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**GREEN DEAL INITIATIVES, SUSTAINABLE MANAGEMENT, MARKET DEMANDS, AND NEW PRODUCTION  
PERSPECTIVES IN THE FORESTRY-BASED SECTOR**

# **CHANGES IN CROATIAN WOOD PRODUCTS MARKET IN RESPONSE TO SUSTAINABLE DEVELOPMENT**



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## INTRODUCTION

The **wood industry plays an important part in today's world economy**, while wood products play an important role in ensuring sustainable consumption and production

Eurostat data from 2020 shows that in the European Union, wood-based industries accounted for 19,00% of all manufacturing enterprises.



... the **wood-based sector continues to be a crucial component of the broader manufacturing landscape within the EU**.

Croatia is one of the leading countries in the production and export of hardwood, according to European Organization of Sawmill Industry (EOS) (2023) and EUROSTAT (2022).

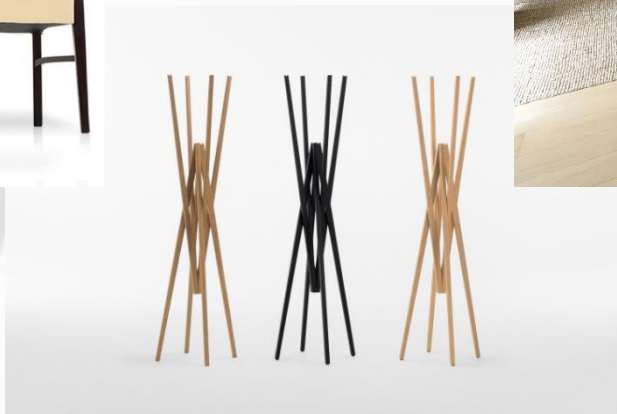
- the total area of forests and forest lands in Croatia is 2,76 million ha, which is 49.3% of the land area of the country.
- 2,1 million ha are public owned forests, while 661,721 ha are owned by private forest owners.
- The majority of forests owned by the state are managed by the public forest owner company – Croatian forests L.td.
- a total amount of wood stock is 418.6 million m3.
- Croatian wood-based industry has been developed on high quality forest raw material and as such, it represents an important economic segment of the country





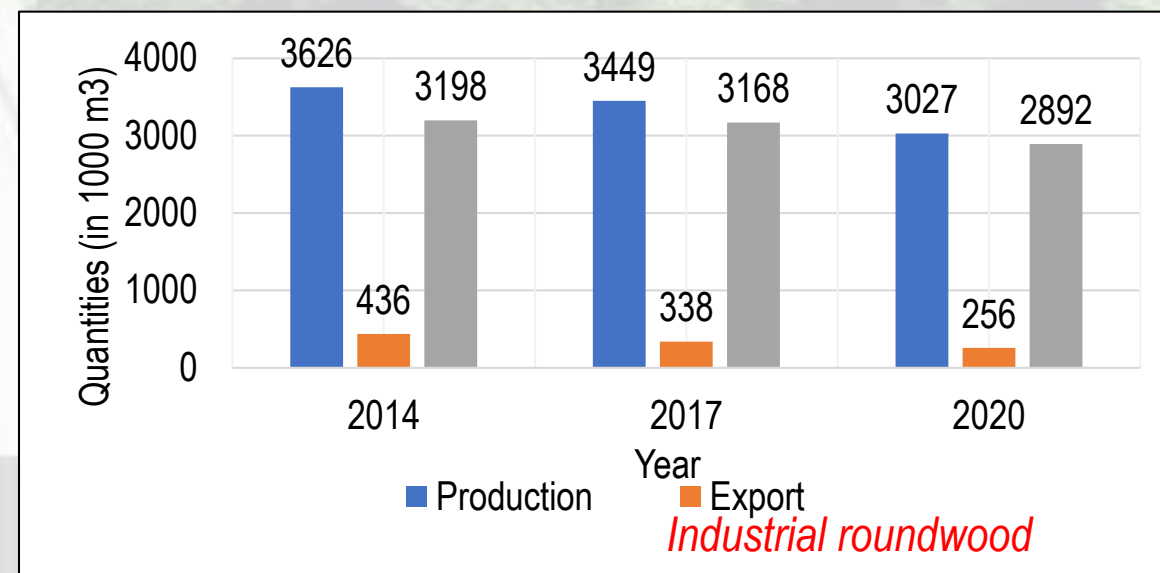
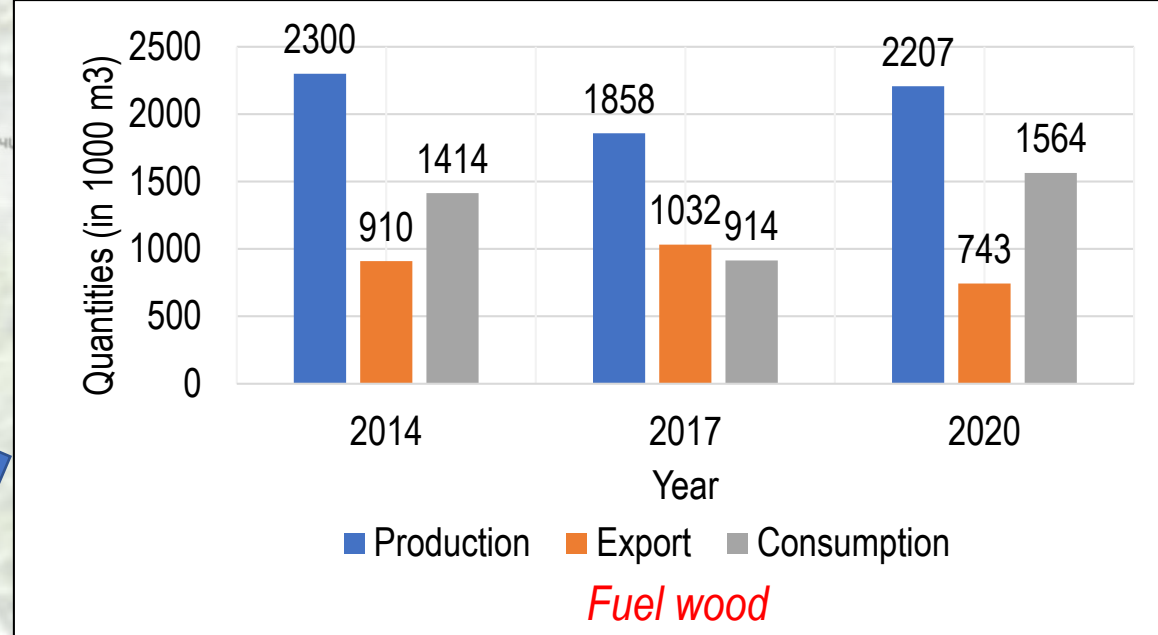
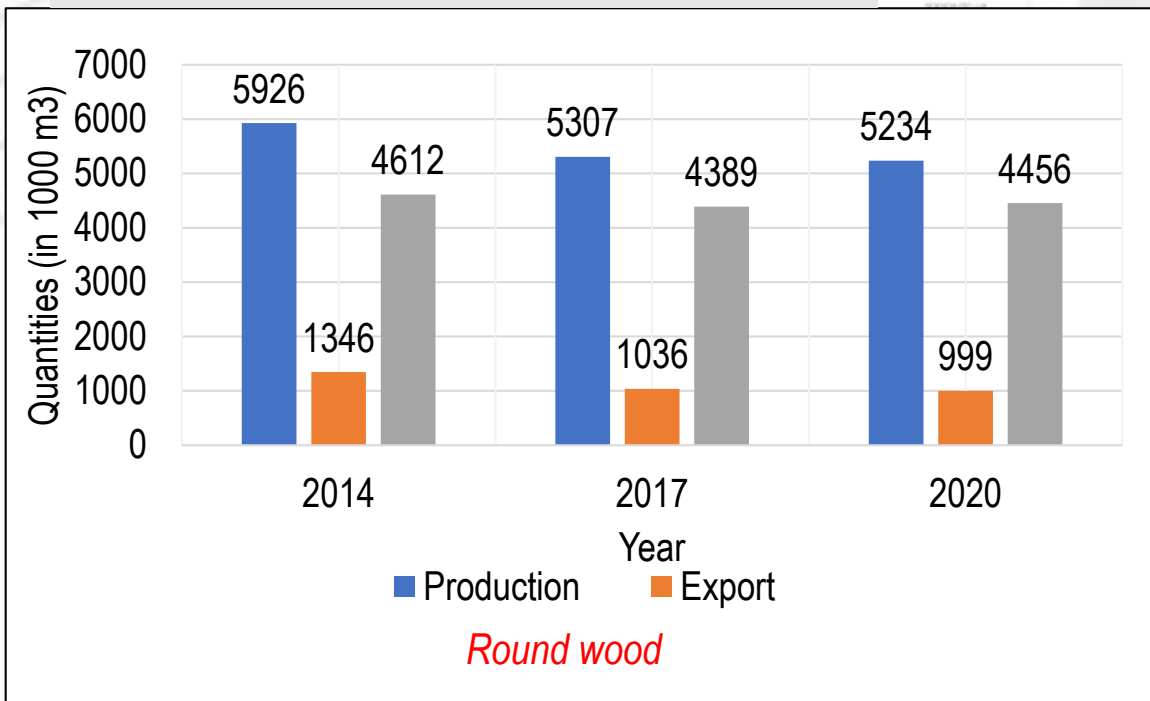
## RESEARCH

The aim of this paper is to analyze changes in Croatian wood products market in response to sustainable development incentives based on production, export and consumption information.



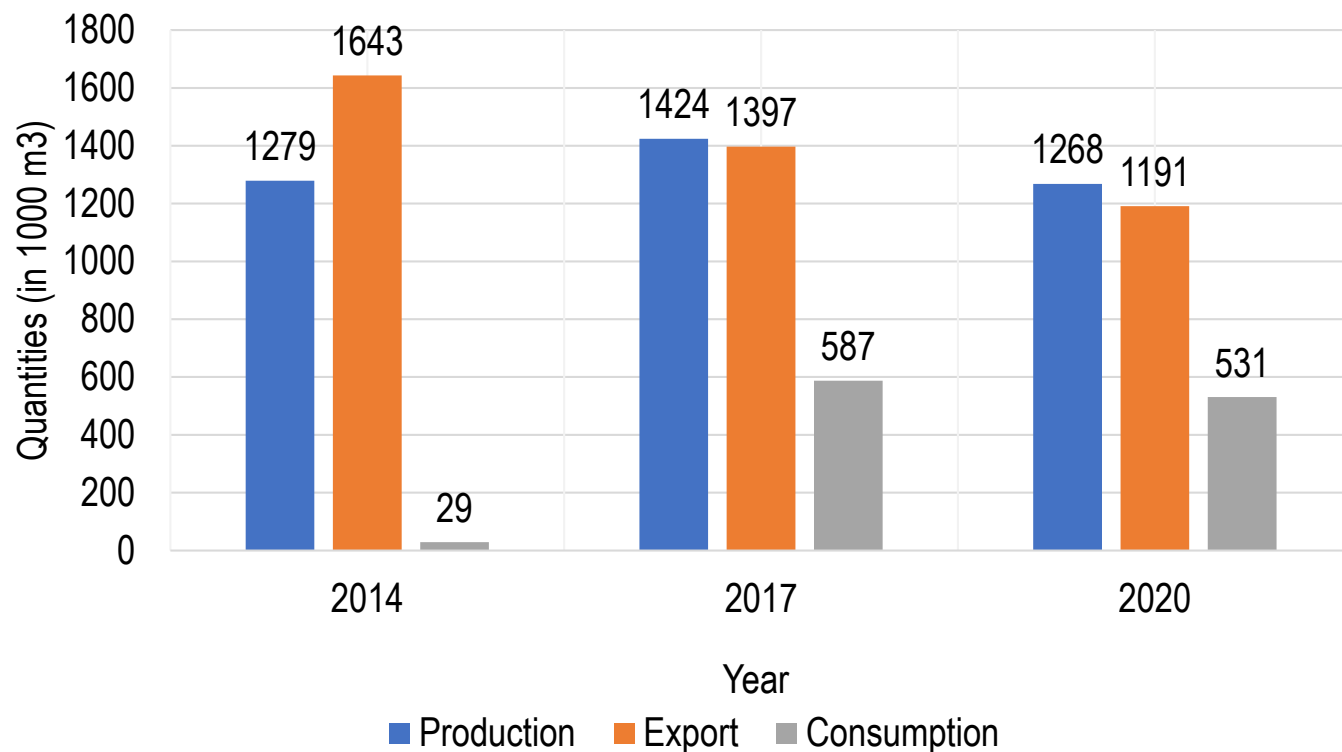
- production, export and consumption of primary wood products data - Croatian Bureau of Statistics (CBS).
- Production of wood products data were categorized based on the National classification of activities (NKD 2007/NACE 2007) using Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials (NACE division C 16).
- Wood products export data were categorized based on the Customs Tariff Document and area 44 - *Wood and wood products*
- The consumption of wood and wood products has been calculated on the basis of the **apparent consumption** using the following equation: **Consumption = Production – Export + Import**.
- Analyzed products were: roundwood, fuelwood, industrial wood, sawn wood, wood-based panels and paper and paper boards.
- Production, export and consumption quantities were selected for three years: 2014 – the first year after Croatia joined to EU, 2017, and 2020 – the year during a first year of Covid-19.
- The obtained values are expressed in cubic meters.

# RESULTS



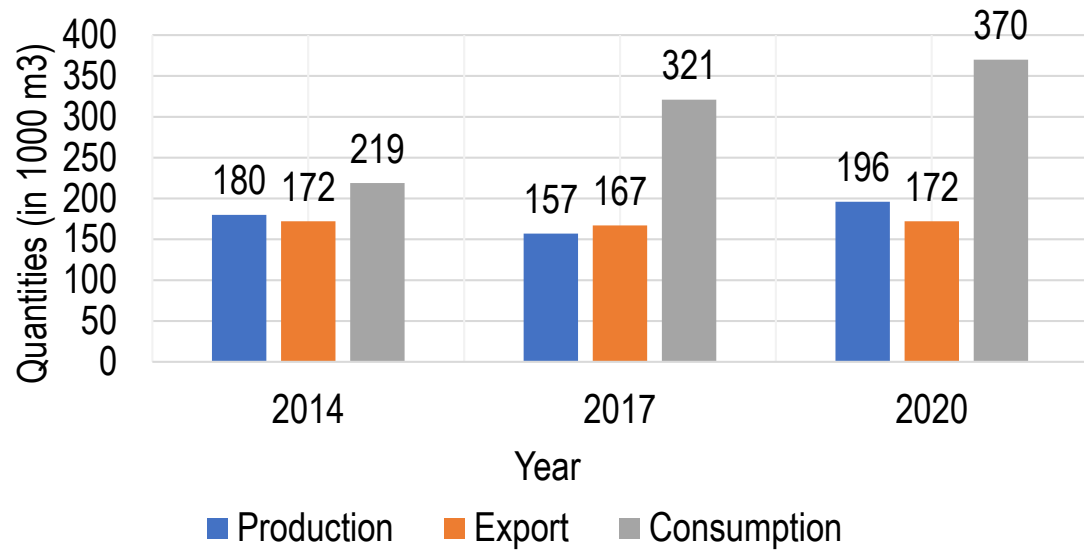
- annual **round wood production** were between 5,2 and 5,9 million m<sup>3</sup>;
- fuel wood production wood was between 1,8 and 2,3 million m<sup>3</sup>,
- industrial wood production was between 3,0 and 3,6 million m<sup>3</sup>.
- **Industrial round wood export** values were **lower than fuelwood exports** in all observed years.
- **Industrial round wood consumption** was **almost equal to industrial round wood production** values.



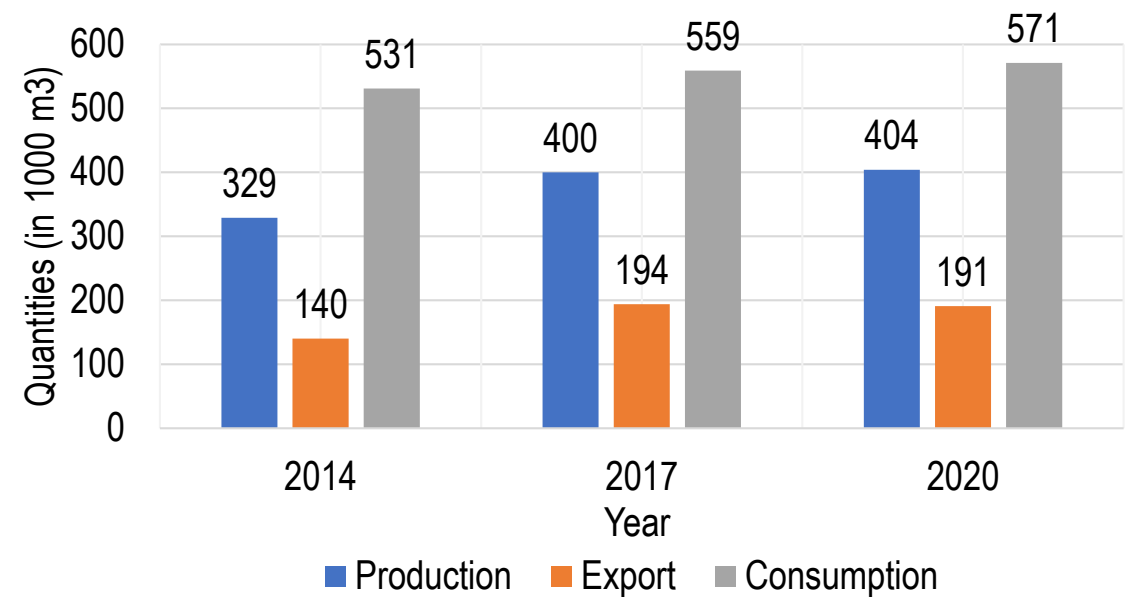


- Production of sawn wood was between 1.4 and 1.7 million m<sup>3</sup>.
- **Production was almost equal to exports.**
- in 2014: the export of sawnwood was higher than production!!!?!?!?

*Sawnwood – production, export and consumption (in 1000m<sup>3</sup>)*



*Wood-based panels*



*Paper and paperboards*

- **consumption of wood-based panels** increased, from 219 thousand m3 in 2014 to 370 thousand m3 in 2020.
- **Export value of wood-base panels** were higher in comparison to production values.
- This refers to assumption that the production of wood-based panel furniture has increased in Croatia mostly including wood-based panels from foreign countries.
- **Consumption of paper and paperboards**, was between 531 thousand m3 and 571 thousand m3.
- **Consumption values were higher** between 30 to 40% in comparison to production values (38% in 2014; 28% in 2017; and 29% in 2020).



## ... INSTEAD OF CONCLUSION

**The new EU forestry strategy for 2030** is one of the leading initiatives of the **European Green Plan**. This strategy should contribute to achieving the EU's goals of reducing greenhouse gas emissions by at least 55% by 2030 and increasing sinks and climate neutrality by 2050.

As a renewable energy source, **wood and wood products** also plays an important role in the transition towards green, sustainable development and the cessation of fossil fuel use.



During 2015, Eurostat received new data related to the consumption of solid biomass, which resulted in the Croatia having a problem of inconsistency of statistical data, what has an impact on the inventories that the Croatia prepares and delivers according to international agreements and that relate to greenhouse gases.

By comparing the data on wood products at the national level, it **became evident that there are certain significant deviations in this data by individual years.** ...and data in this research are presenting some segments of it.



... it was determined that it is necessary to establish a system that would ensure continuous monitoring of biomass production and consumption in accordance with the requirements prescribed by international standards.



At the moment we participate in a project 'ESTABLISHMENT OF A SYSTEM FOR REPORTING ON WOOD PRODUCTS (CRO-WOODS)' which we hope will solve the said problem



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# THANK YOU!

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