

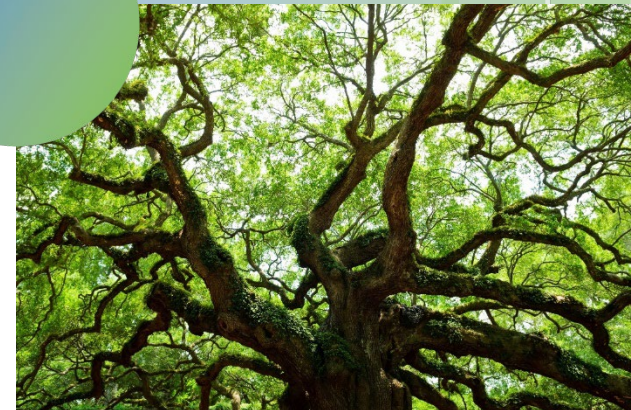
Wood energy in the UNECE region with focus on the Western Balkans Item 5

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UNECE Committee on Forests and the
Forest Industry

80th session

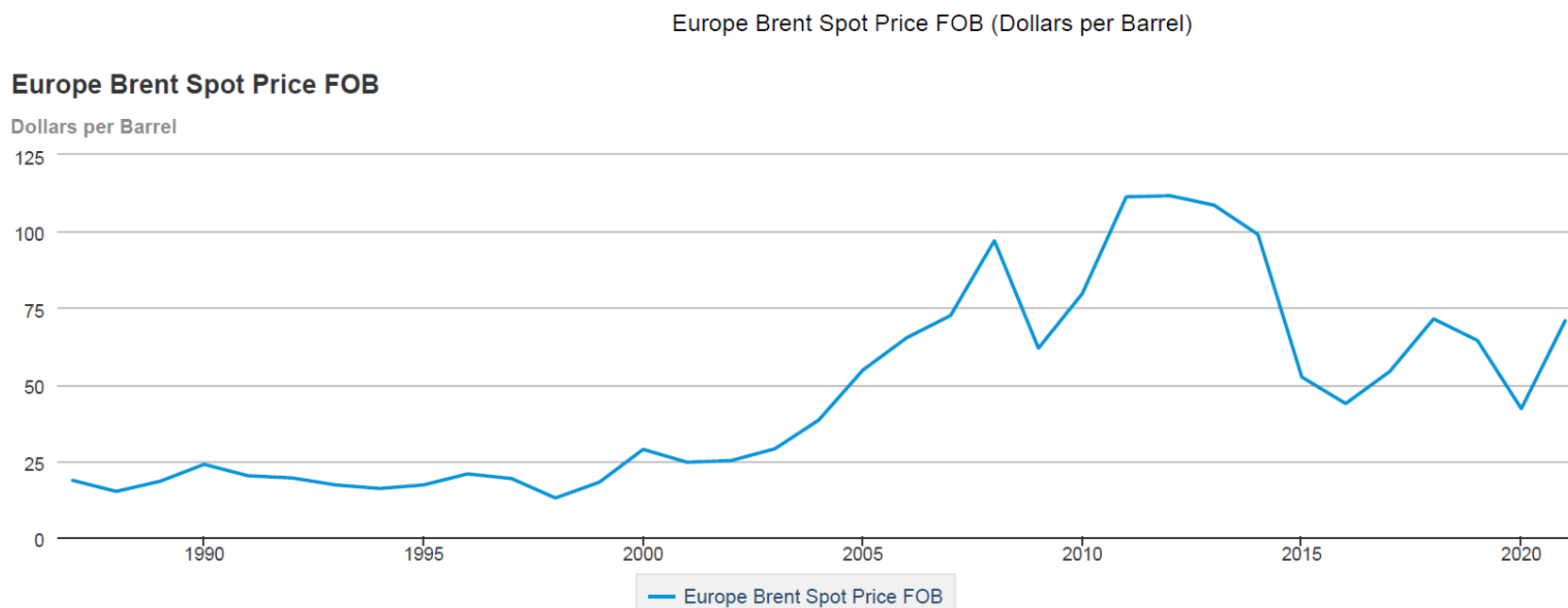
Geneva, 2-4 November 2022



Outline

1. Hot, hotter, wood energy – why is wood energy in the focus
2. Short overview on North American market
3. Wood energy markets in countries in the Western Balkans
4. Wood energy developments in the EU with a focus on wood pellets (by Bioenergy Europe – recorded)

Hot, hotter, wood energy – wood energy in the focus

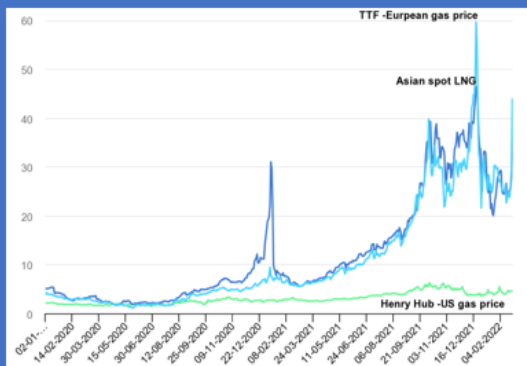


2005-2015 → 15 years of high oil price (constantly above USD 50) driving demand for wood energy modern renewable energy that substituted for old oil heating systems

– not really the driver this time

Hot, hotter, wood energy – why is wood energy in the focus

Natural gas prices soared in August 2022



ENERGY

Europe's 'not out of the woods' despite gas prices falling to 4-month lows

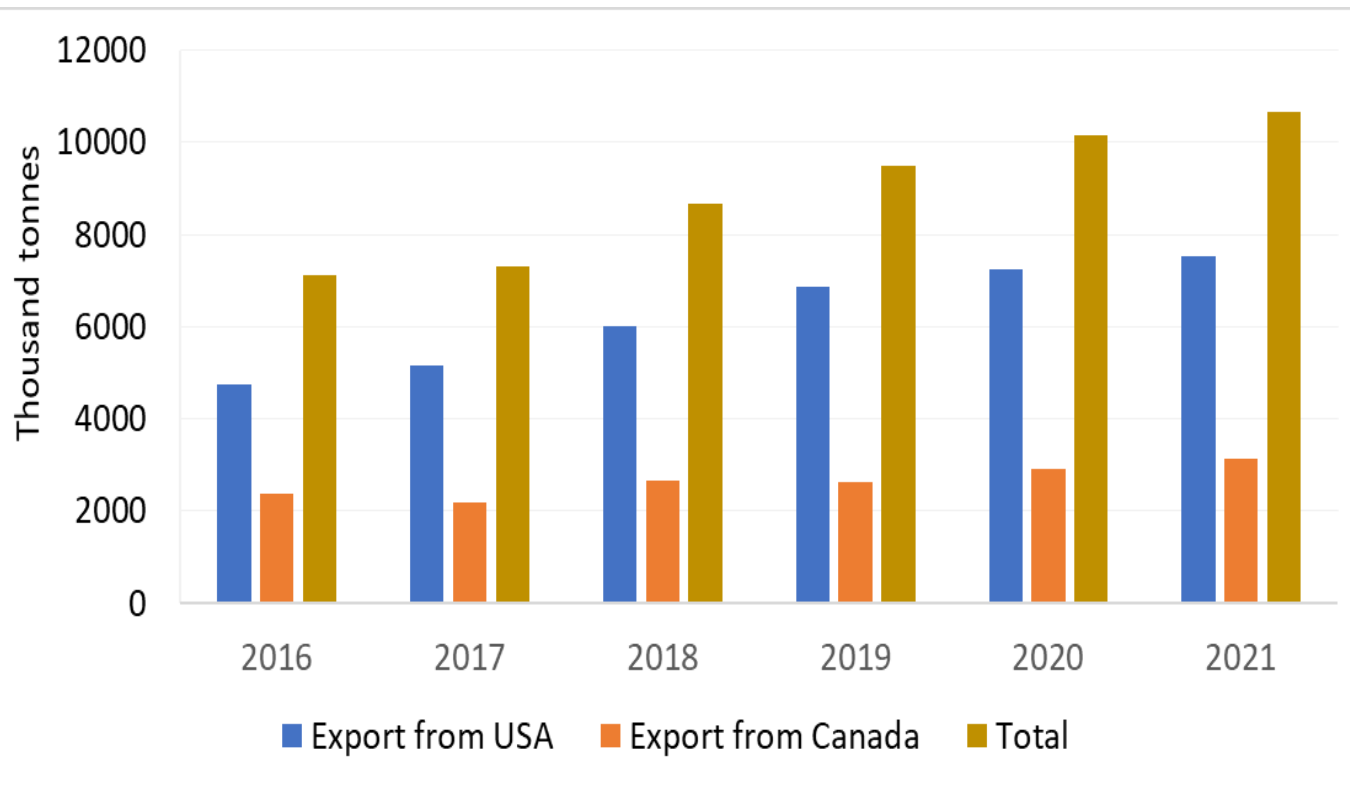
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Wood energy in North America

- Fuelwood is only used by 4% of households in the US with marginal increases in 2021 and early 2022. Long term prospects foresee further decrease.
- The forest-based industries are by far the main producer of wood-based heat and power
- Wood chips for commercial heat and power production is invisible.
- Wood pellets production and export are booming in North America.
- Consumption of wood pellets by individual household very minor.

Wood energy in North America (cont.)

Wood pellet exports



- Canada and the United States together they exported 10.6 million tonnes (about 1/3 of global exported volumes)
- Exports from the US are reported to have jumped by about 20% in the first six months of 2022 compared to the same period in 2021.

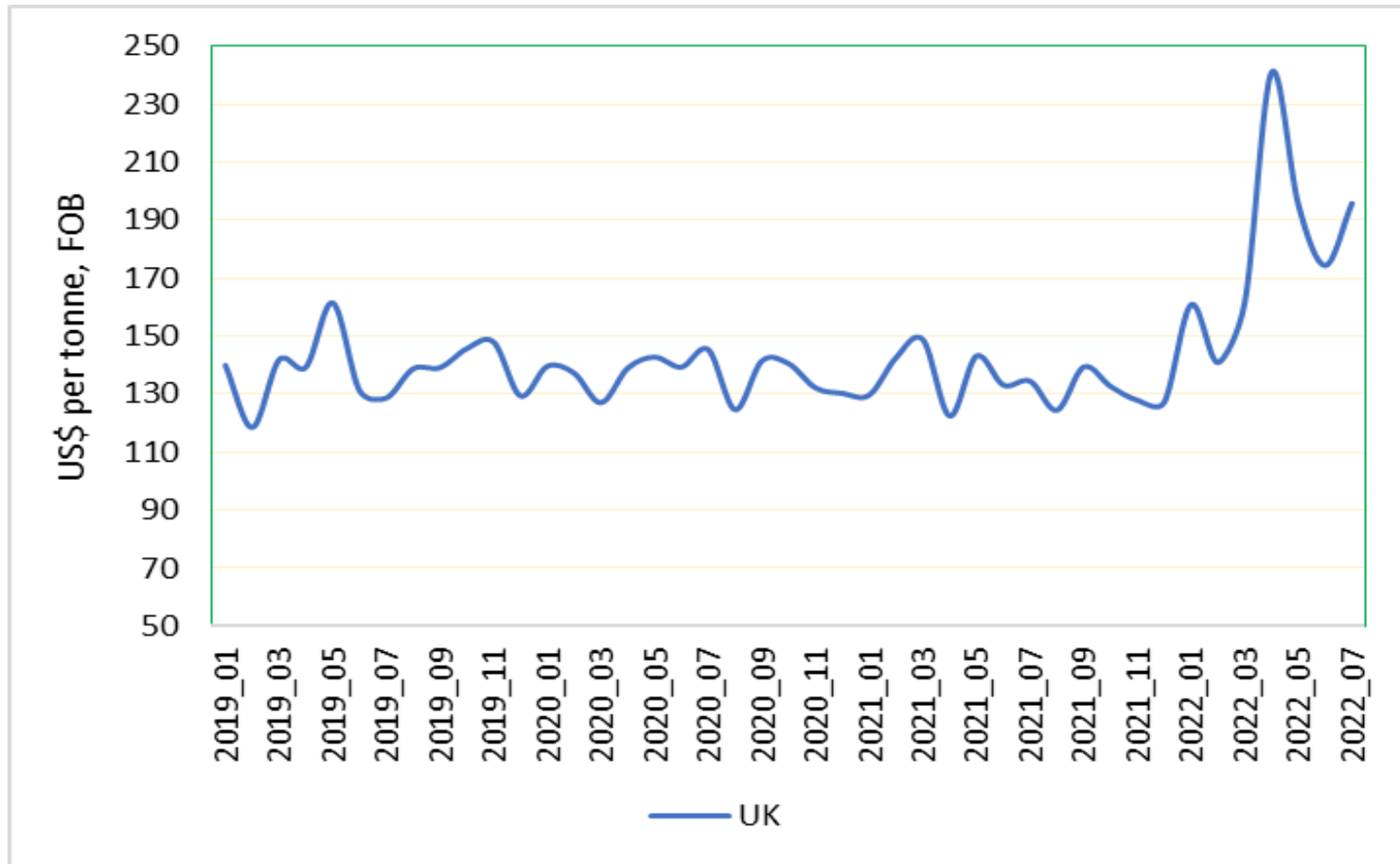
Wood pellets export from USA in 2021

USA: Wood pellets main export destinations, 2021.



Wood pellets export prices from USA

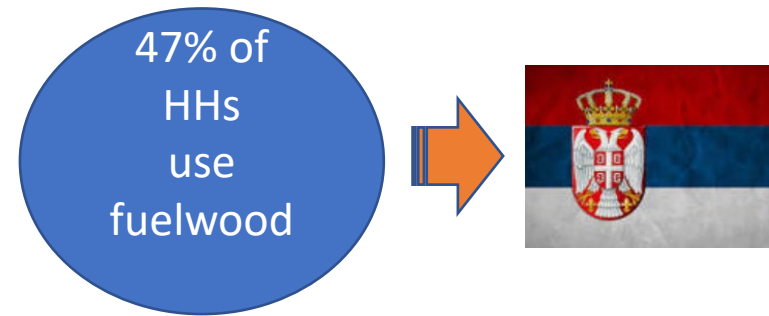
Wood pellets average export prices from USA to UK



Wood energy in the Western Balkans (2021)

- The countries in the Western Balkans subregion consumed 22.7 million m³ of fuelwood in 2021, about 0.8 million m³ less than in 2020.
- Despite the decline in its production in 2021, fuelwood still remains the most important fuel for household heating in the majority of the Western Balkans countries.
- A relatively mild winter and an increasing number of households transitioning to using wood pellets explains this trend.

Case study from Serbia



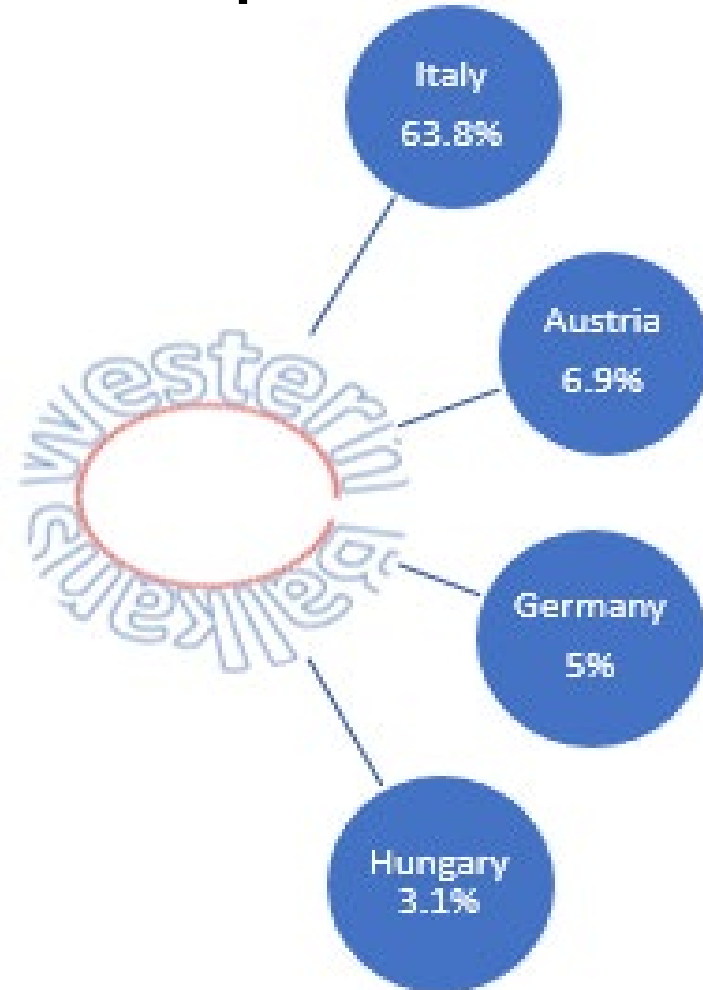
Wood energy in the Western Balkans (2021)

The amount of fuelwood destined for export from the region is significant (over 7% of production). Export of fuelwood increased by 23.3% (1.73 million m³) in 2021.

Italy is the main destination for fuelwood from the entire subregion.

The average value of a 1m³ of exported fuelwood was \$83.5 in 2021, about 6% higher than the average annual price in 2020.

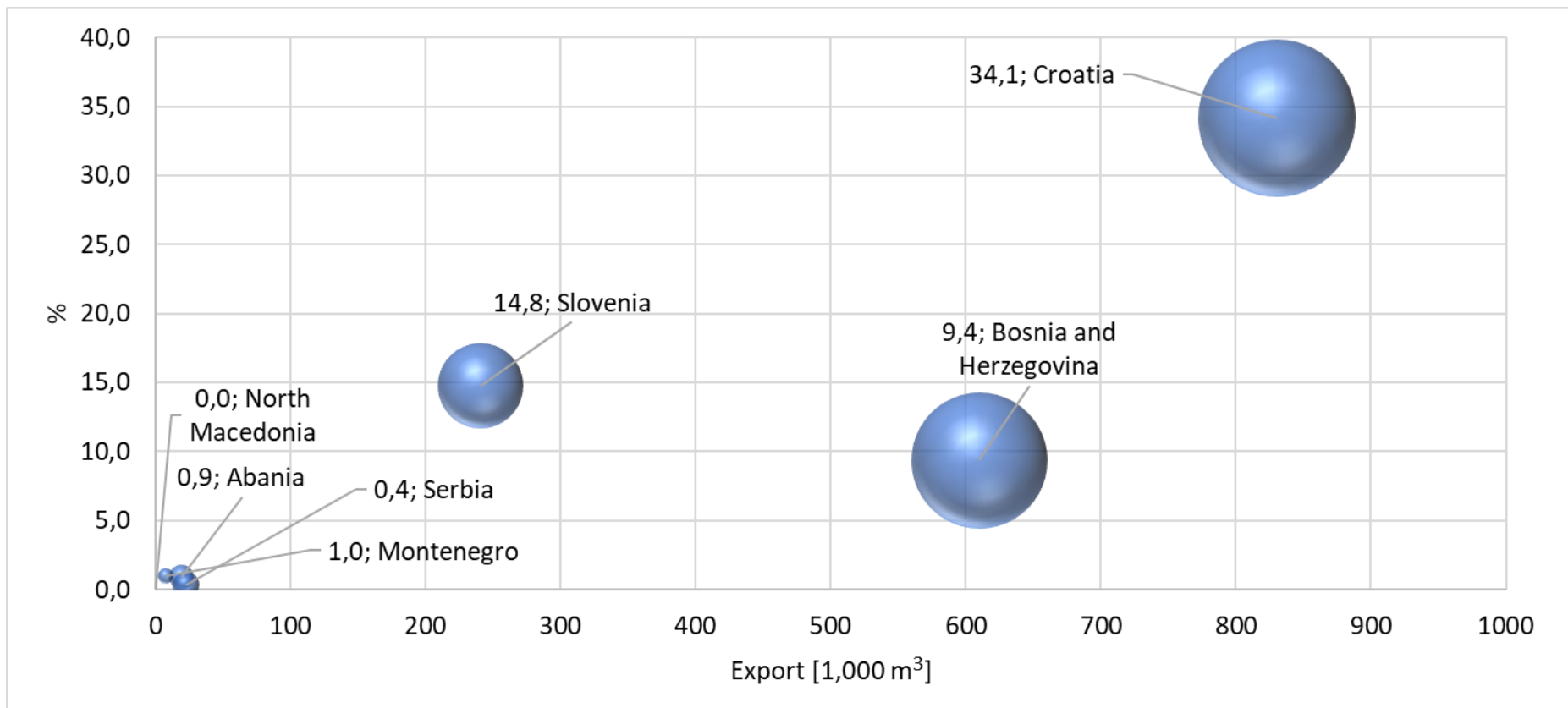
Main export destinations, 2021.



Sources: Comtradeplus database, 2022

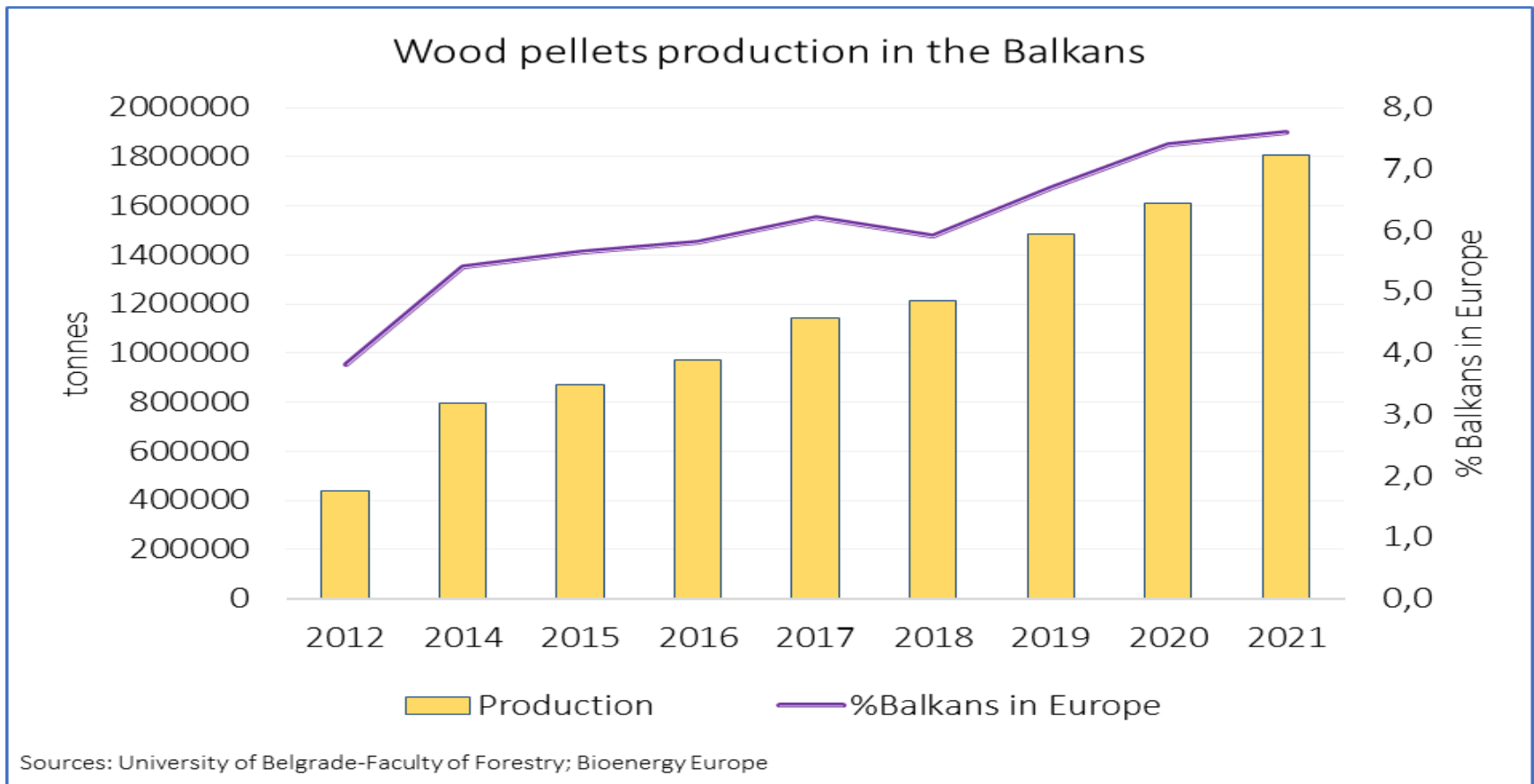
Wood energy markets in countries in the Western Balkans

Ratio export/production of fuelwood in 2021



Wood energy in the Western Balkans (2021) (cont.)

- Wood pellet production by countries in the Western Balkan subregion increased by 12.4% to 1.8 million tonnes in 2021.
- The production of EN plus certified wood pellets (A1 and A2 qualities) totalled 1.27 million tonnes, about 70% of total production, with a majority being certified as A2.

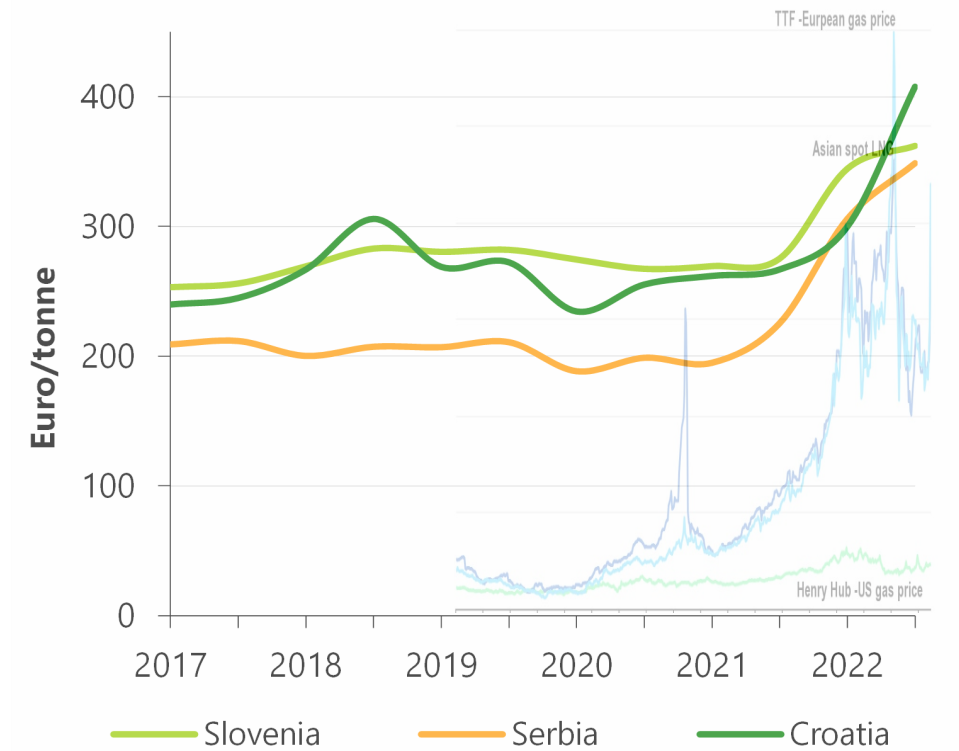


Wood energy in the Western Balkans (2022)

- Decline in production, growth in exports and production costs, and household purchase of fuelwood in the face of uncertain prices for natural gas and electricity triggered this sharp price increase.
- Fuelwood prices in domestic markets increased by approximately 30% year-over-year in May 2022 and accelerated further to reach an annual increase of 50% by September 2022
- Shortages of fuelwood have been reported in Bosnia and Herzegovina, and Serbia by mid-2022. Governments in Belgrade and Sarajevo have implemented temporary export controls to protect local markets.

Highest prices for natural gas coincided with preparations with coming winter period

Wood pellets average domestic market prices in Croatia, Serbia and Slovenia



Note: Average market prices of wood pellets (including VAT, 15 kg bags) as of April in selected countries of the Western Balkans.

Sources: University of Belgrade-Faculty of Forestry, 2022; Slovenian Forestry Institute; 2022)

Wood energy in the Western Balkans (2022) (cont.)

- Other wood fuel markets continued recent trends, with sustained growth in the production of wood chips (used in district heating and combined heat and power systems), and the reduction in charcoal and wood briquette consumption.
- Similar to the case of wood pellets, in the first quarter of 2022 the prices of wood chips increased by 25-30% compared to October 2021 throughout the region. Charcoal prices have risen by 19-26% over the same period.

Conclusions

Rising prices for oil, gas, and electricity are very likely to further boost the consumption of wood energy by individual households throughout the UNECE region in 2022 and beyond.

Thank you!

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