



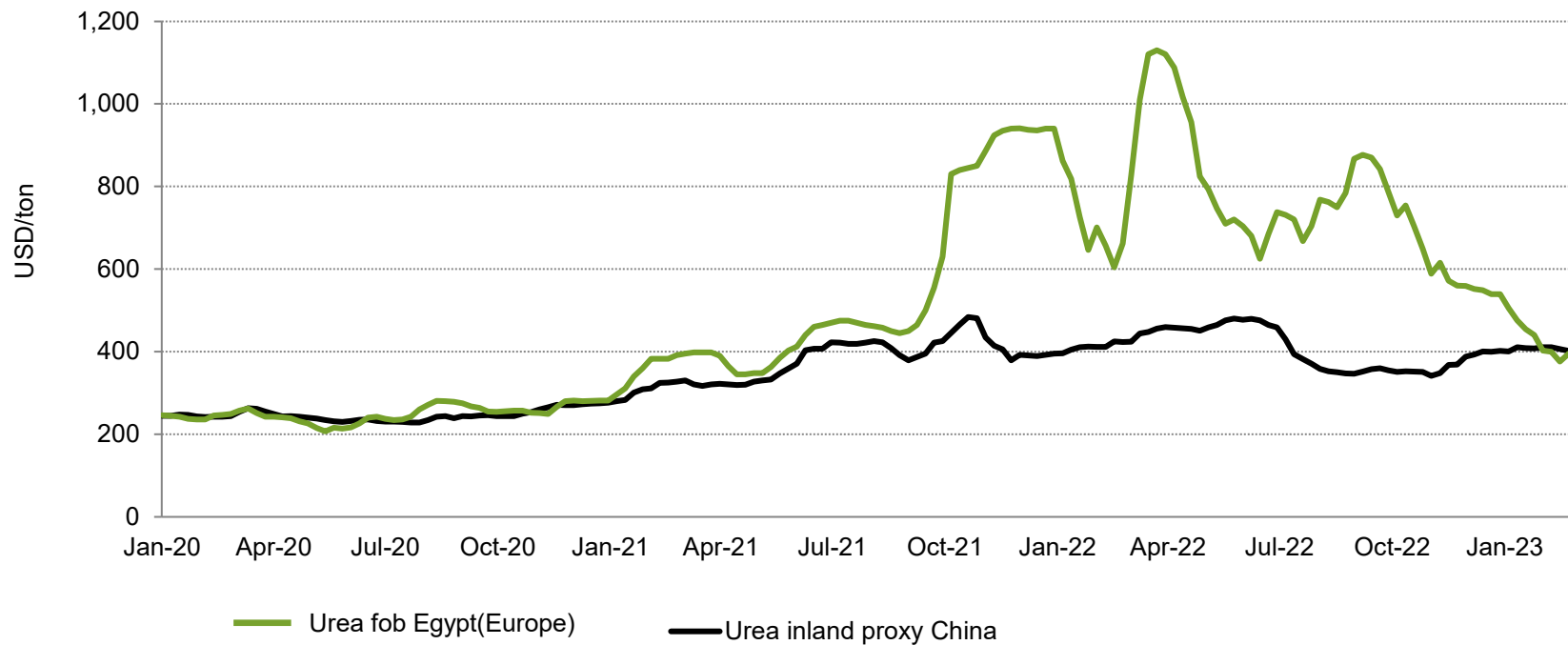
Knowledge grows

# Market Update

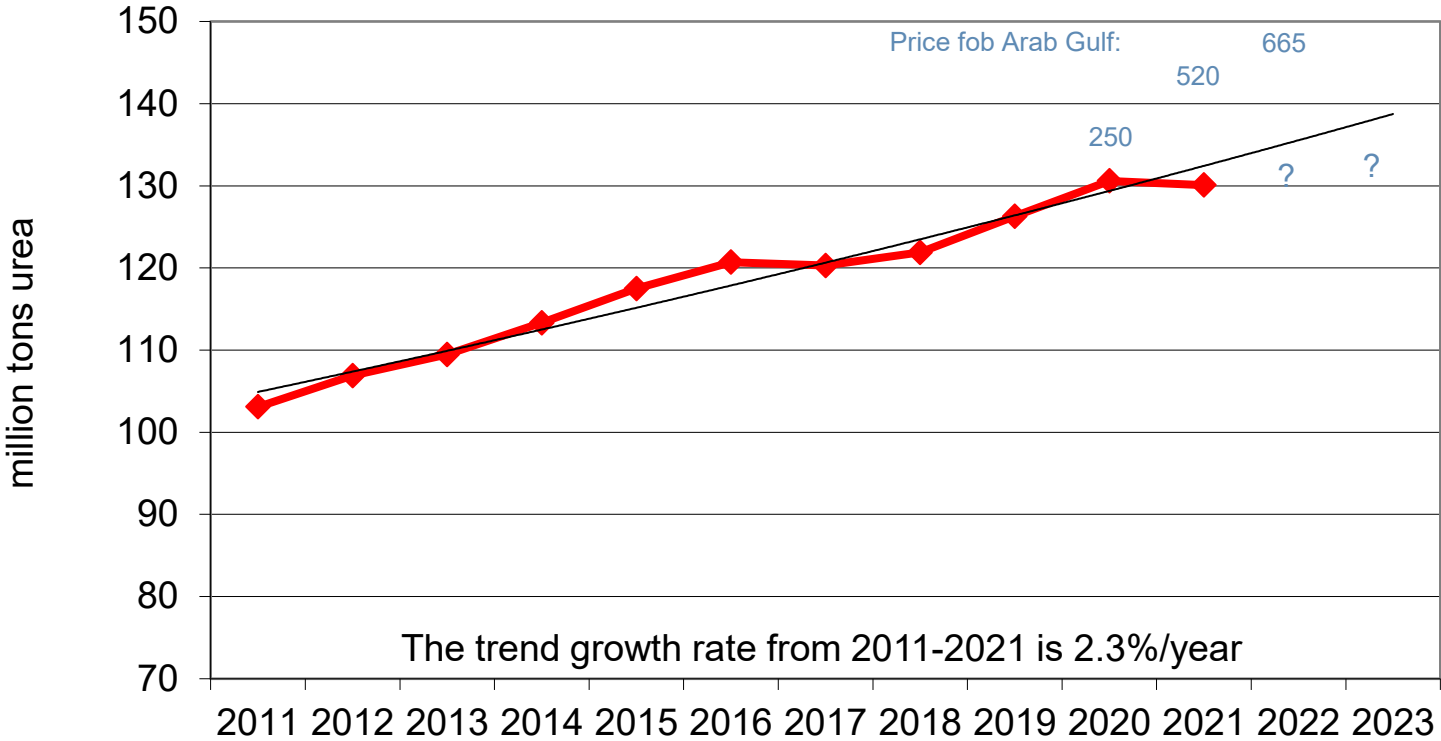
February 2023



# Urea prices - volatile

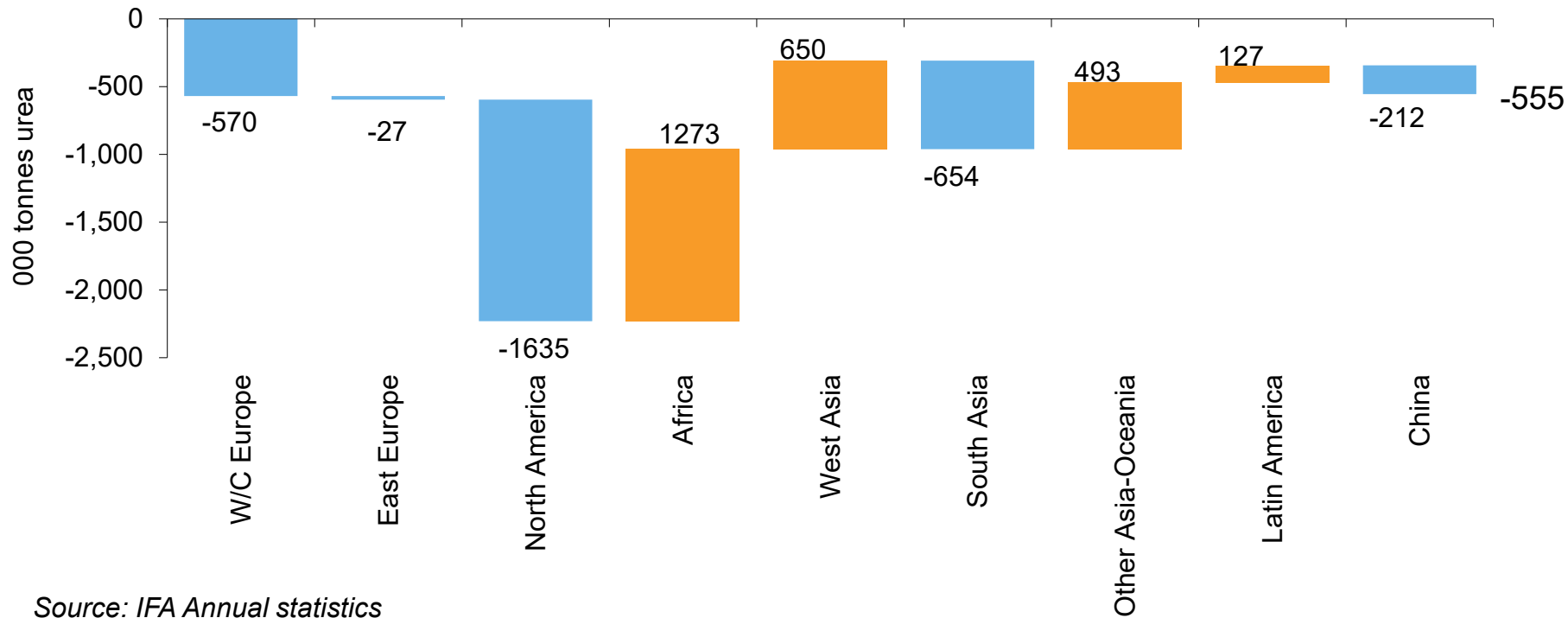


# Apparent urea consumption ex. China – limited by supply



Source: IFA

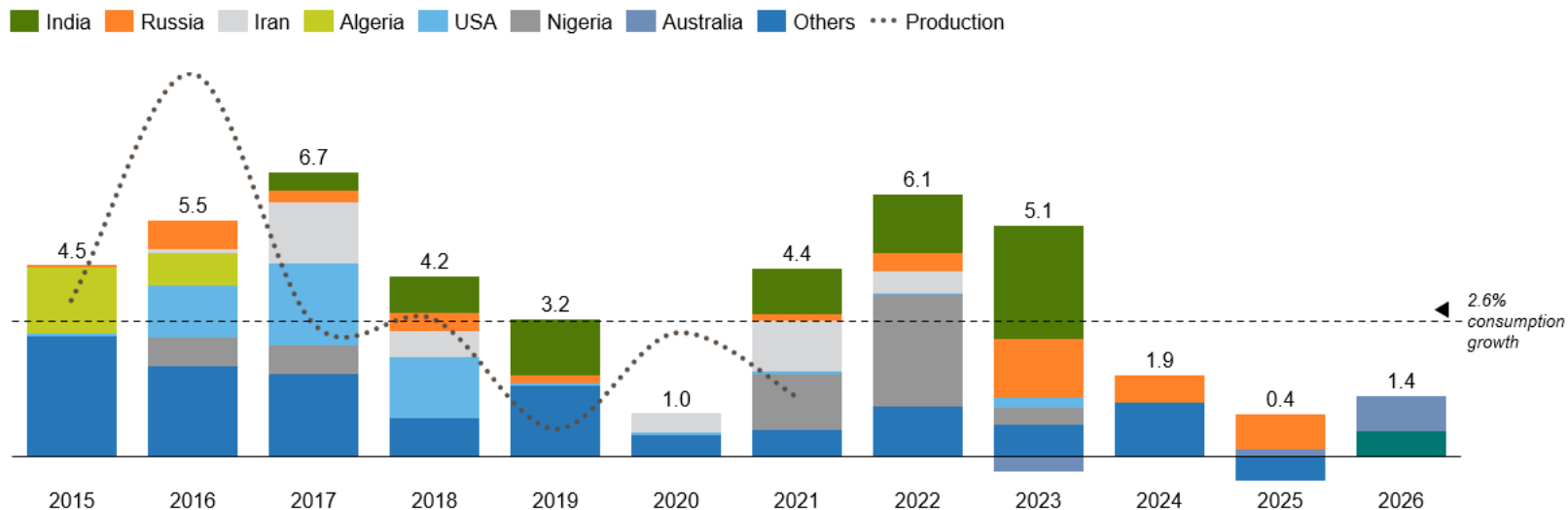
## Urea supply outside China decreased by 0.4% (0.6 million tons ) in 2021, to 130.1 million tons



Source: IFA Annual statistics

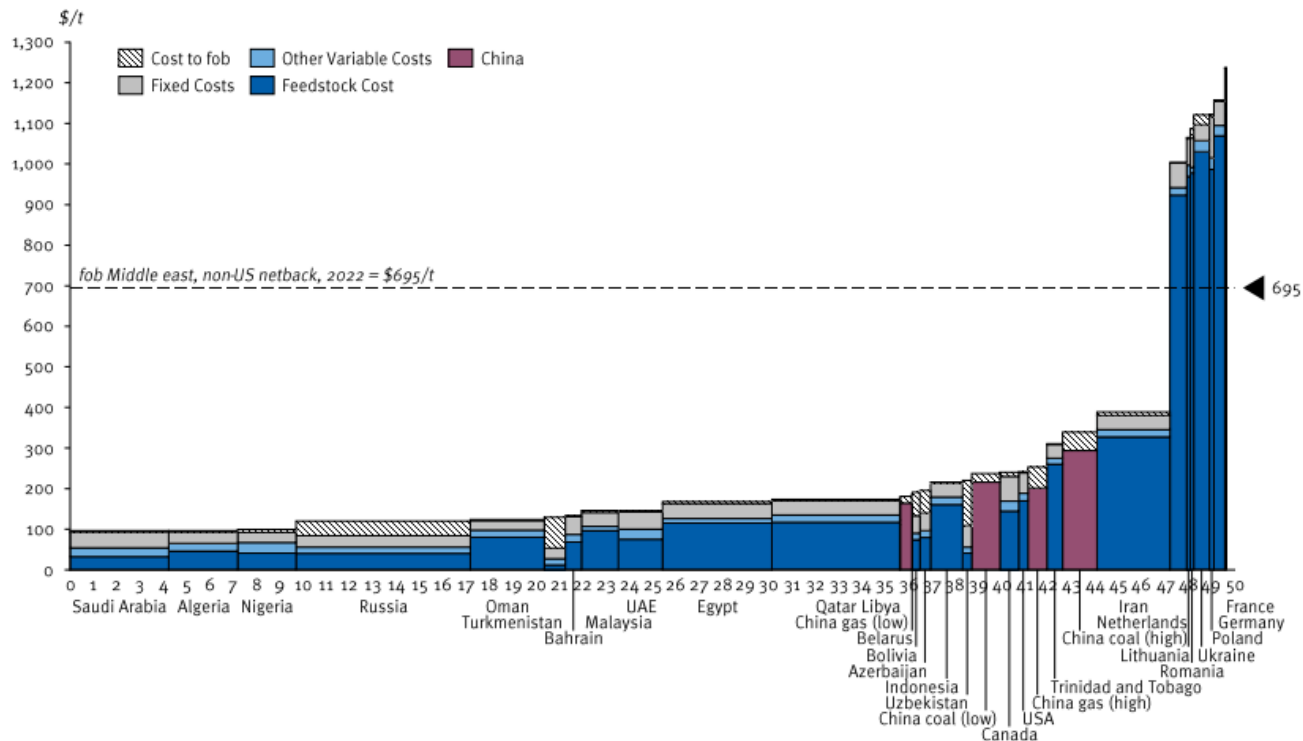
# Peak of capacity additions is now

Global urea capacity additions ex. China <sup>1</sup> (mt)

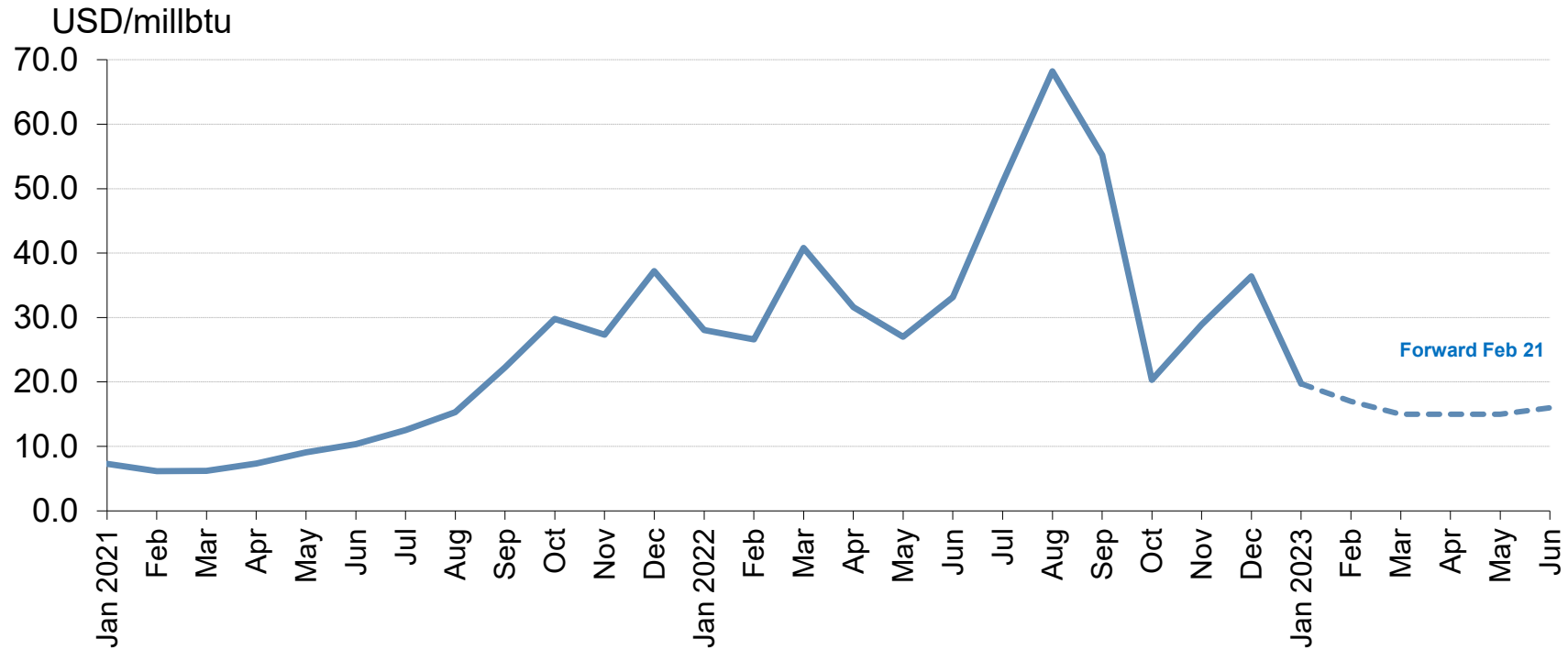


# Urea supply curve is vertical around 2022 pricing

Export cost curve, 2022 (fob/fca basis)

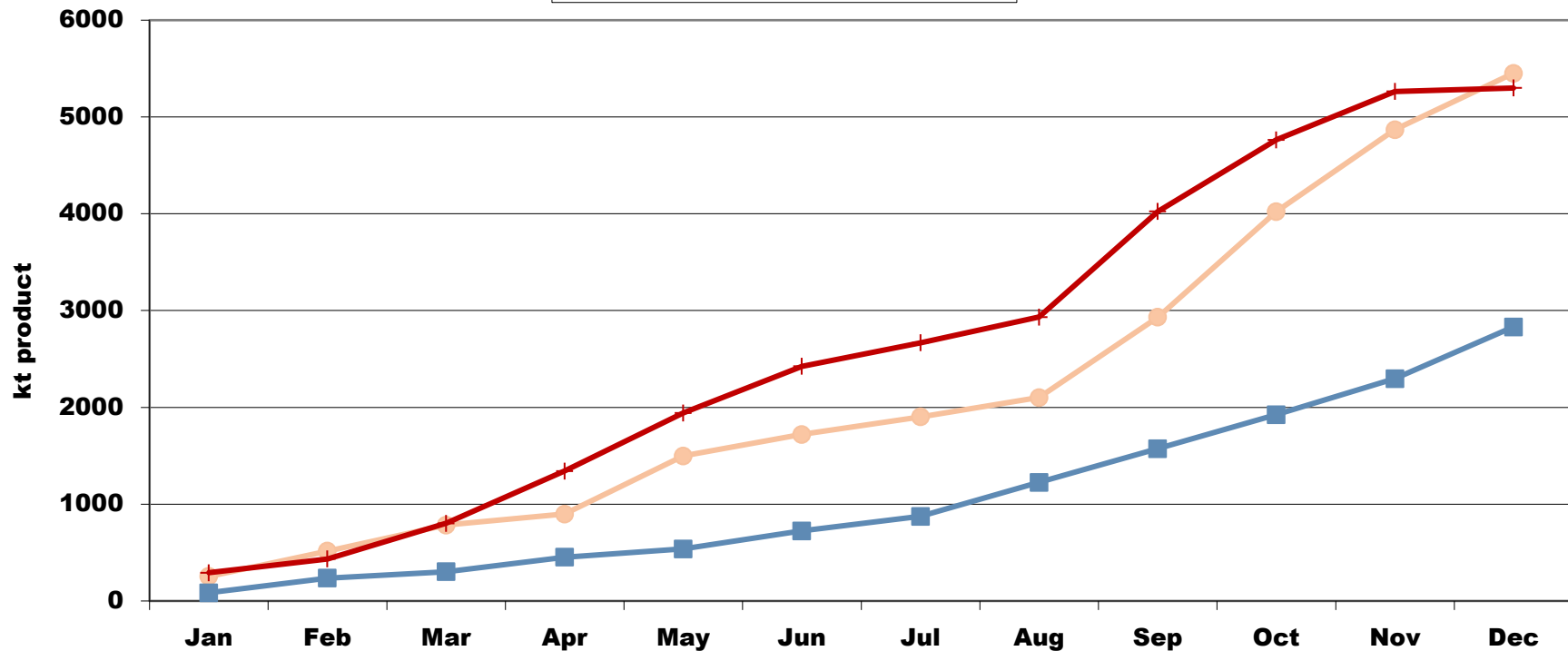


# European natural gas (TTF) – below USD20/millbtu



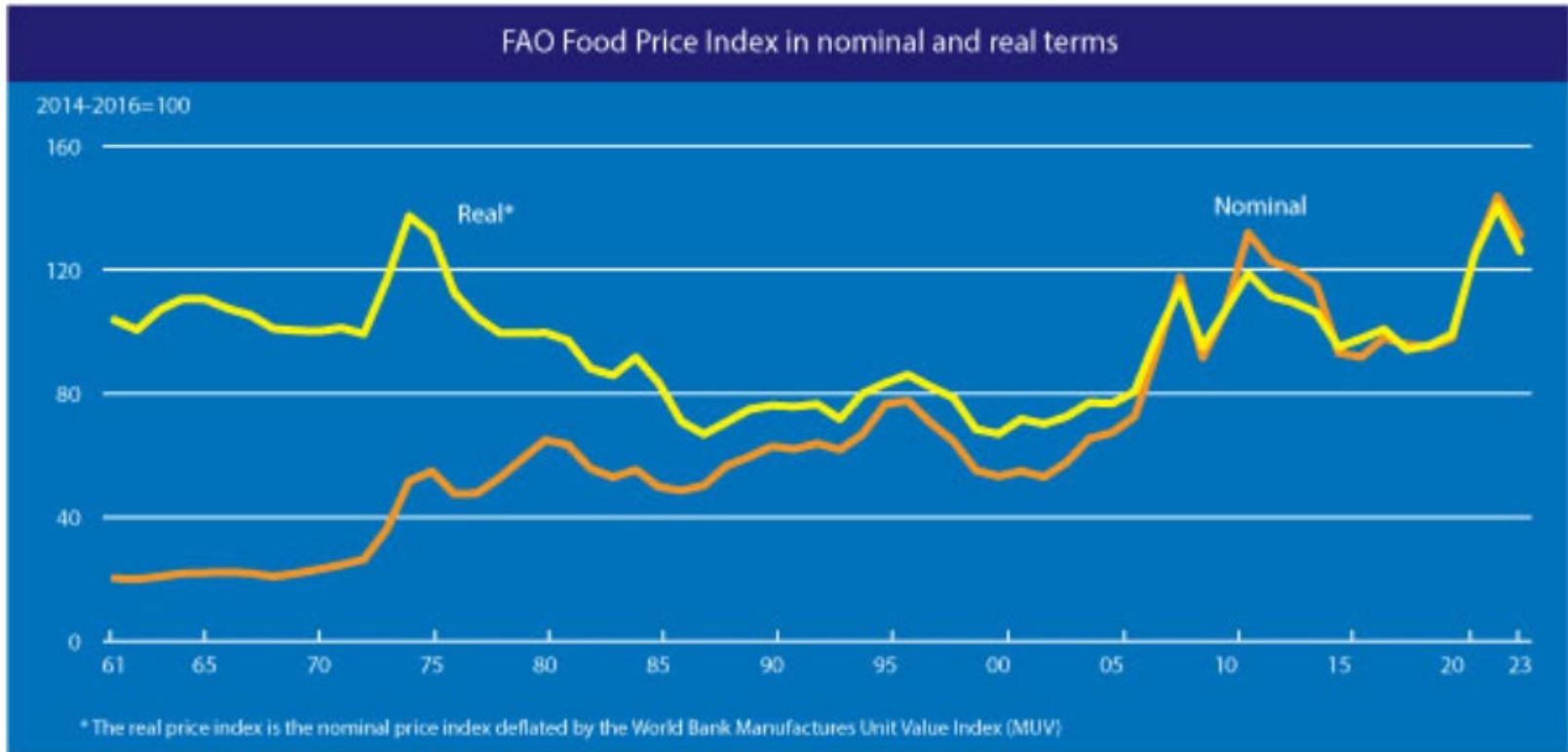
# Urea export from China – stronger recently

—○— 2020 —+— 2021 —■— 2022



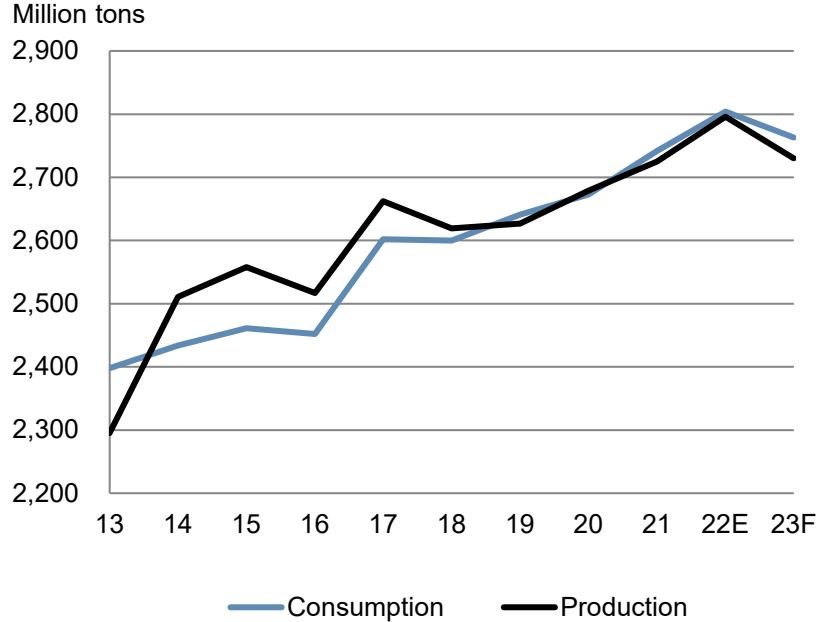


# Food prices still high, although down from 2022 peak



# Declining grain inventories

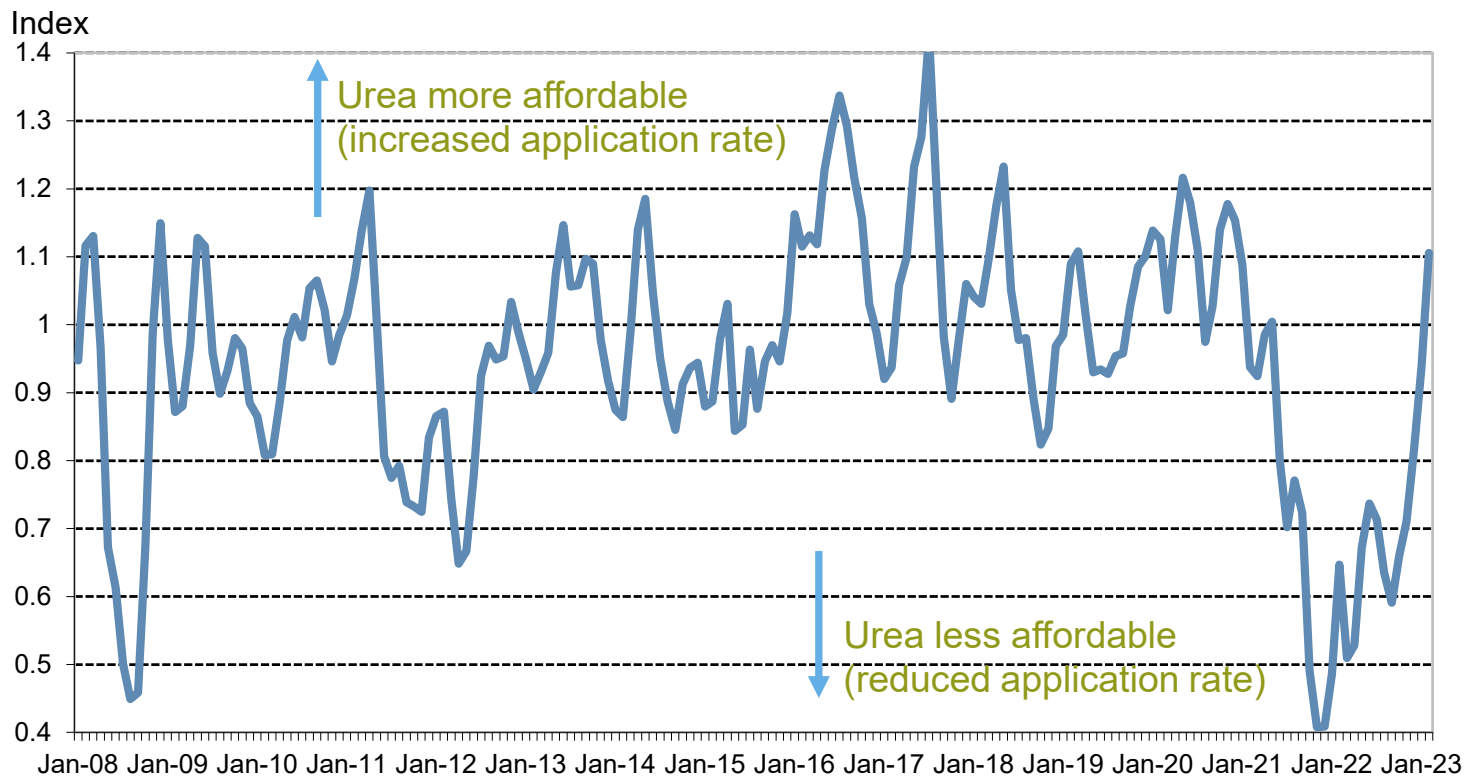
## Grain consumption and production



## Grain stocks – excluding China



# Cereal index/urea index – Feb 23 highest since Dec 20



Source: International publications, FAO (2014-2016 = 100) for both FAO cereal index and urea fob Arab Gulf

# US net nitrogen imports

