	25
	Imports	1000 m³	32 C	38 C		40	50
	Exports	1000 m³	56 C	67 C	46	50	40
	Apparent consumption	1000 m³	26	-10		20	35
7.NC.T	of which, tropical veneer sheets						
	Production	1000 m³	11	0		5	5
	Imports	1000 m³	5	4 E		4	4
	Exports	1000 m³	7 E	6		5	5
	Apparent consumption	1000 m³	9	-2		4	4
8.1	PLYWOOD						
	Production	1000 m³	130 C	103 C		100	110
	Imports	1000 m³	119 C	95 C		110	100
	Exports	1000 m³	20 C	19 C	44	30	44
	Apparent consumption	1000 m³	229	179		180	166
8.1.NC.T	of which, tropical plywood						
	Production	1000 m³	99	82		90	85
	Imports	1000 m³	4	14		10	9
	Exports	1000 m³	2	6		5	4
	Apparent consumption	1000 m³	101	90		95	90
8.2	PARTICLE BOARD (including OSB)						
	Production	1000 m³	743	766		750	760
	Imports	1000 m³	341	331		340	335
	Exports	1000 m³	595	514		580	540
	Apparent consumption	1000 m³	489	583		510	555
8.2.1	of which, OSB						
	Production	1000 m³	0	0		0	0
	Imports	1000 m³	34	50		40	45
	Exports	1000 m³	3	4		3	4
	Apparent consumption	1000 m³	31	46		37	41
8.3	FIBREBOARD						
	Production	1000 m³	535 C	526 C		520	560
	Imports	1000 m³	334 C	338 C		315	335
	Exports	1000 m³	380 C	330 C		350	366
	Apparent consumption	1000 m³	489	534		485	529
8.3.1	Hardboard						
	Production	1000 m³	0	0		0	0
	Imports	1000 m³	36	61		40	50
	Exports	1000 m³	13 E	11		10	11
	Apparent consumption	1000 m³	23	50		30	39
8.3.2	MDF/HDF (Medium density/high density)						
	Production	1000 m³	535	494		500	530
	Imports	1000 m³	282	257		260	265
	Exports	1000 m³	356	305		320	330
	Apparent consumption	1000 m³	461	447		440	465
8.3.3	Other fibreboard						
	Production	1000 m³	0	32		20	30
	Imports	1000 m³	16	20 E		15	20
	Exports	1000 m³	11	15 E		20	25
	Apparent consumption	1000 m³	4	37		15	25
9	WOOD PULP						
	Production	1000 m.t.	2 809 C	2 869 C		2 870	2 870
	Imports	1000 m.t.	151 C	140 C		145	150
	Exports	1000 m.t.	1 294 C	1 252 C		1 280	1 260
	Apparent consumption	1000 m.t.	1 666	1 757		1 735	1 760
12	PAPER & PAPERBOARD						
	Production	1000 m.t.	2 169 C	2 243 C	2 123	2 200	2 240
	Imports	1000 m.t.	930 C	948 C		940	945
	Exports	1000 m.t.	1 930 C	1 981 C		1 940	1 945
	Apparent consumption	1000 m.t.	1 168	1 210		1 200	1 240
5.1	WOOD PELLETS						
	Production	1000 m.t.	731	747		740	735
	Imports	1000 m.t.	4 E	7 E	4	5	5
	Exports	1000 m.t.	508	523		520	520
	Apparent consumption	1000 m.t.	227	231		225	220