

# Portugal Market Report 2017

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## 1 General socio-economic situation overview

In terms of economic buoyancy, in the current millennium, Portuguese economy has been suffering stagnation, with recessions on 2003, 2009 and from 2011 up to 2013.

The 2010-2016 period can be divided into two cycles:

- The recession (2011-2013) associated with a modest recovery of the economy after the 2008-2009 crises, with the recessive nature having been determined by the impact of the economic and financial adjustment program applied to the Portuguese economy and subsequent measures;
- The reversal of the recessive cycle from 2014 onwards.

In 2013, the decline rate of the Gross Domestic Product (GDP) was less sharp (-1.1%) than in the previous year (-4.0%). In 2014 there was a reversal of the last recessive cycle, with moderate growth of GDP (0.9%). This slight recovery consolidated in 2015 and 2016: in these years GDP grew, respectively, at a rate of 1.6% and 1.4%.

Similar trends were observed on the demand side. Domestic demand contracted sharply during the recession (2010-2013), and the net external demand improvement was insufficient to change the decline on the aggregate demand. In 2014 the expansion of domestic demand countered the contraction observed since 2011 and there was a decline in net external demand, which resumed a negative value. In 2015 the stronger expansion of domestic demand combined with the behaviour of net external demand, which declined less than in 2014, contributed to acceleration in the GDP growth rate (Statistics Portugal, 2015 & 2017).

Price growth in 2015 and 2016, expressed by the rate of change in the Consumer Price Index (CPI) rose steadily, at 0.5% and 0.6%, respectively - in 2014, CPI rate has fallen below 0% to -0.4% (deflation) year.

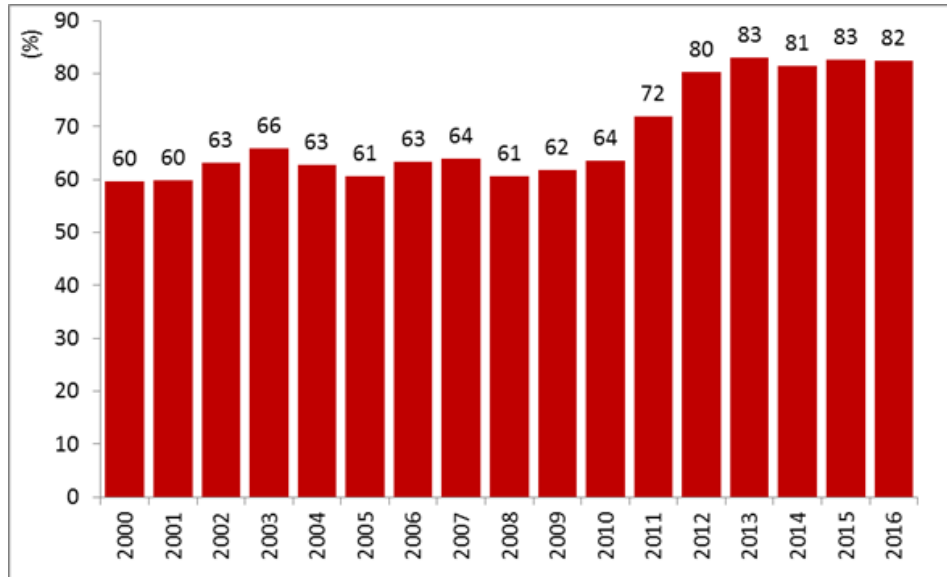
From 2014 onwards Gross Fixed Capital Formation (GFCF) shows positive rates of change, respectively 3.5% (2014), 5.5% (2015) and 0.2% (2016). The main contribution to the rate of change in gross fixed capital formation (contraction versus rise) was made by disinvestment/investment in construction (comprising investment by households and enterprises), with obvious implications to wood and wood products markets.

The import-export coverage rate grew in recent years, reaching the peak in 2013 (83.0%), increasing by 2.9% from 2011 and 18% from 1990. In 2016 a small decrease on the coverage rate is observed (figure 1).

In 2016 the rate of change in exports was smaller than in imports (0.9% against 1.2%). In the present decade (2010 onwards), only in 2014 and 2016 the imports grew more than exports. The other four years, resumed the 2009 pattern when exports grew

more than imports. This resulted in a deficit corresponding to half of the annual average value seen in the 2005-10 period (Statistics Portugal, 2015).

Figure 1 - National export/import coverage rate (Statistics Portugal, 2015).



In 2015 the degree of openness of the Portuguese economy, as measured by the ratio of the sum of exports and imports of goods to GDP at current prices, was 61.3%, declining slightly after five consecutive years of increase. The performance of this indicator since 2010 was associated with a decline in imports, given a contraction of domestic demand, the maintenance of export growth, and the fall in GDP at current prices (Statistics Portugal, 2015).

The Portuguese trade flows are dominated by European Union countries' both in destination (75.1%) and in origin (77.8%) of goods. Spain is the leading partner on international trade flows, with 25.9% in exports and 32.9% in imports; France comes in second place, with, respectively, 12.6% and 7.7%. Nevertheless, the time series analyses of the weights of these flows shows a downward trend, reflecting a change towards the diversification of trading partners.

Angola had the highest weight in the Portuguese-speaking African countries (PALOP African countries), being the destination of 70.9% of the goods exported and the origin of 94.4% of the imports, within the group.

The downward trend of the resident population which started in 2010 was maintained in 2016. Though the fall in the crude rate of increase was less marked in 2015 and 2016 (-0,3%) than in the three previous years (-0,5% in 2012 and 2014; -0,6% in 2013) due to a more moderate decline in the migration rate. Total population is estimated at 10.309.573, less 263.906 than in 2009, when it reached a peak.

The decline in population resulted from the moderately descending rate of natural increase since 2001 (currently at around -0.22%) and the deceleration of migration

rate in recent years - the only and main contribution to the positive change in population in 2009, and 2010 - which recorded negative values, standing at -0.28% in 2014 and -0.10% in 2015. (Statistics Portugal, 2015)

Another significant aspect on population profile is the weight of the elderly, which is following an upward tendency, as a consequence of a decline in fertility and an increase in longevity. The ratio of the number of elderly persons of an age when they are generally economically inactive, aged 65 and over, to the number of young persons, from 0 to 14, (ageing index) showed a recurrent growth trend (72.1 in 1990 and 146.5 in 2015).

In 2015 the activity rate remained at 50.3%, which compares to the downward trend recorded since 2008, the unemployment rate stood at 12.4%. These trends changed in 2016 (79,5%), with the reversal to the upward pattern of activity rate and downgrade of unemployment. The year unemployment rate stood at 11.1% and on April 2017 reached the symbolic value, below 10%, of 9.5 % (Statistics Portugal, 2015 & 2017).

Labour force's educational attainment continued to follow an upward trend observed since 1998, with the share of those in active aged who have completed secondary education rising from 16.6%, in 1998, to 23.9%, in 2016 (Pordata, 2017 & 2016).

### **Final synthesis:**

The Portuguese socio-economic macro trends highlight the positive improvement of the balance sheets and of the openness of the economy. The reversal of the recessive cycle (2014 onwards) is reflected on 2016 macro-economic figures, mainly by the GDP and GFCF upward performance, as well the unemployment rate downgrade shift to less than 10% in 2017.

The population profile is marked by growth rates inferior to one and the increase of the elderly. This profile has recessive implications on the short run and on the long-term concerning implications, namely, on labour force's sustainability.

## **2 Policy measures impacting forest management and forest products trade**

### **2.1 Climate change and carbon**

In Portugal the Strategic Framework for Climate Policy (QEPiC) was approved by the Government Order n.º 56/2015. The QEPiC aims are:

- Promote the transition for a low-carbon based economy, creating more wealth and employment. and enhancing green economy through the Commitment to a Green Economy (CCV);
- Ensure sustained reduction on the emissions of greenhouse gases (GHG), in order to comply with the targets of -18% to -23%, in 2020, and -30% to 40%, in 2030, in relation to 2005 levels, resulting of mitigation measures, namely through the increase of new technologies, energetic efficiency (in 2030 minus

30% in reference to de energetic baseline) and renewable energy sources (in 2030 at least 40% of the energy final consumption);

- Reinforce resilience and the national capacity towards adaptation;
- Ensure a committed participation on international negotiations and cooperation, complying with international commitments and support developing countries in de domains of mitigation and adaptation to climate changes;
- Promote research, innovation and the increase of knowledge;
- Promote social involvement on climate change challenges, enhancing the rise of individual and political actions;
- Improve the efficacy of the information systems, of the reports and of monitoring;
- Ensure the conditions to financial support and increase investment levels, namely by the efficient allocation of the subventions under the Portuguese Carbon Fund (FPC) ;
- Ensure governance and the incorporation of climate aims on sector domains as foreseen, namely, by the National Plan for Climate Change (PNAC 2020/2030) and the National Strategy for Adaptation to Climate Change (ENAAC 2020).

QEPiC establishes an integrated framework of instruments identifying the policy options to comply with the aims of the Commitment to a Green Economy (CCV). This framework considers both the adaptation to and the mitigation of climate change, through the National Plan for Climate Change (PNAC 2020/2030) and the National Strategy for Adaptation to Climate Change (ENAAC 2020). In 2016, it was created the National System for Policies and Measures (SPeM) and a governance structure named Air and Climate Change Interministerial Commission (CIAAC) were also established.

Under the scope of CIAAC, the SPeM and ENAAC coherent articulation with air policies is considered an essential referential to evaluate the progresses achived in climate change mitigation and adaptation. Namely the articulation with the National Emissions Inventory System by Sources and Removal by Sinks of Atmospheric Pollutants (SNIERPA), in particular on the issues related to report and monitoring of climate policies and actions is emphasized.

PNAC 2020/2030 and ENAAC 2020 follow a dynamic approach giving the sectors the opportunity to identify sectorial policies and measures in order to comply with climate policies established by QEPiC.

In particular, PNAC 2020/2030, quantifies the necessary effort to mitigate emissions so as to comply with Portugal's commitments both international and at the EU level, identifying sectorial responsibilities. In the case of forests, the PNAC 2015 didn't include quantified targets for the LULUCF sector, as this can only be possible once the EU has finalized the approval of the accounting rules under the climate package.

The National Strategy for Adaptation to Climate Change (ENAAC 2020) was adopted by the Portuguese Government on April 2010 (Government Order n.º 24/2010, April 1<sup>st</sup>). This Strategy sets the ground for the need for adaptation, through a synthesis of the main observed changes in the climate over the 20th century and a summary of the conclusions of climate scenarios and projections for Portugal. ENAAC is structured around four objectives: Information and knowledge; Reducing vulnerability and increasing the response capacity; Participation, awareness raising and dissemination; International cooperation. The Strategy identifies nine priority sectors, which are connected to nine sectorial working groups. On the priorities, forest and forest sector are aggregated with agriculture and fishing, its measures are organized on measures, and objectives such as:

- Promote forest sector resilience through management practices;
- Reduce forest space vulnerability to biotic and abiotic risks;
- Ensure the sustainability of direct and indirect productions and services;
- Increase the knowledge about potential impacts and capacity to apply effective adaptation measures;
- Promote exchange of knowledge between science and forest practice;
- Monitoring of ecosystems reaction to climate change;
- Monitoring the adequacy of policies, plans and instruments.

In summary: the new generation of climate change policy instruments is based on the new PNAC 2020/2030 revised targets and articulated measures, in terms of GHG emissions mitigation. The sector integration perspective with the implementation of concrete measures is advocated on the second phase of ENAAC 2020.

The revision of previous policy instruments has also covered the Portuguese Carbon Fund (FPC), which, as financing instrument, is directed to support the development and implementation of climate policies and the National Plan for greenhouse gas emission allowance trading (PNLAE), the Portuguese allocation Plan for the scheme for greenhouse gas emission allowance trading (CELE).

The Portuguese “Commitment to a Green Economy” (CCV) establishes a strategic plan for a sustainable future, where economic growth goes hand in hand with responsible environmental behavior, thus contributing to social justice and quality of life of today's populations and of future generations. The Commitment to Green Economy is established through 13 goals and 83 measures.

The CCV includes 10 initiatives for the agricultural and forestry sector:

- AGF 1: Promoting environmental measures and streamline grant award procedures; success criteria: increase area under agri-environmental commitment of 25% by 2020 (Frame: PDR 2014-2020);
- AGF 2: To support agricultural and forestry activities in areas classified under the Birds and Habitats Directives through the Natura payment; success criteria:

- number of beneficiary holdings payment Natura/Number of agriculture or forestry in hazardous areas (reach 25% by 2020) (Frame: PDR 2014-2020);
- AGF 3: To support investments in agriculture to promote higher levels of sustainability in the use of resources. (Ex: investment in irrigation-dependent improvements in proven efficient use of water); success criteria: number of investments with environmental component (framework: PDR 2014-2020);
  - AGF 4: To support holdings comply with the rules of green Payment (Greening) environmental component of direct payments from the first pillar of PAC (2014-2020); success criteria: farm area to comply with the rules of greening (framework: PDR 2014-2020);
  - AGF 5: To promote the certification of sustainable forest management by supporting the adaptation of farms and enterprises to environmental requirements, safety and risk prevention; success criteria: (a) 2020: certified forest area 450.000 ha; (B) 2020: chain of custody certificates above 500; (Framework: PDR 2014-2020);
  - AGF 6: To support holdings which meet Good Agricultural and Environment Conditions (BCAA); success criteria: increase agricultural area subject to BCAA (framework: PDR 2014-2020);
  - AGF 7: Support the development and structuring of new products agroforestry sector, ensuring greater value added environmental; success criteria: (a) number of supported projects; (B) supported for new products (Framework: NFS)
  - AGF 8: Improving forest management and productivity of forest stands; Success criteria: (a) % Area forest which is subject to active management according to the a Forest Management Plan; (b) stands area subject to production improvement (100.000 ha) (Framework: NFS);
  - AGF 9: Increase the contribution of hunting, fishing, forestry and grazing, beekeeping, production of mushrooms and other non-wood products; success criteria: 10% in 2020 and 20% in 2030 of forest holdings present more than a source product in exploration to marketing/economic exploitation (framework: NFS);
  - AGF 10: Promote the use of forest products with a low carbon footprint (ex .: Green building); criteria success; (a) 15% acquisition of forest products with forest management certification in 2020; (b) 40% of purchasing forest products to forest management certification in 2030 (framework: MAOTE initiative).

## **2.2 Energy**

The Portuguese legal framework on energy reflects the EU strategy and targets. The National Energy Strategy (NES2020), Government Order n.º 29/2010, from 15 of April of 2010, contains aims related with forest biomass for energy.

On the scope of the NES, the National Renewable Energies Action Plan (NREAP 2020) and the National Energy Efficiency Action Plan (NEEAP 2016) are additional planning instruments that establish the national targets to achieve the aims of international commitments related to renewable energies and energy efficiency,

Presently more than 45% of the electricity produced in Portugal and about 25% of the final consumption of energy is based on renewable energies. At European level, Portugal has one of the best rates on the accomplishment of the targets related to the incorporation of renewable energies in the gross consumption of energy.

## **2.3 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 in the framework of this Program.

## **2.4 Forests**

The European commitments for forest policies are incorporated in the Portuguese National Forest Strategy (NFS), which was update in 2015 (Government Order n.º 6-B/2015, of 4 of February). The NFS 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 risks affecting forests (biotic and abiotic);
- specialization of the territory;
- enhancement of forest productivity through sustainable forest management;
- internationalization of forest sector and increase value of forest products;
- enhancing the sector's efficiency and competitiveness.

New legislation was introduced this year - a "Forest reform" that will impact mainly the afforestation and reforestation processes, but also will provide an additional impetus on land registration and mapping. In addition, the regional forest management plans for the whole continent are under revision and are expected to be in force earlier 2018.



## **2.5 Timber and timber products markets**

The Timber Regulation (Reg. EU 995/2010) to combat trade of illegally harvested timber was adopted in October 2010 by the EU. This regulation has 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 in Portugal establishes, in addition, a mandatory register for all the operators with activity in the country. The register is made electronically in a platform («RIO system») that is available through a link located at the web site of the competent authority for the application of the Regulation, the Institute for Nature Conservation and Forests (ICNF,I.P.).

The registration of the operators has proven to be a good instrument to verify the application in Portugal of the obligations laid down by the timber regulation, as it allows the competent authority to identify the operators working in Portugal and to plan the monitoring actions to verify compliance with EUTR.

## **3 Market drivers (wood energy certified products)**

The Portuguese forest sector has long been export oriented. Forest products exports have been among the country's main exports, accounting on average for 10 % 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 thousands million euros (table 1), making it one of the most international markets dependent sectors of the Portuguese economy.

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).

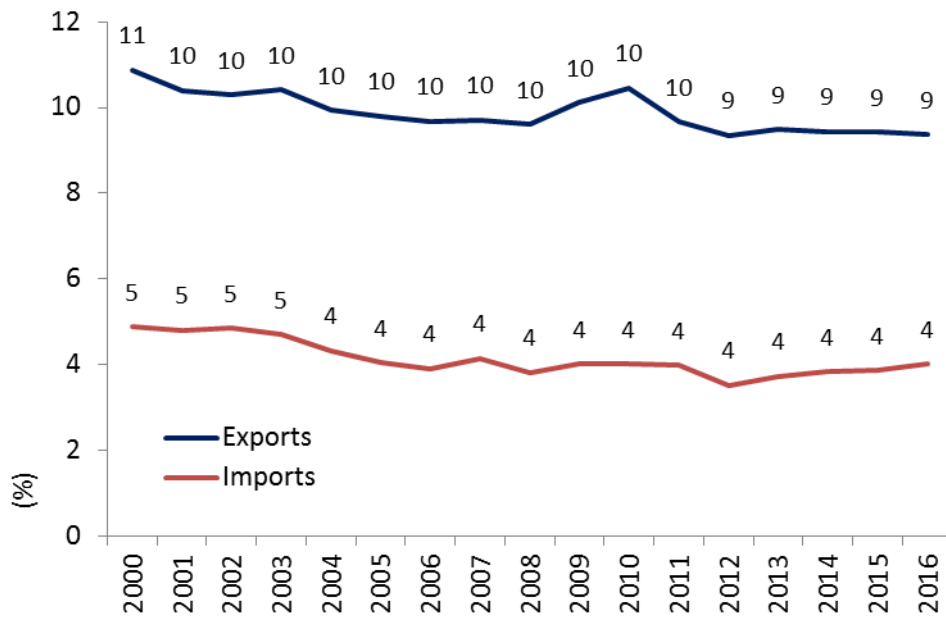


Figure 2 – The forest sector exports/imports in percentage of the Portuguese exports/imports (Statistics Portugal 2017)

Table 1 - National and forest sector commercial balance (Statistics Portugal, 2017)

Year	Commercial balance (million €)		Coverage rate of exports over imports (%)	
	Forest sector	National	Forest sector	National
2000	734	-18.491	133	60
2001	663	-18.701	130	60
2002	743	-16.619	134	63
2003	954	-15.181	146	66
2004	940	-18.340	144	63
2005	971	-20.242	147	61
2006	1.249	-20.654	157	63
2007	1.235	-21.632	150	64
2008	1.277	-25.347	152	61
2009	1.146	-19.682	156	62
2010	1.550	-21.379	166	64
2011	1.765	-16.723	174	72
2012	2.241	-11.161	213	80
2013	2.362	-9.710	211	83
2014	2.274	-10.978	200	81
2015	2.363	-10.485	201	83
2016	2.267	-10.766	193	82

The exceptions to export oriented markets are the end use of wood products on construction and on wrapping and packaging sectors. Historic data show that these wood products have the domestic consumption in Portugal as major destination. Since 2000, domestic markets represented on average 78% of the consumption in builder's joinery and carpentry of wood and 72 % in wooden wrapping and packaging (Table 2).

Beginning in 2011, vis-a-vis with the recent financial Portuguese crisis, the domestic consumption of both these products has drop, reflecting the consequences of construction contraction and the overall economic activity decay.

Thought, more recently (2013 onwards) the market trends of wooden wrapping and packaging materials are changing to the pre-crisis levels. The pattern of wood packaging materials sales reflects the augmentation of domestic demand resulting from the recovering of previous economic difficulties.

Table 2 – Patterns of domestic consumption and exports of the end products of wood construction packaging materials (Statistics Portugal 2017)

		(% of total sales)								2000 to 2015*
		2000	2010	2011	2012	2013	2014	2015		
Builder's joinery and carpentry of wood	Domestic Consumption	89	77	76	72	66	61	61	78	
	Exports	11	23	24	28	34	39	39	22	
Wooden wrapping and packaging	Domestic Consumption	71	77	73	70	62	68	72	72	
	Exports	29	23	27	30	38	32	28	28	

\* anual average since 2000

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 257 625 ha of certified area, 817 forest producers, 125 Chain of Custody's certificates and 288 sites (PEFC Portugal, 2017).
- The Forest Stewardship Council (FSC) with 378.057 ha of certified area, corresponding to 31 certificates of forest management, more than 230 forest owners, 279 sites/members and 253 certificates of the Chain of Custody (FSC Portugal, 2017).

## 4 Development in forest product markets

### 4.1 Wood production and markets

In the current millennium the production of coniferous timber for industrial uses has been decreasing at concerning rates (average annual variation -4%). Even so, the positive change of 6% observed between 2014 and 2015 must be remarked. The non-

coniferous production has increased substantially and at higher rates (7%) than the decrease on coniferous timber (table 3).

The recent investments made on production capacity by forest industries, namely within the pulp, paper and paperboard chain, upgraded raw material demand.

Furthermore, the cluster of forest biomass for energy, presently associated with the policies on climate change mitigation and reduction of global greenhouse gases, represents an additional demand on wood raw material supply. The situation is described by the Indufor study's forecast horizon for 2016 (European Commission, 2013) which states that "...the EU will face a shortfall from EU sources of 63 Mm<sup>3</sup> of RWE<sup>1</sup> per annum in trying to meet the EU renewable energy targets, as shown by the NREAPs (National Renewable Energy Plans). In this context, the NFS (Government Order n.º 6-B/2015) assumes clearly as its main policy strategies the minimization of fire risks and biotic agents and the enhancement of productivity

This evidence reinforces the uncertainties associated with domestic markets to fully satisfy the supply of raw-material to wood based industries, namely the high risks related to wildfires and pest and diseases are a threat to the production of roundwood at national level on the long run.

On the current year (2017), wildfires had a drastic impact on Portugal, up to now the total burnt forest area is 112.859 hectares. The quality of burnt wood is depreciated or even unappropriated for some industrial uses. Thought, a part of the burnt wood can be used by the wood base chains changing, on the short run, the patterns of the markets.

In general, the prospects for 2017 and 2018 assume the changes on the markets resulting from the extra supply in consequence of the wildfires. In general the assumptions follow the raw material (timber) short decrease on the imports and the increase on the production and exports.

For tropical timber, it was assumed that both imports and exports will continue "business as usual", as operators may perceive an additional risk concerning the origin of raw material, while applying the due diligence under the timber regulation (Reg. EU 995/2010).

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<sup>1</sup> RWE = roundwood equivalent, i.e. how much wood raw material is needed for a given quantity of product.

Table 3 – Forest production structure between 2000 and 2015 (Statistics Portugal, 2017).

	2000	2010	2014	2015	2014/2015	2000/2015	2000/2015
	106 euros				(annual %)	variation (annual average %)	(total %)
Forestry goods output	1.458	1.025	1.191	1.241	4	-1	-15
Coniferous timber for industrial uses	270	122	122	129	6	-4	-52
Sawlogs and veneer logs - coniferous	220	99	101	107	6	-4	-51
Pulp wood (round & split) - coniferous	42	17	15	17	10	-5	-60
Other wood - coniferous	9	6	6	5	-10	-4	-43
Non-coniferous timber for industrial uses	188	247	298	319	7	6	69
Sawlogs and veneer logs - non-coniferous	3	5	5	5	-6	5	60
Pulp wood (round & split) - non-coniferous	182	241	290	312	7	6	71
Other wood - non-coniferous	3	2	2	2	-2	-3	-30
Forestry output at basic prices	1.458	1.025	1.114	1.175	6	-2	-19

## 4.2 Sawn wood

As observed before, the recent Portuguese economic crises had particular effect on the construction activity, which showed a rough contraction. Traditionally this sector dominates the end use of swan wood and carpentry products. Another important product of sawnwood industries is wood for wrapping and packaging.

The forecast for 2017 assumed on the sawnwood coniferous a slight reduction on the imports and increase of exports and production, triggered by the prospect of rise on the production of sawlogs and on the domestic demand, namely, the bigger consumption of wrapping materials based on wood resulting from the sustained expected increase in the Portuguese total exports.

On sawnwood non-coniferous and on tropical sawnwood was assumed the “business as usual” scenario. In tropical sawn the forecast considers the context of due diligence imposed by the timber regulation (Reg. EU 995/2010) that can lead operators to a more careful approach concerning the origin of raw material.

## 4.3 Wood base panels

The Portuguese forest based industries are efficient in the use as raw material of wood residues generated in the processing activities and recycled wood products. The reutilization is particularly relevant in wood panel industries. In these sense, these industries are linked to other wood based chains, namely to sawmills activities.

On 2015 and 2016, particle board represented on average 56 % of the panels produced in Portugal, fiberboard 35 % and veneer sheets and plywood and other board 9 %. The fiberboard production is dominated exclusively by MDF (medium density). Around 70% of the wood panels production is exported to international markets.

Following the information of the Portuguese panel’s organization there is no production of veneer and plywood panels, though the Portuguese PRODOCOM data, published by Statistics Portugal, shows that the production, although residual, exists.

On fiberboard and particleboard the forecast for 2017 assumes the increase of production and exports resulting from the rise on the amount of raw material supply.

The forecast for wood base panels based on tropical species (veneer and plywood) assumed the “business as usual” scenario as, like for other wood products, operators may perceive an additional risk concerning the origin of raw material, while applying the due diligence under the timber regulation (Reg. EU 995/2010).

#### 4.4 Wood pulp and paper and paper board

Traditionally, the supply of domestic raw materials to pulp industries is limited by its availability and even the case of a “business as usual” activity might imply the increase of imports. Thought, based on the prospect of higher production of national pulpwood (round and split) (TF1) the forecast for 2018 assumes a slight reduction on the imports. The production follows the “business as usual” scenario with a minor increase in 2018.

In Portugal the production of paper and paperboard is concentrated on a limited variety of products: printing and writing paper and packaging paper and paper board are dominant. The prospects for 2018 are considered similar to the ones observed on previous years, assuming no investments on capacity, maintenance of the export orientation of national production of paper and paper board and the necessity to import, for domestic consumption, of other types of paper and paper board, namely journal paper.

#### 4.5 Biomass for energy

The industrial capacity to produce biomass for energy increased in recent years (table 4)

Table 4 - Industrial capacity of the chain of forest biomass for energy,

Type of plants	State (January 2012)	Number	Capacity (MW)	Biomass consumption in 2010 (tonnes/year)
Dedicated	Operating	9	110.4	1.268.831
Dedicated	Approved	12	96.8	1.166.355
Dedicated	Project	8	82	619.845
Cogeneration	Operating	7	51	715.910
Concrete	Operating	2	-	35.000
Pellets and briquettes	Operating	6	-	169.500
	Construction	3	-	

In 2018 the prospect is for the increase of production (pellets), the reduction of imports and the increase on exports, mainly resulting from the higher production. There is also a renewed interested in dedicated plants, with government decision to launch a special regime for an additional of up to 60 MW biomass plants (each with no more than 15 MW) – Decree n.º 64/2017 of 12th July.

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**Annex**
**Table 5 - TIMBER FORECAST QUESTIONNAIRE, roundwood**



 <b>UNECE</b>  <b>TF1</b> <b>TIMBER FORECAST QUESTIONNAIRE</b> <b>Roundwood</b>		Country: Portugal		Date: Setembro 2017			
		Name of Official responsible for reply: Graça Maria 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			<b>Note:</b> Complete only if data for 2016 have been revised.		
		E-mail: Graca.Louro@icnf.pt					
Product Code	Product	Unit	Historical data		Revised	Estimate	Forecast
			2015	2016	2016	2017	2018
1.2.1.C	<b>SAWLOGS AND VENEER LOGS, CONIFEROUS</b>						
	Removals	1000 m <sup>3</sup> ub	1.927	2.004 N	1.955	1.984	2.013
	Imports	1000 m <sup>3</sup> ub	282 #	247 #	129	116	110
	Exports	1000 m <sup>3</sup> ub	30 #	14 #	10	17	25
	Apparent consumption	1000 m <sup>3</sup> ub	2.179	2.237	2.074	2.083	2.098
1.2.1.NC	<b>SAWLOGS AND VENEER LOGS, NON-CONIFEROUS</b>						
	Removals	1000 m <sup>3</sup> ub	23	50 N	24	25	26
	Imports	1000 m <sup>3</sup> ub	52 #	9 #	19	17	17
	Exports	1000 m <sup>3</sup> ub	0 #	0 #	0	0	0
	Apparent consumption	1000 m <sup>3</sup> ub	75	59	43	42	43
1.2.1.NC.T	of which, tropical logs						
	Imports	1000 m <sup>3</sup> ub	24 #	24 #	24	24	24
	Exports	1000 m <sup>3</sup> ub	6 #	6 #	6	6	6
	Net Trade	1000 m <sup>3</sup> ub	18	19	18	18	18
1.2.2.C	<b>PULPWOOD (ROUND AND SPLIT), CONIFEROUS</b>						
	Removals	1000 m <sup>3</sup> ub	695	714		733	753
	Imports	1000 m <sup>3</sup> ub	128 #	121 #	91	82	81
	Exports	1000 m <sup>3</sup> ub	13 #	13 #	70	70	71
	Apparent consumption	1000 m <sup>3</sup> ub	811	822	735	745	763
1.2.2.NC	<b>PULPWOOD (ROUND AND SPLIT), NON-CONIFEROUS</b>						
	Removals	1000 m <sup>3</sup> ub	7.712	7.921		8.136	8.357
	Imports	1000 m <sup>3</sup> ub	915 #	1.693 #	1.098	1.087	1.076
	Exports	1000 m <sup>3</sup> ub	247 #	315 #	184	186	188
	Apparent consumption	1000 m <sup>3</sup> ub	8.380	9.299	8.835	9.038	9.245
3	<b>WOOD CHIPS, PARTICLES AND RESIDUES</b>						
	Domestic supply	1000 m <sup>3</sup>	4.213 C	3.641 C	4.326	4.441	4.560
	Imports	1000 m <sup>3</sup>	1.377 C	1.763 C		1.746	1.728
	Exports	1000 m <sup>3</sup>	318 C	260 C		263	266
	Apparent consumption	1000 m <sup>3</sup>	5.272	5.144	5.829	5.924	6.022
1.2.3.C	<b>OTHER INDUSTRIAL ROUNDWOOD, CONIFEROUS</b>						
	Removals	1000 m <sup>3</sup> ub	68	68 N	77	116	117
1.2.3.NC	<b>OTHER INDUSTRIAL ROUNDWOOD, NON-CONIFEROUS</b>						
	Removals	1000 m <sup>3</sup> ub	277	256 N	204	208	212
1.1.C	<b>WOOD FUEL, CONIFEROUS</b>						
	Removals	1000 m <sup>3</sup> ub	182	200 N	333	433	389
1.1.NC	<b>WOOD FUEL, NON-CONIFEROUS</b>						
	Removals	1000 m <sup>3</sup> ub	771	400 N	1.410	1.410	1.269



Table 6 - TIMBER FORECAST QUESTIONNAIRE, forest products.

 <b>UNECE</b>  <b>TF2</b> <b>TIMBER FORECAST QUESTIONNAIRE</b> <b>Forest products</b>		Country: Portugal		Date: Setembro 2017				
		Name of Official responsible for reply: Graça Maria Louro						
Product Code		Product		Historical data		Revised	Estimate	Forecast
				2015	2016	2016	2017	2018
5.C	SAWNWOOD, CONIFEROUS	1000 m <sup>3</sup>	1.156	1.112 N	1.239	1.289	1.230	
	Production	1000 m <sup>3</sup>	82	105		100	90	
	Imports	1000 m <sup>3</sup>	320	278		306	300	
	Exports	1000 m <sup>3</sup>	917	939	1.066	1.082	1.020	
5.NC	SAWNWOOD, NON-CONIFEROUS	1000 m <sup>3</sup>	33	33 N		33	40	
	Production	1000 m <sup>3</sup>	213	80 E		80	75	
	Imports	1000 m <sup>3</sup>	94	28		28	30	
	Exports	1000 m <sup>3</sup>	152	85		85	85	
5.NC.T	of which, tropical sawnwood	1000 m <sup>3</sup>	11	12 N		12	11	
	Production	1000 m <sup>3</sup>	35	33		31	30	
	Imports	1000 m <sup>3</sup>	40	7 E	16	12	11	
	Exports	1000 m <sup>3</sup>	7	38	38	32	30	
6.1	VENEER SHEETS	1000 m <sup>3</sup>	37	32 C	61	37	40	
	Production	1000 m <sup>3</sup>	23 C	24 C	2	2	3	
	Imports	1000 m <sup>3</sup>	47 C	54 C	31	32	33	
	Exports	1000 m <sup>3</sup>	13	2	32	6	10	
6.1.NC.T	of which, tropical veneer sheets	1000 m <sup>3</sup>	3	2 N	1	2	2	
	Production	1000 m <sup>3</sup>	5	5		5	4	
	Imports	1000 m <sup>3</sup>	4	5		5	4	
	Exports	1000 m <sup>3</sup>	4	2	1	2	2	
6.2	PLYWOOD	1000 m <sup>3</sup>	38	47 C	82	55	50	
	Production	1000 m <sup>3</sup>	56 C	80 C		89	60	
	Imports	1000 m <sup>3</sup>	29	13 C	63	79	70	
	Exports	1000 m <sup>3</sup>	65	114	99	65	40	
6.2.NC.T	of which, tropical plywood	1000 m <sup>3</sup>	6	2 N	0	1	2	
	Production	1000 m <sup>3</sup>	1	2		3	2	
	Imports	1000 m <sup>3</sup>	0	0		1	1	
	Exports	1000 m <sup>3</sup>	7	3	1	3	3	
6.3	PARTICLE BOARD (including OSB)	1000 m <sup>3</sup>	738	775 N	700	706	710	
	Production	1000 m <sup>3</sup>	201	259		256	250	
	Imports	1000 m <sup>3</sup>	458	446		489	339	
	Exports	1000 m <sup>3</sup>	481	588	513	474	621	
6.3.1	of which, OSB	1000 m <sup>3</sup>	0	0 N		0	0	
	Production	1000 m <sup>3</sup>	12	16		19	13	
	Imports	1000 m <sup>3</sup>	2	0		1	1	
	Exports	1000 m <sup>3</sup>	10	16		18	12	
6.4	FIBREBOARD	1000 m <sup>3</sup>	494 C	514 C	405	416	420	
	Production	1000 m <sup>3</sup>	235 C	270 C		324	320	
	Imports	1000 m <sup>3</sup>	378	338 C	324	337	330	
	Exports	1000 m <sup>3</sup>	351	446	350	404	410	
6.4.1	Hardboard	1000 m <sup>3</sup>	0	0 N		0	0	
	Production	1000 m <sup>3</sup>	19	30		36	20	
	Imports	1000 m <sup>3</sup>	19	23 E	29	32	19	
	Exports	1000 m <sup>3</sup>	0	7	1	5	1	
6.4.2	MDF/HDF (Medium density/high density)	1000 m <sup>3</sup>	494	514 N	405	416	420	
	Production	1000 m <sup>3</sup>	199	220		263	230	
	Imports	1000 m <sup>3</sup>	344	276		281	270	
	Exports	1000 m <sup>3</sup>	350	458	349	399	380	
6.4.3	Other fibreboard	1000 m <sup>3</sup>	0	0 N		0	0	
	Production	1000 m <sup>3</sup>	16	20		25	23	
	Imports	1000 m <sup>3</sup>	15	38	19	24	22	
	Exports	1000 m <sup>3</sup>	1	-19	1	0	1	
7	WOOD PULP	1000 m.t.	2.661 C	2.729 C		2.799	2.790	
	Production	1000 m.t.	125 C	153 C		171	160	
	Imports	1000 m.t.	1.190 C	1.239 C	1.240	1.266	1.250	
	Exports	1000 m.t.	1.596	1.643	1.642	1.705	1.700	
10	PAPER & PAPERBOARD	1000 m.t.	2.220 C	2.247 C		2.275	2.265	
	Production	1000 m.t.	894 C	851 C		952	900	
	Imports	1000 m.t.	1.882 C	1.909 C		1.948	1.938	
	Exports	1000 m.t.	1.232	1.189		1.278	1.227	
4.1	WOOD PELLETS	1000 m.t.	761	1.055 N	606	909	850	
	Production	1000 m.t.	70	51	52	38	40	
	Imports	1000 m.t.	690	482		723	700	
	Exports	1000 m.t.	141	624	177	224	190	