

**THE NETHERLANDS
NATIONAL MARKET REPORT 2023**

**PRESENTED TO
THE 81th SESSION OF THE UNECE COMMITTEE ON
FORESTS AND FOREST INDUSTRY
20-23 NOVEMBER 2023
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October 2023

1. General economic trends affecting the forest industries sector

A year with two faces.

The year 2022 has been a year of two halves. In the first half, the economy was still running at full steam, with the result that full-year growth amounts to 4.2%. The second half saw GDP growth turn into a slight contraction due to high inflation and lower world trade growth. The positive impact of the reopening of the economy after the final COVID-19 measures were lifted gave way to persistent uncertainty and sharply higher energy prices during the year. Whereas the economy was still running at full steam in the first half of 2022, unemployment had been rising slowly since the summer and economic growth turned to a contraction in the second half of the year. Gross domestic product (GDP) nevertheless grew by an average of 4.2% in full-year 2022, mainly due to the strong recovery in late 2021 (carry-over effect) and growth in the first two quarters. With the exception of 2021 (4.9%), this is the highest growth rate recorded since 2000. Economic Developments and Outlook (dnb.nl)

However, this development was accompanied by historically unprecedented inflation of 11.6% in the Netherlands, (and 8.4% in the euro area). These high rates of inflation had their origins in the post-pandemic recovery and the sharp rise in energy and commodity prices following the Russian invasion of Ukraine. Inflation was a contributory factor in the unparalleled fall in consumer confidence and, to a lesser extent, business confidence. It also led to a sharp loss of purchasing power, especially among lower-income households, and rising costs for energy-intensive companies in particular. Together with the general uncertainty, this led to a cooling of the economy in the second half 2022.

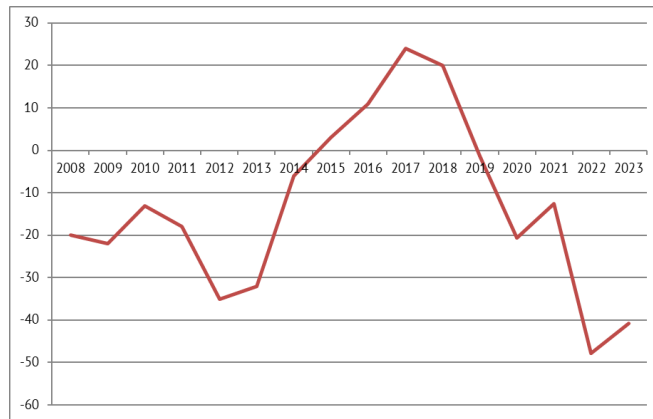
Over half of the economic growth in 2022 was contributed by households and their inclination to buy. Households mainly increased their spending on sectors which were hit hard in 2020 and 2021 as a result of coronavirus measures. Consumers had enough income to spend on goods and services despite higher prices. In 2022 (adjusted for price changes), consumers spent 6.6 percent more than in 2021; an historically large increase. They mainly spent more on services such as accommodation and food services, recreation, culture, transport and communication. Society was reopened for most of 2022, whereas a hard lockdown applied for almost half of the year 2021.

As in 2020, movements in the pandemic and the related containment measures are causing strong labour market dynamics in 2021. Although the labour market became very tight shortly after the coronavirus recession, unemployment rate remains fairly stable at a 4.2% in 2021 (4.9% in 2020) and is 3.5% over 2022. Wages did not rise as fast as inflation, but households worked many more hours; 441 thousand new jobs were added in 2022. Nearly 10 million people in the Netherlands are in paid employment. The Dutch labour market is strong, but tight. There is a huge shortage of staff in various sectors such as ICT, construction, healthcare and education. At the end of March 2023, there were 437,000 vacancies, well above the average of 181,000 since records began in 1997.

Additional to these indicators, purchasing power increased by 0.3% in 2021 and decreased to -2.7% in 2022.

Consumer confidence drops

Consumer confidence is an indicator of consumers' faith and expectations in the Dutch economy. It is however largely influenced by the general world economy. As is shown in figure 1, consumer confidence in the Netherlands increased sharply since 2013, stabilised between 2017 and 2018 and then shows a large drop in 2019 as a consequence of the COVID-19 outbreak, stretching into 2020. However, over the first seven months of 2021 consumer confidence increased again by 9 points. To a great extent this recovery may be attributed to the high vaccination rate in the Netherlands and consequently the gradual ease of related limitations. Unfortunately consumer confidence dropped in 2022. The all-time low (-59) was reached in September and October 2022. This is according to CBS 2022 the lowest level since measurement began in 1986. The estimated high inflation rate (11,4%) among others probably plays a role in the reduced consumer confidence. Consumers are slightly less gloomy in November onwards, in December it stands at -52.



(Source: CBS statline edited by Probos)

Figure 1

Consumer confidence trend in the period from 2008 to the first seven months of 2023

Housing market

Traditionally, the housing industry is important for the softwood industry. The demand for housing remains high and house prices rose steeply until mid-2022. This was mainly driven by low interest rates combined with generous mortgage loan standards, which allowed people to borrow money cheaply.

Mortgage rates have been rising since 2022. Combined with a slumping economic outlook, this has caused the housing market to cool since the summer of 2022. Construction output grew by 3% in 2022. New construction of non-residential buildings increased sharply by 7% in line with the growth in permit approvals, while residential construction grew by 2½%. For new residential construction, growth was well below expectations at the beginning of last year. Not only were permits granted disappointing, the lead time from permit to realisation also increased due to execution problems. Maintenance of residential and non-residential buildings lagged behind structural growth.

2. Policy measures influencing timber trade and marketing

Sustainable procurement policy

In the view of the Dutch government, public procurement of sustainably produced timber is very important to give timber producing countries a clear signal regarding consumers'

willingness to purchase sustainably produced products at reasonable prices and thus increase such purchases. It also sets an example for semi-governmental organisations and the private sector to introduce sustainably produced timber in their procurement criteria and by doing so, contribute to sustainable forest management.

In June 2008 the Dutch national government established its sustainable procurement policy. By implementing this policy the government intended to increase the use of sustainably produced products. Therefore all governmental organisations must use sustainability as an important criterion when purchasing goods. This way the Dutch government intends to stimulate the market for sustainable products and promote innovation within companies. Clear goals were set. As of 2010 the Dutch government has the ambition that all timber procured by central government should come from a sustainable source.

Part of the sustainable procurement policy is a set of criteria for sustainably produced timber, the Dutch Procurement Criteria for Timber. Based on these criteria the government can assess whether the offered timber is produced sustainably. The Timber Procurement Assessment Committee (TPAC) is responsible for the assessment of certification systems for sustainable forest management according to the Timber Procurement Assessment System (TPAS). TPAC advises the Dutch Ministry of Infrastructure and Water Management. The minister decides on the final acceptance. Information on the TPAS criteria and the TPAC judgements can be found on the TPAC website (www.tpac.smk.nl).

The website www.inkoopduurzaamhout.nl has been set up to support procurers and suppliers in their efforts to procure or supply sustainably produced timber.

EU Deforestation Regulation

On 29 June 2023 the Regulation on deforestation free products was adopted in the EU. This regulation will enter into force on 29 December 2024 and will replace the EU Timber Regulation. Under the EU Timber Regulation, the Dutch Competent Authority, the NVWA, carried out about 30-40 inspections in 2020 and the first half of 2021. For 2022, 70 inspections were planned. However, only seventeen were conducted due to staff changes. Of the seventeen inspected companies, seven were found to be compliant, while 10 companies were non-compliant with the law. The Deforestation Regulation requires additional transparency and due diligence from timber traders and other operators in the timber value chain. NGOs have announced that they will request stringent enforcement of the regulation as soon as it enters into force.

Sustainable Energy Agreement

Burning woody biomass such as pellets has been a hot political issue for some time, as Parliament has expressed concerns regarding the clear cut of large areas of forests for burning. People living in the vicinity of small biomass-based power plants have protested the air pollution caused by these.

In the Climate Agreement, it was decided to draw up a sustainability framework for all types of bio-based raw materials. The first version of this framework was presented in October 2020; the most recent letter with updates is from May 2023. For more information, see “Sustainability framework for bio-based raw materials”. The aim of the sustainability framework is to phase out low-value applications of bio-

based raw materials (e.g. energy applications) and to focus on more high-value applications (e.g., chemicals and construction). For this reason, the cabinet announced in April 2022 that no new subsidies will be issued for generating low-temperature heat (<100* C).

The final adoption of the revised Renewable Energy Directive (REDIII) is expected this fall, after which it must be transposed into national legislation within 18 months. Preparations for the implementation of REDIII are therefore in full swing in view of the desired implementation date of January 1, 2025. For the sustainability framework the goal is to follow as much as possible the European system of sustainability assurance of biogas feedstock (RED), as had been communicated with parliament in May 2023.

For the EU ETS all companies burning biomass must demonstrate compliance with the relevant RED sustainability criteria since 1 January 2023.

Climate agreement

In 2019 the National Climate Agreement was presented by the coalition and cabinet. The aim of this agreement is a reduction in CO2 emissions of at least 49% by 2030 compared to 1990. The underlying aim is compliance with the Paris Climate Agreement, in other words a maximum 2-degree temperature increase compared to 1990, and preferably 1.5 degrees.

The Climate Agreement contains a package of measures which has broad societal support, with the active support of stakeholders. The agreement was established through meetings of authorities, companies and interest groups at five so-called climate tables. The five tables are: Electricity, Built Environment, Industry, Agriculture & Land Use, and Mobility. At each table a package of measures was formulated and agreements between parties were concluded which together comprise the contribution of each of the five sectors to achieve the climate objective.

The forestry- and timber sector is covered by the sector table Agriculture & Land Use. A specific sub-table titled 'trees, forests and nature' is dedicated to the optimization of the contribution of forest and nature (including the timber- and other related sectors) to reach the climate mitigation goals. The goals are afforestation, revitalisation of existing forests, agroforestry and landscape restoration, and carbon storage in biomaterials, including wood. The main framework for the implementation of the Climate Agreement for forests and timber is the National Forest Strategy.

In 2021 the EU adopted a new binding goal of at least 55% reduction in CO2 emission reduction by 2030, which is a 6% increase from the Dutch Climate Agreement. In July 2021 the European Commission presented the Fit-for-55 package with proposals to deliver on this goal. The EU Forest Strategy is part of this package and aims to protect and restore EU forests and their vital role in tackling climate change and biodiversity loss. Part of the EU Forest Strategy is the pledge to plant 3 billion trees by 2030. This translates to approximately 11,000 hectares of forest in the Netherlands, which is in line with the National Forest Strategy (which aims for 37,400 hectares).

National Forest Strategy

In 2020 the Dutch minister of Agriculture, Nature and Food Quality together with the provinces presented a National Forest Strategy. This strategy has been developed in close cooperation with stakeholders such as decentralized government and forest managers (public and private). The national forest strategy will be executed through 12 provincial

plans. These plans will feed into the National Rural Area Program (NPLG – *Nationaal Programma Landelijk Gebied*), which aims to translate goals of climate, nature, water and reducing nitrogen deposition to the local level. For this, around €24 billion has been made available.. The national forest strategy is part of this programme and covers four main topics/issues:

1. More forest
The aim is to increase the Dutch forest area by 10% by 2030, an increase of approximately 37,400 hectares of forest.
2. Vital forests
To improve the quality of forests, it is important to improve environmental factors, to give a quality boost to forests and to adjust the management in certain areas in order to increase the resilience of forests against the backdrop of a changing climate. This requires action in various policy areas and programmes. For example, the reduction in nitrogen deposition, which is envisaged in the government's nitrogen approach, is crucial for the vitality of many forests. This is achieved through the nitrogen policy that will be further developed in the coming years.
3. Trees outside forests
By supporting the partners in the Delta Plan Biodiversity Recovery the aim is to increase the area of trees outside the forest to 10% in rural areas and to aim for 25.000 hectares of agroforestry and 1.000 hectares of food forests by 2030.
4. Sustainable use of trees and forest
The strategy aims to increase the sustainable use of the forests for recreational and educational purposes and to increase the percentage of Dutch timber used in long-lasting products.

Netherlands Circular in 2050

The outcome of latest Dutch government climate change and wider environmental policy decisions could provide an enhanced market opportunity for wood. The Netherlands' aim is to create a truly 'circular economy' in 2050, with an emphasis on using products and materials that can be re-used, recycled and ultimately disposed of in an environmentally sound way. To this end the government submitted the policy paper 'Netherlands Circular in 2050' to the House of Representatives in 2016. In the follow up of this policy ambition the National Agreement on the Circular Economy has been signed by more than 300 businesses and social partners like NGOs. At the beginning of 2019 the Dutch Cabinet presented the implementation program for the circular economy. At the beginning of 2023 an update was sent to the House of Representatives: 'National Circular Economy Programme 2023-2030'. This implementation program presents concrete measures, actions and projects for prioritised product chains: consumer goods, plastics, construction and manufacturing.

Sustainability framework for bio-based raw materials

Bio-based raw materials, including wood, play an increasingly important role in the transition towards a circular and climate-neutral economy. This is the case for bio-based raw materials for material applications such as the building industry as well as raw material in chemicals and the use of residual flows for energy applications.

The Dutch government has sent a Letter to Parliament in October 2020 with the Sustainability Framework. The government is convinced that the use of biomass is essential in the transition to a climate-neutral and circular economy by 2030 and 2050. However, only sustainable biomass can contribute to this transition, and sustainable raw

materials must ultimately be used for the highest-value applications possible. These are applications with lower carbon emissions than processes using fossil fuels, which contribute to the transition to a circular economy and have a positive effect on employment and the economy. This gives rise to the following categories:

1. Low-value applications are applications that do not comply with this desired end state. Alternatives are available, or will become available in the near future, and policy must be focused on phasing out.
2. Bridging applications dovetail with the transition perspective, and policy on them should focus on conversion.
3. High-value applications are the desired end state, and policy on them should focus on phasing in

Sustainable use of bio-based raw materials requires that the materials themselves are sustainably produced – in other words, without negative effects on the environment (availability of water, biodiversity, emissions, soil quality and carbon stocks) or the social circumstances of the local population, and with respect for the rights of workers (people, planet, profit). The government has developed sustainability criteria for all bio-based raw material flows and applications, insofar as they are promoted or regulated. These are sent to Parliament in June 2021.

A key document on which this sustainability framework is based is the advisory report by the Social and Economic Council of the Netherlands (SER) entitled ‘Biomass in the Balance’. The report draws on many sources, including analyses by the Netherlands Environmental Assessment Agency (PBL) of the availability and uses of biomass and an independent report on sustainability criteria.

The new criteria are scheduled to come into effect halfway through 2025 at the earliest and will apply to biomass used for energy, (chemical) feedstock and materials. The new sustainability criteria will not yet apply to food, feed, paper and textile.

3 Developments in Dutch forest products markets sectors

a) Wood raw materials

Removals of roundwood, chips and shreds from the Dutch forests and other wooded area's in 2021 are estimated to be approximately 2,975,000 m³ under bark in total. A decrease of 1.1% compared to 2021.

Industrial roundwood has a share of app. 21% (app. 615.000 m³ under bark) within the total removals. The rest of the removals mainly consist of wood fuel as logs or chips and shreds, including those from landscape care wood and municipal waste streams.

The share of export within the total removals of industrial roundwood in the Netherlands was 39% in 2021. The export of pulpwood has a share of almost 55% in the total exports of industrial roundwood.

b) Wood energy

The share of renewable energy in the Netherlands in 2021 was approximately 15%. This is an increase compared to 2021 when the share of renewable energy was 13%, according to

the statistics Netherlands (CBS)¹. Approximately 40% of the renewable energy comes from use of biomass, 28% from wind energy and 22% from solar energy. Based on the current trend and the expected future developments the Dutch National Climate and Energy Outlook 2020 expects that the renewable energy share will be 25% in 2030².

In 2022 47 billion kWh electricity is produced from wind-, water- and solarpower and biomass, which means around 40% of the total electricity use. In 2021 this percentage was 33%. Electricity production from biomass however showed a decrease of 19%.

Approximately 4.5 million ton dry matter of woody biomass is estimated to be used for the production of energy and heat in the Netherlands. Due to the increase in the use of energy pellets the share of imports substantially increased within the total consumption of wood for energy production.

c) Certified forest products

The market share of certified primary timber products (sawn wood and wood-based panels) on the Dutch market in 2017 was 84.7%, which corresponds to a volume of 5.1 million m³ roundwood equivalents under bark. This concerns primary timber and timber products (sawnwood and wood based panels) that meet the Dutch Procurement Criteria for Timber. Differences between the product groups are large. While sawn softwood and wood-based panels have a market share of respectively 84.8% and 92.5%, sawn tropical hardwood (67.1%) and sawn temperate hardwood (37.8%) are lagging behind.

Results from an internal monitoring system³ of the Netherlands Timber Trade Association for the year 2021 indicates growth over the last years. In 2022 the growth is stabilizing at a very high level within the product group of sawn softwood and panels. Tropical sawnwood showed a minor decrease in 2022 compared to 2021.

1 <https://www.cbs.nl/nl-nl/longread/rapportages/2023/hernieuwbare-energie-in-nederland-2022/samenvatting#:~:text=Het%20aandeel%20hernieuwbare%20energie%20was,was%20dit%2013%2C0%20procent.>

2 <https://www.pbl.nl/sites/default/files/downloads/pbl-2020-netherlands-climate-and-energy-outlook-2020-summary-4299.pdf>

3 Thémis - <https://timbermarketsurvey.com/login>

d) Sawn softwood

After a period of decreasing imports and consumption since 2007 (see figure 2), the sawn softwood market in the Netherlands recovered in 2015 and this recovery continued until 2019. After a small decrease in 2019, the recovery continued in 2020 and 2021.

Due to the many coinciding economic and political developments on national and international level in recent years, combined with the change in HS-codes, the trade statistics of 2022 in the Netherlands are considered of less high quality compared to other years. This was especially the case for trade with Russia and Belarus in the beginning of 2022. Corrections in data had to be made based on other trade statistics and export judgments. Hence the numbers presented below contain some level of uncertainty and should be interpreted with care.

With this in mind; in 2022 imports of sawn softwood decreased by 12% while exports increased with 32% compared to 2021. This resulted in a heavy decrease in apparent consumption. Rough sawn softwood has a share of roughly 60% of the total softwood import (Table 2). Stocks are expected to remain at a low level.

Table 1
Key facts of the Dutch sawn softwood market x 1000 m³

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Domestic Production	137	159	163	129	126	110	82	90	95	110	115
Net Imports	2.151	2.138	2210	2433	2477	2615	2827	2760	2818	3032	2659
Stock Change	327	359	411	456	393	428	512	602	509	391	515
Apparent Consumption	1.961	1.938	1.962	2.106	2.210	2.297	2.397	2.248	2.404	2.750	2.259

Sources: Statistics Netherlands (CBS) / Netherlands Timber Trade Association (Royal VVNH) / Probos

Table 2
Sawn softwood imports (volume in m³)

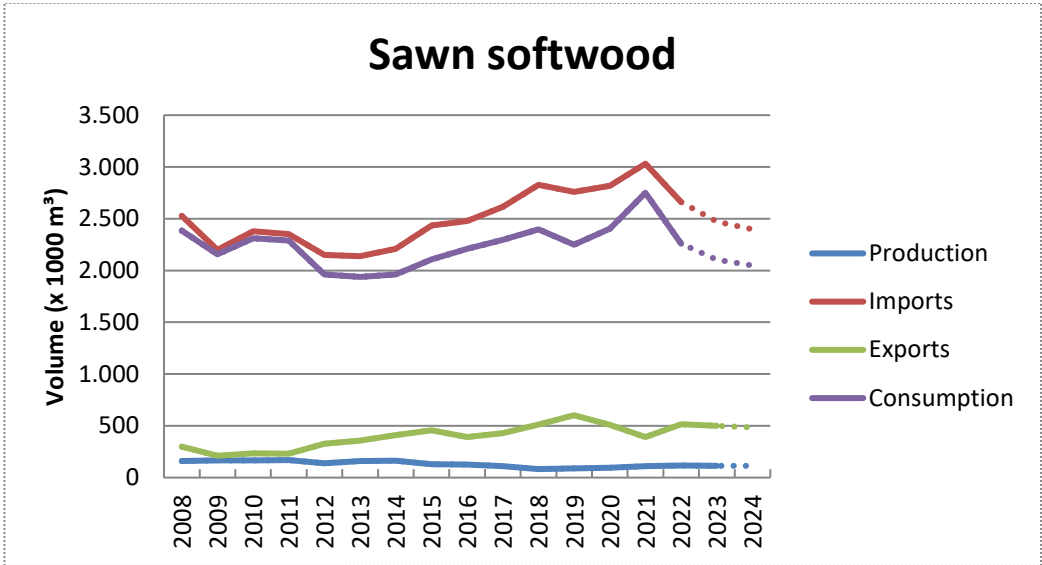
Countries	2021				2022				Sawn	Planned	Total
	Sawn	Planned	Total	%	Sawn	Planned	Total	%			
1 Sweden	301.988	527.452	829.440	27%	305.008	532.727	837.735	32%	1%	1%	1%
2 Germany	419.245	238.642	657.887	22%	413.185	179.139	592.324	25%	-1%	-25%	-10%
3 Finland	197.956	82.374	280.330	9%	183.703	76.443	260.146	10%	-7%	-7%	-7%
4 Russia	219.078	119.977	339.055	11%	161.536	88.464	250.000**	5%	-26%	-26%	-26%
5 Belarus	134.853	8.935	143.788	5%	99.433	6.588	106.021**	4%	-26%	-26%	-26%
6 Latvia	70.035	85.525	155.560	5%	59.971	38.831	98.802	4%	-14%	-55%	-36%
7 Belgium	113.498	29.567	143.065	5%	68.729	24.408	93.137	4%	-39%	-17%	-35%
8 Estonia	35.536	46.002	81.538	3%	31.627	40.942	72.569	3%	-11%	-11%	-11%
9 Poland	68.538	24.548	93.086	3%	40.735	10.814	51.549	2%	-41%	-56%	-45%
10 Ukraine	31.427	1.637	33.064	1%	46.862	1.300	48.162	2%	49%	-21%	46%
Other	172.710	101.985	274.695	9%	176.997	71.432	248.429	8%	2%	-30%	-10%
Total	1.764.864	1.266.645	3.031.509		1.587.786	1.071.087	2.658.873		-10%	-15%	12,3%

* Other (2022): This group consists of 44 countries with exports to the Netherlands of less than 43,000 m³ (Source: CBS trade statistics edited by Probos and international trade statistics of Sweden, Germany, Finland and Latvia for verification)

** Estimates by Dutch Delegation.

With the corrections and uncertainties in mind, the top 10 countries for softwood import in the Netherlands remains unchanged compared to 2021 (table 2). Within the top 10 countries some changes did occur; Estonia surpassed Poland as the 8th most important country for softwood import. Sweden and Germany remain by far the foremost suppliers of softwood timber to the Netherlands. In general the imports decreased significantly. This is reflected in the individual imports of almost all countries. Only Sweden and are the exceptions with increased export of 1% and 46% respectively to the Netherlands. All other countries show significant decreases. Russia and Belarus show estimated decreases of approximately 25%. This is directly related to

the restrictions due to the war in Ukraine. The total import of sawn softwood in the Netherlands decreased by 12.3% in 2022 compared to 2021.



(Source: CBS trade statistics edited by Probos, Probos roundwood survey and NTTA estimates and forecasts)

Figure 2
Development of production, import, export and consumption of sawn softwood in the Netherlands in the period 2008-2022 and expectations for 2023 and 2024.

e) Sawn hardwood (temperate and tropical)

The imports of temperate hardwoods decreased significantly (-36%) in 2022 compared to 2021. With app. 120.000 m³, the import is at its lowest point since 2014. The war in Ukraine most likely affects the supply of temperate hardwood. Furthermore the general economic trends and high inflation also play its parts. A further decrease is expected in coming years.

The market for temperate hardwoods is expected to benefit from the recovery of the construction sector and the housing market from 2022 onwards. However, this is still surrounded by major uncertainties due to several factors, including nitrogen deposition. As interior products and furniture are bought at the end of the construction cycle, there is a delay compared to tropical timber used in construction. European oak is by far the most popular species within the temperate hardwoods. There is a huge demand for European oak, with almost daily price increases. Due to constraints in the availability supply might limit market developments.

Imports of tropical hardwood decreased since 2018, however in 2022 an unexpected increase in imports was reported. This increase seems to be fully caused by one product: unassembled profiled board for hardwood floors. The DIY and gardening sector significantly benefitted from the fact that people - due to the COVID measures - were limited in commuting and travelling and thus spent more time at home and in their gardens. The negative impact of COVID-19 regarding imports and delays in shipments and high freight costs seems to have alleviated and hence the Dutch market for (tropical) hardwoods is positive about the medium term market development. The productivity within the construction sector is recovering and shows a growing trend. This leads to more demand as well.

The share of further processed/optimized tropical sawnwood keeps increasing in the Dutch joinery industry resulting in more demand for timber from Asian producing countries, but the share of African timber species within these imports are increasing. Demand is shifting from Meranti, traditionally the species most used in the Dutch joinery industry, to Mahogany.

According to Statistics Netherlands the turnover of the timber industry decreased most of the months in 2023. The companies within the timber industry expect that prices will increase during the end of 2023 and the first months of 2024.

Timber might also benefit from the increased environmental awareness among consumers and architects. Although competition with other building materials is still heavy, timber seems to recover market share, E.g. in renovation, where now and then PVC plastic is replaced by timber. Increasingly new Life Cycle Analyses studies are published⁴. Innovations like CLT help strengthen the position of timber as well.

Table 3
Key facts of the Dutch sawn hardwood market x 1000 m³

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Domestic Production	53	59	66	56	58	60	58	51	54	38	34
of which tropical	7	5	11	7	6	6	7	6	6	8	7
Net Imports	276	231	201	224	230	273	385	305	268	271	314
of which tropical	194	172	148	156	136	125	218	152	141	136	142
Apparent Consumption	329	290	267	280	288	333	443	356	322	309	238
of which tropical	201	177	159	163	142	131	225	158	141	143	148

Sources: Probos, Statistics Netherlands (CBS)

f) Pulp and paper

The turnover within the Dutch paper and board industry increased by 32% between 2021 and 2022 to EUR 2,678 million. In the previous year this was 22%. So the market for paper and paperboard is clearly recovering after the effects of the pandemic. However, the total paper production decreased by 2%. This suggests a clear increase in price, as a consequence of inflation and high demand.

The paper and board industry in the Netherlands is one of the leading sectors in recycling and energy reduction. This is due to the large collection of waste paper by consumers and the biobased production process. Export accounted for 78% of the total production. Germany remains by far the most important export country (27%), followed by Belgium (13%), France (12%) and the UK (9%).

Paper and board producing factories in the Netherlands almost solely produce paper and board from recovered paper and/or imported pulp. From the total of 21 factories in the Netherlands there is only one factory that is producing mechanical wood pulp for the production of board for folding boxes. The species used are Poplar and Norway spruce.

In 2017 76.7% of the imported market pulp was certified sustainably (FSC or PEFC) sourced. A slight increase compared to 2015.

⁴ <http://www.europeansttc.com/environment/>

Table 4*Fibre furnish of the Dutch paper and board industry*

Year	X 1,000 m ³ round wood equivalents under bark									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Cellulose	2,496	2,611	2,275	2,377	2,181	2,083	2024	1867	2024	1862
Recovered paper	7,170	7,179	7,254	7,426	8,561	8,541	8379	8453	8632	8174
Total fibre input	9,666	9,790	9,529	9,803	10,741	10,624	10.402	10.320	10.656	10.036

Source: Probos and Royal VNP

In 2022 the total number of employees in the paper and board industry remained stable with 3,800 employees. However, the number of employees in the industry in the Netherlands decreased by almost 33% since 2005.

Table 5*Recent developments of the Dutch paper and board industries*

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Change in production in %:										
Thermo-mechanical pulp (integrated)	3,1	8	0%	2,3%	2,3%	0,0%	0,0%	0,0%	0,0%	0,0%
Graphic papers	-0,4	0	4%	-2,6%	-3,3%	-5,7%	-8,3%	-13,2%	-0,0%	1,5%
Packaging papers	3,5	0	1%	4,3%	30,1%	2,8%	-0,6%	2,5%	3,9%	0,5%
Case materials	3,5	0	1%	4,3%	30,1%	2,8%	C	C	C	C
Other packaging paper and board	3,3	2	4%	0,9%	4,8%	0,3%	C	C	C	C
Sanitary & household	0	-6	-3	-0,9%	0,0%	-1,8%	-14,5%	-0,0%	-11,3%	-0,5%
Total paper & board	1,1	-1	-4	1,1%	11,7%	-0,1%	-2,9%	-0,9%	2,7%	0,5%
(Turnover [million Euro])	1,786	1,809	1,737	1,693	1,859	1,956	1,813	1,656	2,024	2,678
Price change of production of paper and board industries	n,a,	n,a,	n,a,	n,a,	n,a,	n,a,	n,a,	n,a,	n,a,	n,a,

Source: Royal VNP C = confidential

h) Wood pellets

The production of wood pellets was approximately 268,000 m.t. in 2022, compared to over 300.00 m.t. in 2021. Close to 70% of this quantity is exported. The imports of wood pellets have increased substantially in 2021 due to the fact that the utilities further increased co-firing of wood pellets. In 2021 almost 2.7 million tons (+16%) of wood pellets were imported by the Netherlands. In 2022 this amount stabilised.

4. Gender and human rights issues related to the forest market sector

According to Statistics Netherlands, approximately 20.000 individuals are employed in forestry and the timber industry in 2022, of which 16.000 are estimated to be men.

At the State forest Service, 1.358 individuals are employed, with a ratio of 66% men and 34% woman⁵.

In 2020 the corrected wages between woman and men was -6% in the private sector and -3% in the public sector (figure 3). However there is a decreasing trend in the past 12 years in this difference.



(Source: <https://www.cbs.nl/nl-nl/longread/aanvullende-statistische-diensten/2022/monitor-loonverschillen-mannen-en-vrouwen-2020?onpage=true>)

Figure 3

Corrected wages between woman and men, 2008-2020

However the above mentioned differences do not specifically apply to the forest market sector, but are general data on the overall labour market.

Data specifically for the forestry market sector are not available. However table 6 shows the number of jobs (and division between part-time and full-time), hourly rate, monthly salary and the average workweek for men and woman working in the sector of agriculture, forestry and fisheries combined. However, do note that these are general averages and hence uncorrected numbers. This means that for instance the level of education or function has not been incorporated in the comparison between men and woman.

⁵ <https://www.staatsbosbeheer.nl/over-staatsbosbeheer/feiten-en-cijfers#:~:text=Bij%20Staatsbosbeheer%20werken%201.358%20mensen,25%20leerlingen>

Table 6

Average hourly rate and monthly salary of men and woman in the Agriculture, Forestry and Fisheries sector

<i>Employment</i>	<i>Year</i>	Jobs	Hourly Wage	Monthly Wage (incl. overtime)	Workweek (incl. overtime)	Jobs	Hourly Wage	Monthly Wage (incl. overtime)	Workweek (incl. overtime)
		<i>x1.000</i>	<i>Euro</i>	<i>Euro</i>	<i>Hour</i>	<i>x1.000</i>	<i>Euro</i>	<i>Euro</i>	<i>Hour</i>
Part-Time	2018	27	13,49	771	15	26	15,22	963	16,7
	2019	27	14,02	824	15,3	27	15,65	1015	17
	2020	28	14,81	916	16,2	27	16,33	1073	17,3
	2021	28	15,19	919	15,7	28	16,4	1073	17,1
	2022	27	15,95	976	15,9	27	17,21	1152	17,5
Full-Time	2018	44	18,46	2956	41,7	10	13,47	2179	42,1
	2019	45	18,91	3039	41,7	11	13,86	2248	42,1
	2020	45	19,6	3134	41,7	12	14,53	2343	42
	2021	46	19,62	3174	41,8	12	14,61	2382	42,1
	2022	45	20,56	3327	41,8	12	15,45	2531	42,3
Total	2018	71	17,55	2119	31,5	37	14,34	1308	23,9
	2019	72	18,02	2203	31,7	38	14,74	1377	24,4
	2020	73	18,67	2293	32	39	15,42	1450	24,6
	2021	74	18,78	2311	31,8	40	15,48	1467	24,6
	2022	72	19,71	2453	32,2	39	16,28	1586	25,3

5. Tables

A, Economic indicators for the Netherlands

Change in %, unless otherwise specified	2019	2020	2021	2022	2023	2024
GDP	2.0	-3.9	6.2	4.3	0.7	1.4
Private consumption	0.9	-6.4	4.3	6.6	0.7	2.3
Exports of goods and services	2.0	-4.3	8.8	17.4	1.0	3.4
Imports of goods and services	3.2	-4.8	10.0	20.7	-0.3	3.5
Consumer Price Index (inflation)	2.7	1.1	2.8	11.6	4.1	3.9
Labour share in enterprise income (in level %)	73.9	76.3	72.9	71.5	70.6	71.5
Active labour force	1.6	0.0	0.9	2.4	1.9	0.9
Unemployment level, % of labour force ¹	3.4	4.9	4.2	3.5	3.6	4.0
EMU-debt level (ultimo year, in % GDP)	48.5	54.7	51.7	50.1	48.0	47.4
EMU-balance level (in % GDP)	1.7	-3.7	-2.3	-0.1	-1.6	-2.4

Source: CPB (Netherlands Bureau for Economic Policy Analysis)

¹ According to the international definition

B, Forest products production and trade in 2021, 2022 and 2023

Product Code	Product	Unit	Estimate		Forecast
			2021	2022	2023
1,2,1,C	SAWLOGS AND VENEER LOGS, CONIFEROUS				
	Removals	1000 m ³	154	173	170
	Imports	1000 m ³	87	77	80
	Exports	1000 m ³	65	117	105
	Apparent consumption	1000 m ³	176	133	145
1,2,1,NC	SAWLOGS AND VENEER LOGS, NON-CONIFEROUS				
	Removals	1000 m ³	57	48	50
	Imports	1000 m ³	65	54	60
	Exports	1000 m ³	59	48	50
	Apparent consumption	1000 m ³	62	54	60
1,2,1,NC,T	of which, tropical logs				
	Imports	1000 m ³	15	12	10
	Exports	1000 m ³	6	4	5
	Net Trade	1000 m ³	9	8	5
1,2,2,C	PULPWOOD (ROUND AND SPLIT), CONIFEROUS				
	Removals	1000 m ³	263	244	240
	Imports	1000 m ³	113	70	80
	Exports	1000 m ³	182	168	170
	Apparent consumption	1000 m ³	195	146	150
1,2,2,NC	PULPWOOD (ROUND AND SPLIT), NON-CONIFEROUS				
	Removals	1000 m ³	131	108	100
	Imports	1000 m ³	19	21	20
	Exports	1000 m ³	89	67	70
	Apparent consumption	1000 m ³	61	62	50
3 + 4	WOOD RESIDUES, CHIPS AND PARTICLES				
	Domestic supply	1000 m ³	971	915	900
	Imports	1000 m ³	512	198	
	Exports	1000 m ³	173	717	
	Apparent consumption	1000 m ³	1.310	396	
1,2,3,C	OTHER INDUSTRIAL ROUNDWOOD, CONIFEROUS				
	Removals	1000 m ³	35	32	30
1,2,3,NC	OTHER INDUSTRIAL ROUNDWOOD, NON-CONIFEROUS				
	Removals	1000 m ³	9	9	9
1,1,C	WOOD FUEL, CONIFEROUS				
	Removals	1000 m ³	451	457	450
1,1,NC	WOOD FUEL, NON-CONIFEROUS				
	Removals	1000 m ³	1.911	1.925	1.930

6,C	SAWNWOOD, CONIFEROUS		2021	2022	2023
	Production	1000 m ³	110	115	115
	Imports	1000 m ³	3.408	2.659	2.473
	Exports	1000 m ³	481	515	500
	Apparent consumption	1000 m ³	3.036	2.259	2.088
6,NC	SAWNWOOD, NON-CONIFEROUS				
	Production	1000 m ³	38	34	34
	Imports	1000 m ³	343	314	289
	Exports	1000 m ³	72	110	110
	Apparent consumption	1000 m ³	309	238	213
6,NC,T	of which, tropical sawnwood				
	Production	1000 m ³	8	7	7
	Imports	1000 m ³	159	197	181
	Exports	1000 m ³	23	55	55
	Apparent consumption	1000 m ³	143	149	133
7	VENEER SHEETS				
	Production	1000 m ³	0	0	0
	Imports	1000 m ³	21	17	15
	Exports	1000 m ³	7	3	3
	Apparent consumption	1000 m ³	14	15	13
7,NC,T	of which, tropical veneer sheets				
	Production	1000 m ³	0	0	0
	Imports	1000 m ³	2	1	1
	Exports	1000 m ³	0	0	0
	Apparent consumption	1000 m ³	2	1	1
8,1	PLYWOOD				
	Production	1000 m ³	0	0	0
	Imports	1000 m ³	695	586	551
	Exports	1000 m ³	95	98	94
	Apparent consumption	1000 m ³	600	488	457
8,1,NC,T	of which, tropical plywood				
	Production	1000 m ³	0	0	0
	Imports	1000 m ³	149	143	133
	Exports	1000 m ³	48	50	47
	Apparent consumption	1000 m ³	100	93	86
8,2	PARTICLE BOARD (including OSB)				
	Production	1000 m ³	0	0	0
	Imports	1000 m ³	727	800	774
	Exports	1000 m ³	90	114	112
	Apparent consumption	1000 m ³	637	686	662

8,2,1	of which, OSB		2021	2022	2023
	Production	1000 m ³	0	0	0
	Imports	1000 m ³	208	286	286
	Exports	1000 m ³	16	64	64
	Apparent consumption	1000 m ³	192	222	222
8,3	FIBREBOARD				
	Production	1000 m ³	29	29	29
	Imports	1000 m ³	572	465	431
	Exports	1000 m ³	147	162	150
	Apparent consumption	1000 m ³	454	332	310
8,3,1	Hardboard				
	Production	1000 m ³	0	0	0
	Imports	1000 m ³	66	63	58
	Exports	1000 m ³	22	19	17
	Apparent consumption	1000 m ³	44	44	41
8.3.2	MDF (Medium density)				
	Production	1000 m ³	0	0	0
	Imports	1000 m ³	408	361	336
	Exports	1000 m ³	117	141	131
	Apparent consumption	1000 m ³	291	220	205
8.3.3	Other fibreboard				
	Production	1000 m ³	29	29	29
	Imports	1000 m ³	73	41	37
	Exports	1000 m ³	8	2	2
	Apparent consumption	1000 m ³	93	68	64
9	WOOD PULP				
	Production	1000 m,t,	37	37	37
	Imports	1000 m,t,	2.167	1.717	1.717
	Exports	1000 m,t,	1.274	1.312	1.312
	Apparent consumption	1000 m,t,	929	443	442
12	PAPER & PAPERBOARD				
	Production	1000 m,t,	2.942	2.884	2.827
	Imports	1000 m,t,	2.268	2.180	2.096
	Exports	1000 m,t,	2.341	2.250	2.163
	Apparent consumption	1000 m,t,	2.869	2.814	2.760
5,1	WOOD PELLETS				
	Production	1000 m,t,	307	268	268
	Imports	1000 m,t,	2.657	2.523	2.523
	Exports	1000 m,t,	185	465	465
	Apparent consumption	1000 m,t,	2.779	2.326	2.326