



European market update

UK Wood Heat Conference

Fiona Matthews
Director

October 2023

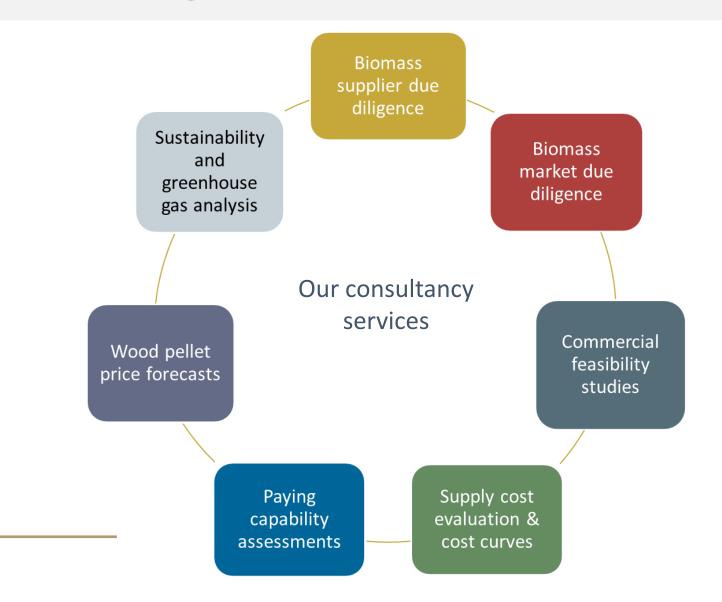
www.hawkinswright.com



Page 2



Hawkins Wright



- Experienced forest products consultancy
- Extensive network of market contacts

 We carry out a range of market intelligence-led projects

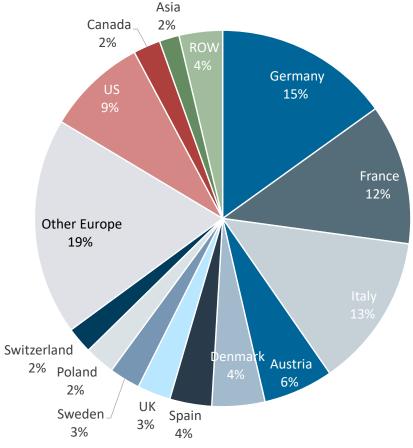
October 2023





Introduction to the global heating pellet markets

Global heating pellet demand in 2022, by region



Source: Hawkins Wright, Outlook for Wood Pellets

- The global heating market is close to the size of the industrial market
- Europe represents the largest share of the market
- Germany, Italy and France are the largest individual markets
- We include residential and commercial heating in our heating figures

Page 3 October 2023



Policies driving heating market growth

Key policies supporting new boiler and stove installations



- Although using pellets is often cheaper than fossil fuels, consumers often need government grants/incentives to install new boilers/stoves.
- Bans on fossil fuels systems are also effective incentives
- Changes to support can have a significant impact
 e.g. Germany's BEG reforms

Page 4 October 2023





A look back at last year





A look back at last year

German and Austrian retail heating pellet prices



Source: DEPI, ProPellets

- Heating pellet pricesskyrocketed ahead ofthe winter season
- Fears over the loss of Russian supply supported the price moves
- reached \$450/t,
 largely due to high
 power prices

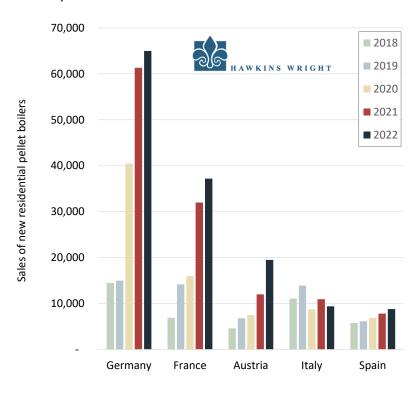
Page 6 October 2023



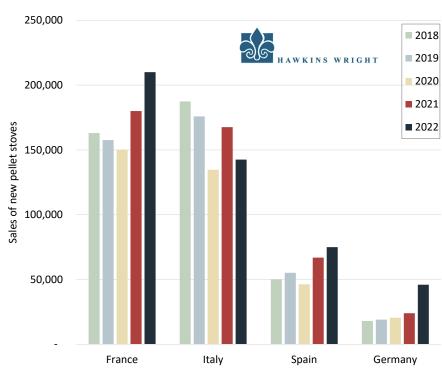


2021 and 2022 appliance sales were record-breaking

European biomass boiler sales



European pellet stove sales



 Biomass boiler and stove sales had been strong in 2021 and 2022, indicating demand would increase substantially in winter 2022/23

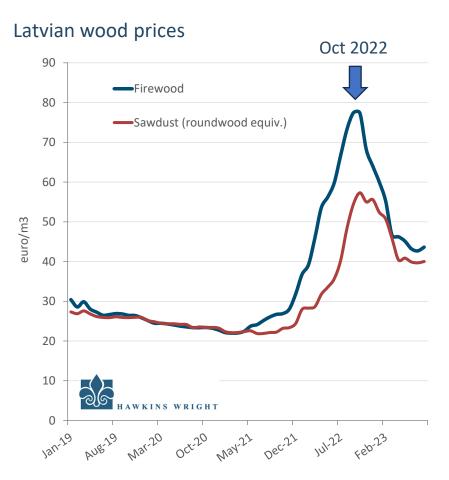
Source: Bioenergy Europe

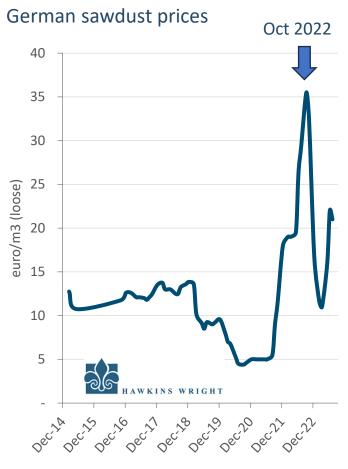
Page 7 October 2023





High wood & energy prices supported high pellet prices





- The Baltic states were particularly vulnerable to EU sanctions imposed on Russia
- The fallout was felt in other markets as wood prices rose universally

Source: MeKA Source: EUWID

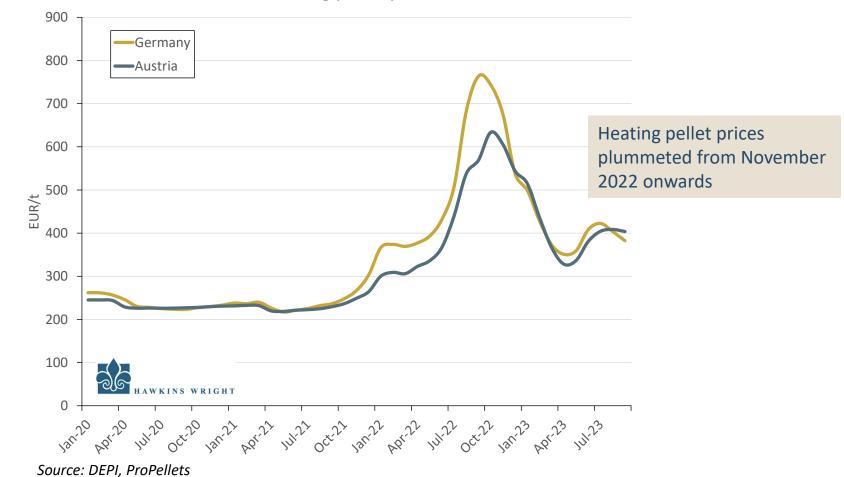
Page 8 October 2023





So what happened?

German and Austrian retail heating pellet prices



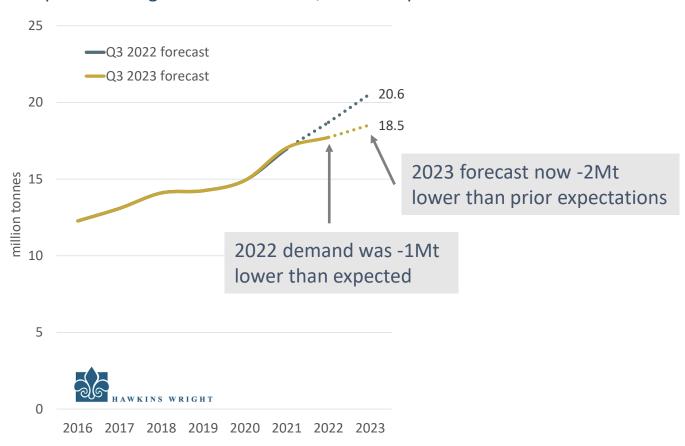
- Demand did not materialize as expected
- Prices softened during the heating season, bucking the usual seasonal trend

Page 9 October 2023



European heating demand has not matched expectations

European heating demand forecasts, now and previous



Source: Hawkins Wright, Outlook for Pellets, Q3 2023

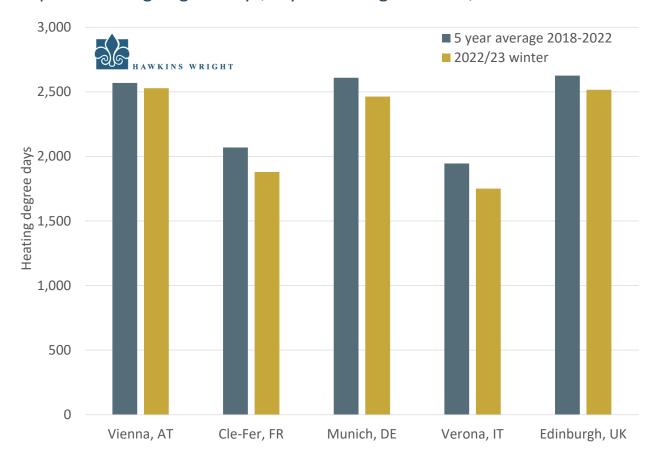
Page 10 October 2023





Mild weather dampened demand

European heating degree days, 5-year average vs 2022/23 winter season



Source: MDA EarthStat

- Italy HDDs down –10% versus 5-year average
- German HDDs down –6% versus 5-yearaverage
- UK HDDs down –4% versus 5-year average

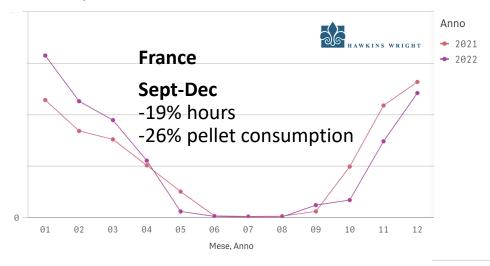
Page 11 October 2023

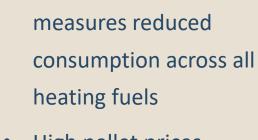




European consumers altered their behaviour

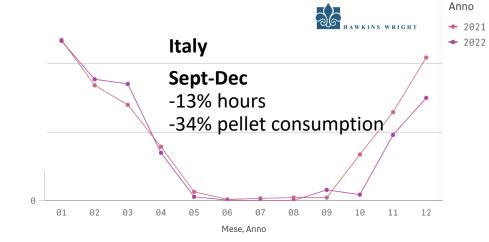
Palazzetti pellet stove use 2021 vs 2022





Energy efficiency

- High pellet prices
 dissuaded pellet use in
 existing appliances
- Stove users were better able to reduce pellet consumption



Source: PALAZZETTI IoT Data Platform

Page 12 October 2023

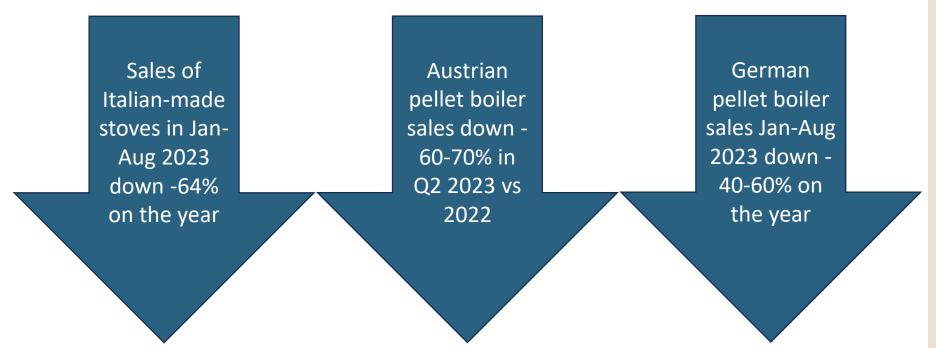




Heating market outlook



Boiler and stove sales plummeted since 2H2022



- New sales of pellet
 heating appliances
 plummeted, depressing
 future market growth
- Consumer confidence dented by high pellet prices and shortages
- Change of policy in Germany also impacted sales
- Sentiment is said to be improving

Sources: AIEL, ProPellets, German government statistics

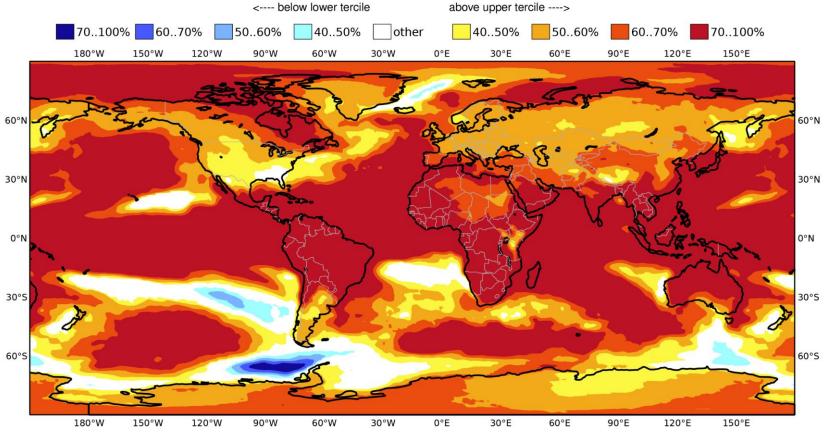
Page 14 October 2023





European weather outlook

Copernicus forecast, probability of temperature departing from long-term mean



Source: Copernicus

2m temperature anomaly refers to the departure of the current day's forecast temperature from a long-term mean.

- El Niño years often lead to differences between early winter and late winter
- Copernicus expects a
 warmer and wetter Q4 in
 Europe, particularly in the
 south
- But then colder weather could arrive, particularly in northern Europe
- Winter as a whole is predicted to be likely warmer than average

Page 15 October 2023



Outlook for European supply

We can identify 1.3Mt/y of new capacity under construction in Europe

Production rates were strong in the first half of 2023, slowdown in later summer

Spring buying spree means end-user stocks are relatively high

Raw material prices have eased from record highs last year

- European pellet
 production has been
 strong this year
- A lot of new capacity is starting up, primarily in countries with growing demand e.g. France,
 Germany

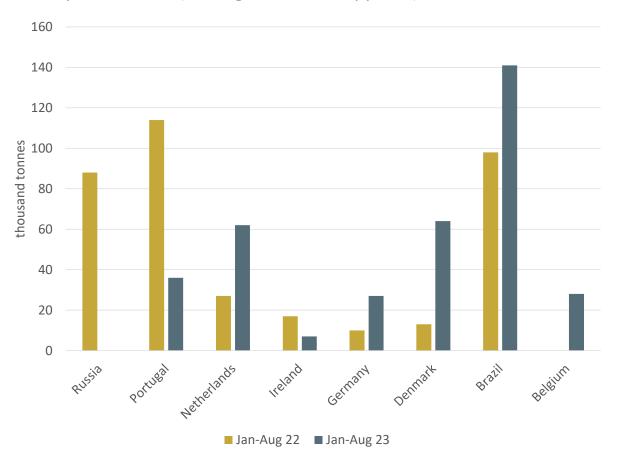
Page 16 October 2023





UK heating pellet import trends

2023 imports v 2022 (exc big industrial suppliers)



- NB: Industrial supply countries not shown (USA, Canada, Baltics)
- -176kt lower imports from
 Russia, Ireland and Portugal
- +174kt higher imports from
 Belgium, Brazil,
 Netherlands, Germany and
 Denmark

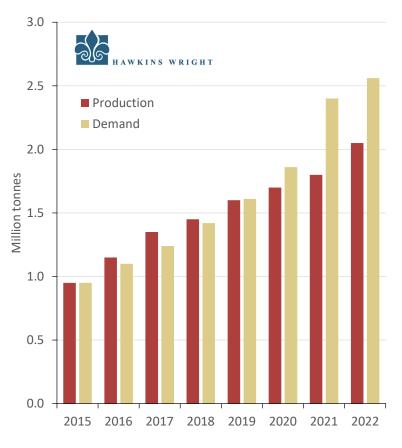
Page 17 October 2023



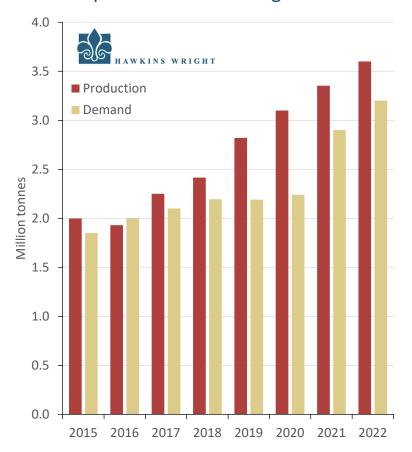


Will Europe need North American heating pellets?

French production vs heating demand



German production vs heating demand



- Although European production is growing to meet increased demand, there is a disconnect.
- were to return to pre-2023 levels, European production may struggle to keep up

Source: Hawkins Wright research

Page 18 October 2023



Thank you for your attention!

If you have any questions, please contact me:

Fiona Matthews

Fiona.matthews@hawkinswright.com



4-5 December 2023 | Amsterdam, Netherlands



Page 19 October 2023