



# Wood Energy

Update on current trends and developments on wood energy policies and market trends

## COFFI Market Discussions 2023

San Marino, 20-23 November 2023

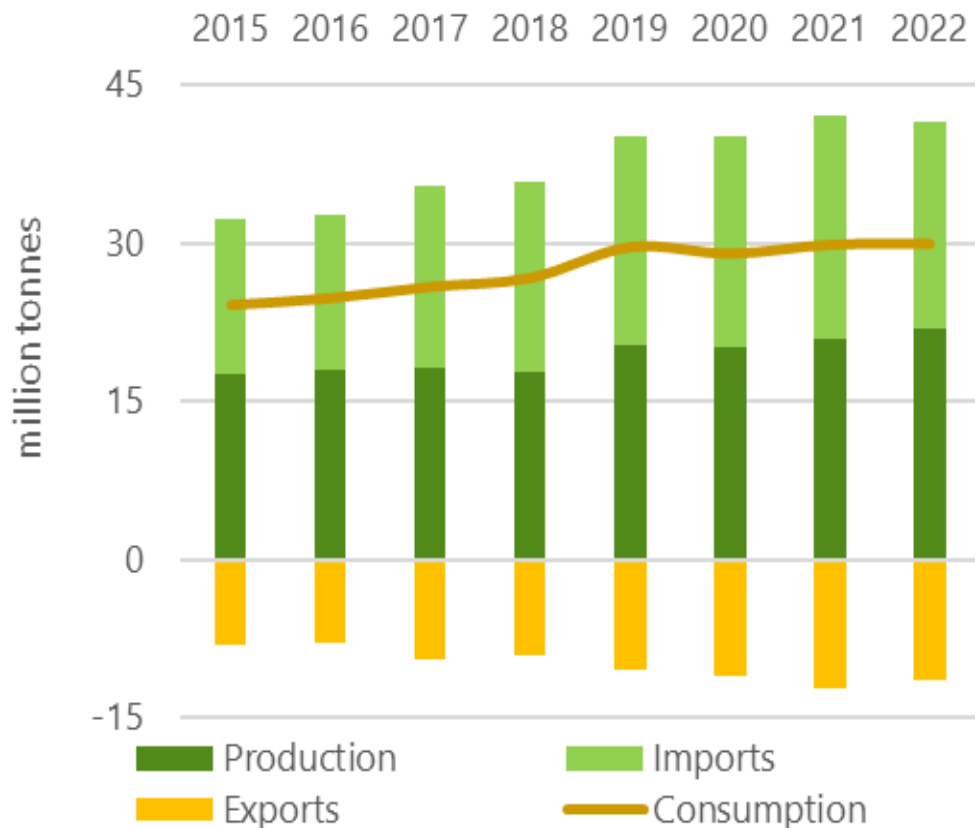


# Highlights: Wood Energy Markets



- Worldwide, the value of exported wood pellets (HS 440131) totaled an estimated US\$5.87 billion in 2022, which accounted for some 69% of the combined export value of energy-related wood products (wood briquettes, wood charcoal, coniferous and non-coniferous woodfuel, wood pellets ).
- Led by the US, nine of the top-10 exporters of wood pellets (by value) worldwide are in the ECE region.
- Value of wood pellets exports among these nine ECE members was over 10 times that of woodfuels in 2021
- Most recent UNECE/FAO Joint Wood Energy Enquiry (JWEE) data show that wood fibres densified into wood pellets are split between direct (52.2%) and indirect (47.8%) sources.

# Highlights: European Region

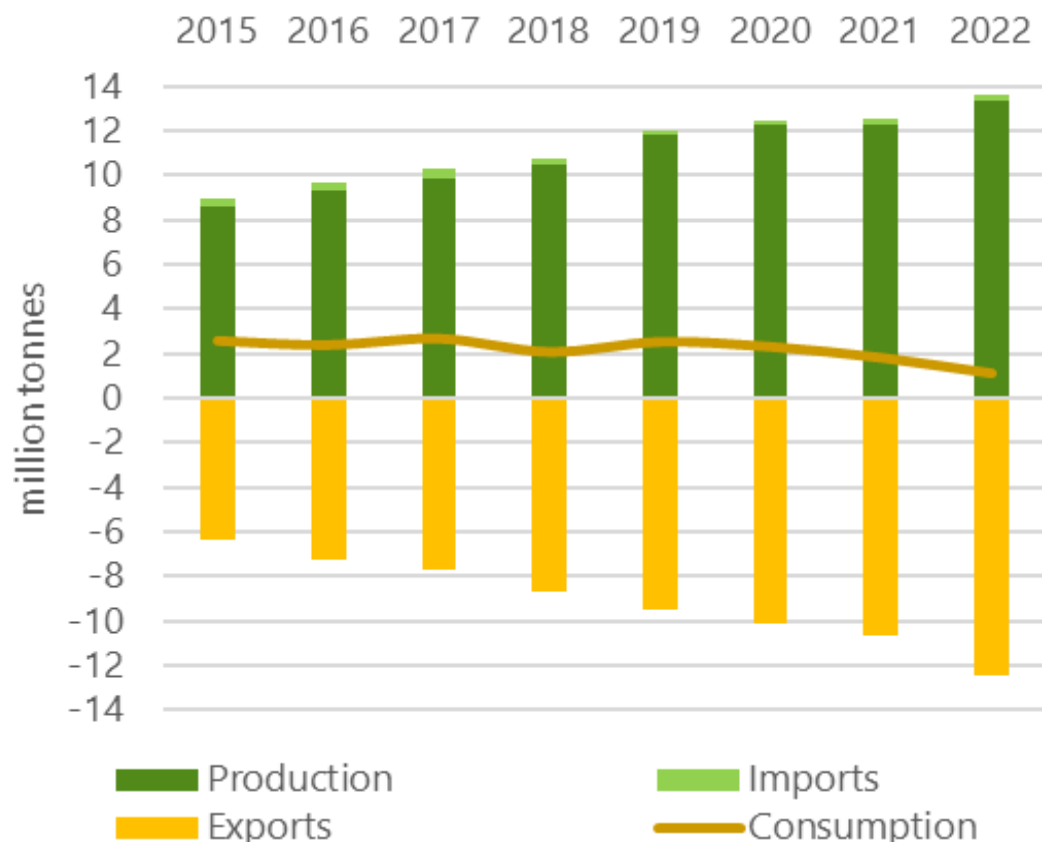


## In 2022:

- Annual European wood pellet production increased marginally. Longer trends show production growing by 22% since 2018, and nearly by 25% from 2015 levels.
- Year-over-year decline of about 6% in wood pellets (by weight) imported into Europe
- Total imports of wood pellets was about 90% of regional production.
- Net wood pellet consumption in Europe seems to have plateaued.
- Annual average value of wood pellets imported into Europe grew by nearly 24% to 232 US\$/tonne, from 188 US\$/tonne in 2021.

Europe: Wood pellet production, trade and consumption

# Highlights: North American region



North America: Wood pellet production, trade and consumption

## In 2022:

- Growth in wood pellet production (8.7% year-over-year) and exports (16.5% year-over-year) continued.
- Quantity of wood pellets exported reached 12.47 million tons.
- Net wood pellet consumption in North America continued on a downward trend.
- US wood pellet exports were just shy of 9 million tonnes and had a traded value at over 1.545 billion USD.
- US wood pellet production (by weight), represents about 5% of all roundwood production in the country's southern region.

# Policy Developments



- The European Commission proposed amendments to current Renewable Energy Directive (2018/2001) would increase energy consumption target for renewable sources from 32% to 42.5% by 2030. Amendments include a 'cascading principle': (1) wood-based products, (2) extending their service life, (3) re-use, (4) recycling, (5) bio-energy, and (6) disposal.
- EU Regulation on deforestation-free supply chains (EUDR) will begin implementation on 30 December 2024. Feasibility of providing required geolocation data and verifying a full chain of custody may prove challenging to implement.
- EU Regulations 2022/355 and 2022/576 established restrictive measures on imports from Belarus and Russia. By Q4 2022 all imports of wood pellets into the EU have fully stopped.

# Policy Developments



- The US Inflation Reduction Act includes US\$369 billion allocated to clean energy investments. The US Energy Information Administration's outlook through 2024 foresees no changes in domestic woody biomass used to generate power in the electricity, industrial and commercial sectors.
- Tax credits provided to bioenergy producers that capture and store carbon dioxide could affect wood pellet production by increasing demand for biomass feedstock in the future.
- Canada's Clean Fuel Standard focuses on liquid fuels, and includes various pathways for wood to fuel but does not cover solid fuels. It establishes a Clean Fuels Fund - up to C\$8 billion - to decarbonize large emitters, support industrial transformation, and develop clean technology and battery development. Bioenergy projects that meet these goals eligible for funding.

# Wood Energy Markets for salvage wood



Wood damaged by extreme weather, insects, and disease can be more readily used for energy, than saw or pulp milling sectors.

- In Portugal, legislation mandates that wood damaged by *Pinus pinaster* nematode is to be burned. Salvaged timber after wildfires is another assortment used for energy generation.
- In Sweden, where an estimated 5 million m<sup>3</sup> of standing timber were killed by the European spruce bark beetle in 2022, there was a declining trend in 2023 in damaged wood. Bark beetle-damaged wood is solely used as a biofuel if stored for too long.

# Summary



- Wood pellets dominate global trade in energy-related forest products
- Year 2022 marked by disruptions and high prices
- Market growth continued in 2022 albeit at slower rates in wood pellet production and trade across the ECE
- Wood pellet uses have been backed by public policies promoting renewable energy, future growth will likely depend on whether policies in the ECE and beyond continue their support
- Importance of energy markets to keep value of salvaged wood



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# Thank you

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