



Mapping fertilizer trends in major import markets

GPCA Agri-Nutrients conference

Where is the short and long term opportunity for GCC Agri-Nutrients?

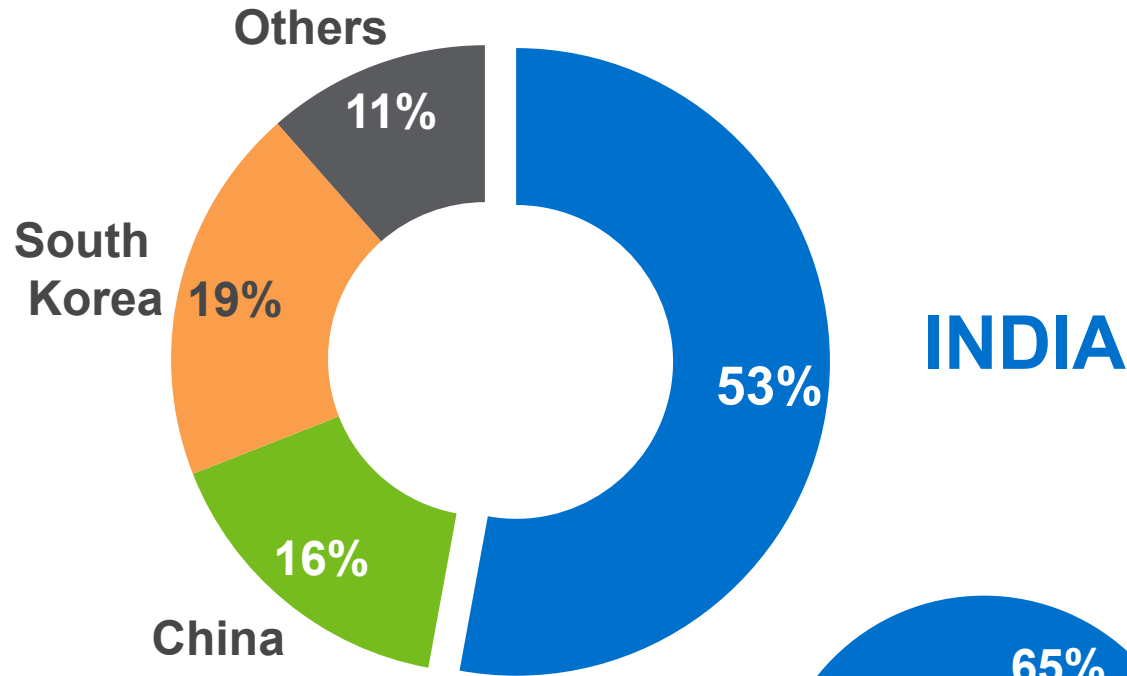


India

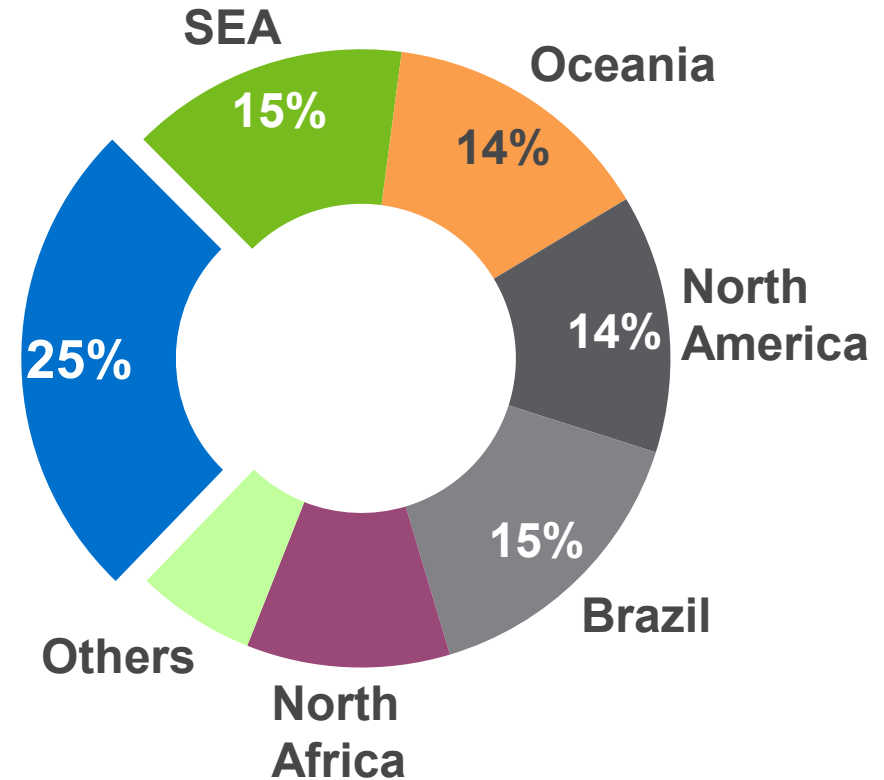


All roads (ships) lead to India

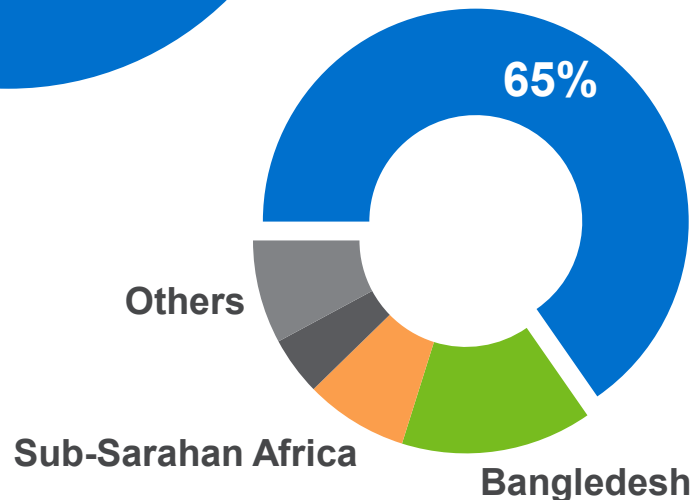
Ammonia Exports by Destination



Urea Exports by Destination



INDIA

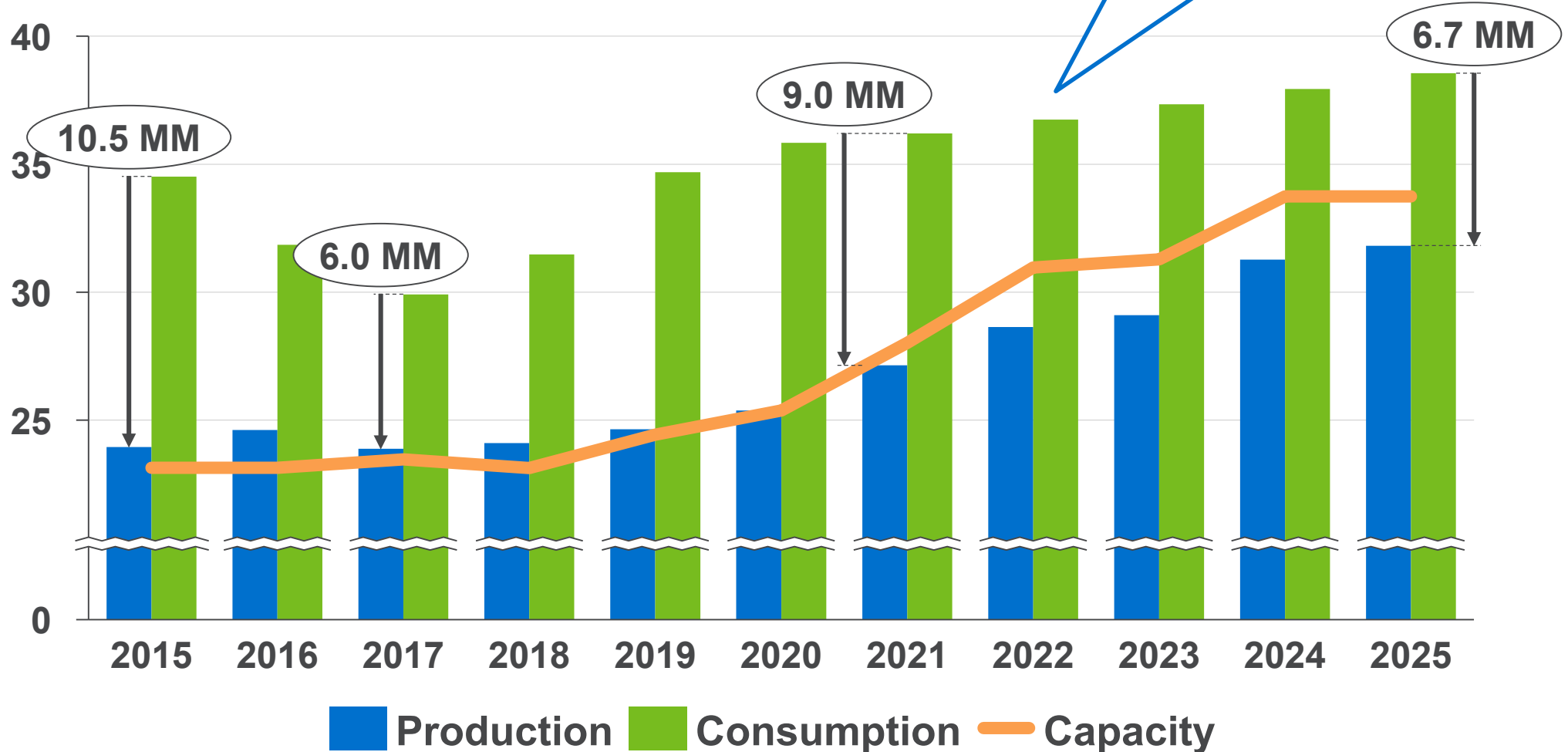


DAP Exports by Destination

(Year: 2021)

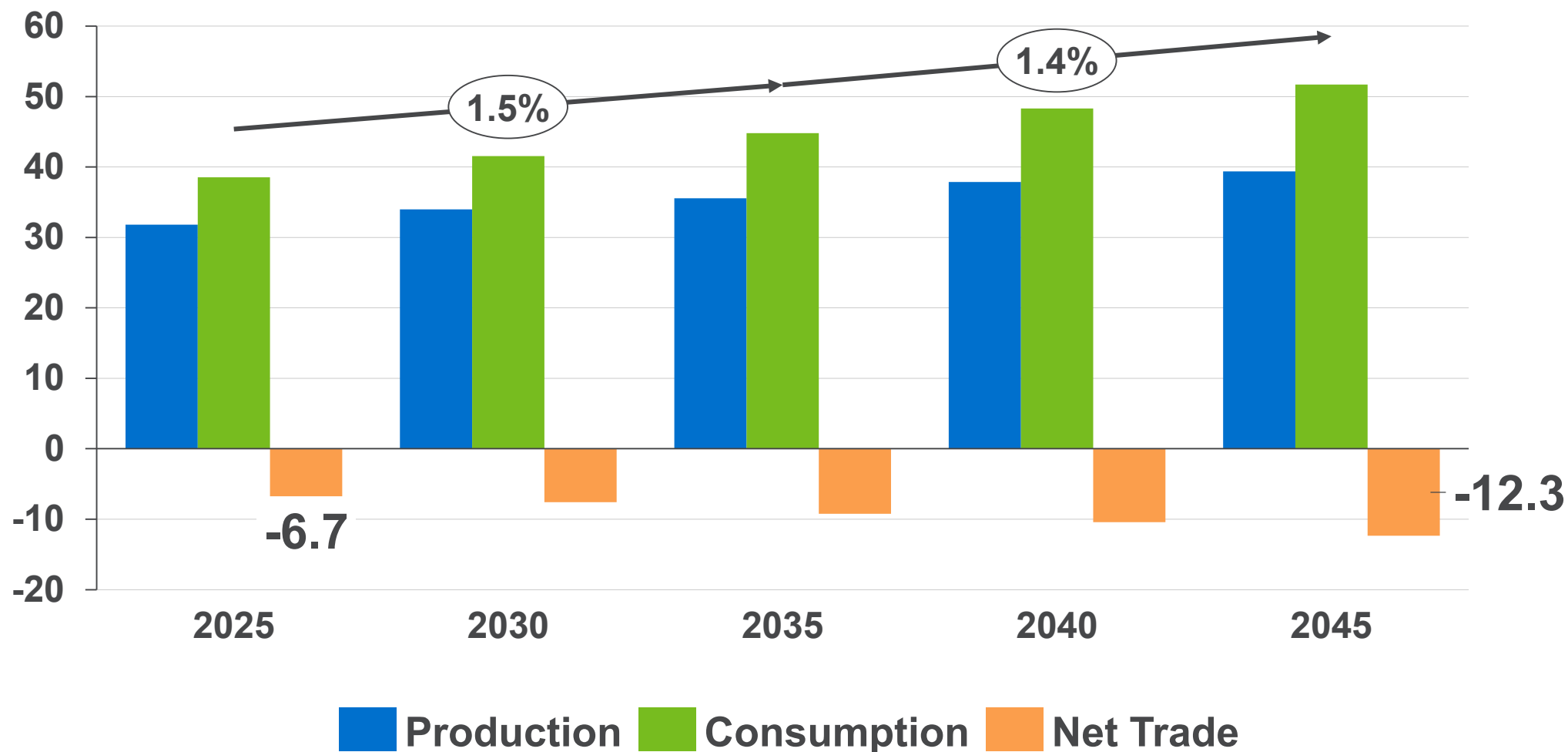
Is the India opportunity disappearing?

India urea supply, demand and capacity
(million tons)



Will India ever reach its aim of self-sufficiency?

India urea supply, demand & trade (million tons)

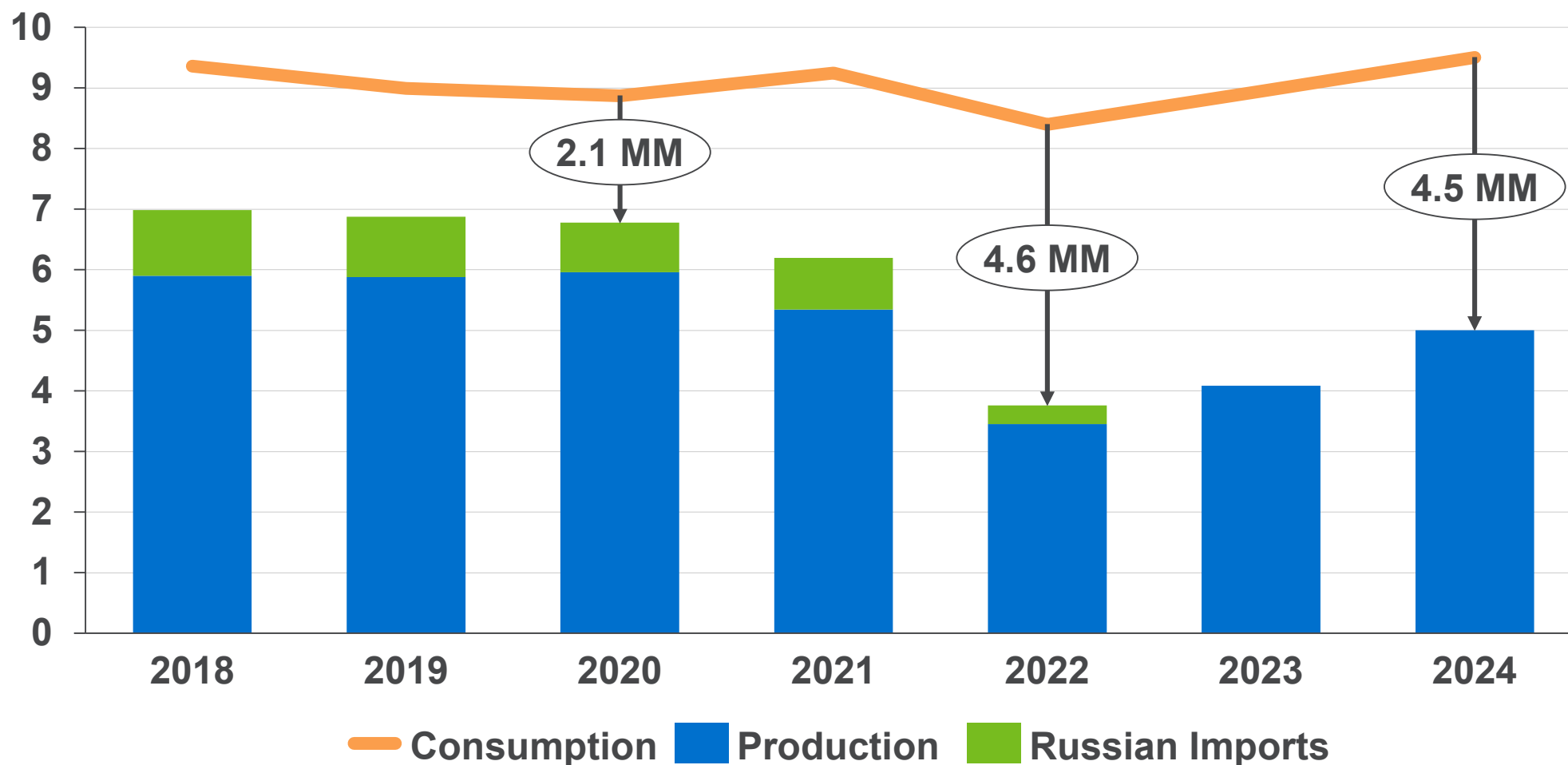


Western Europe



A new opportunity for the GCC?

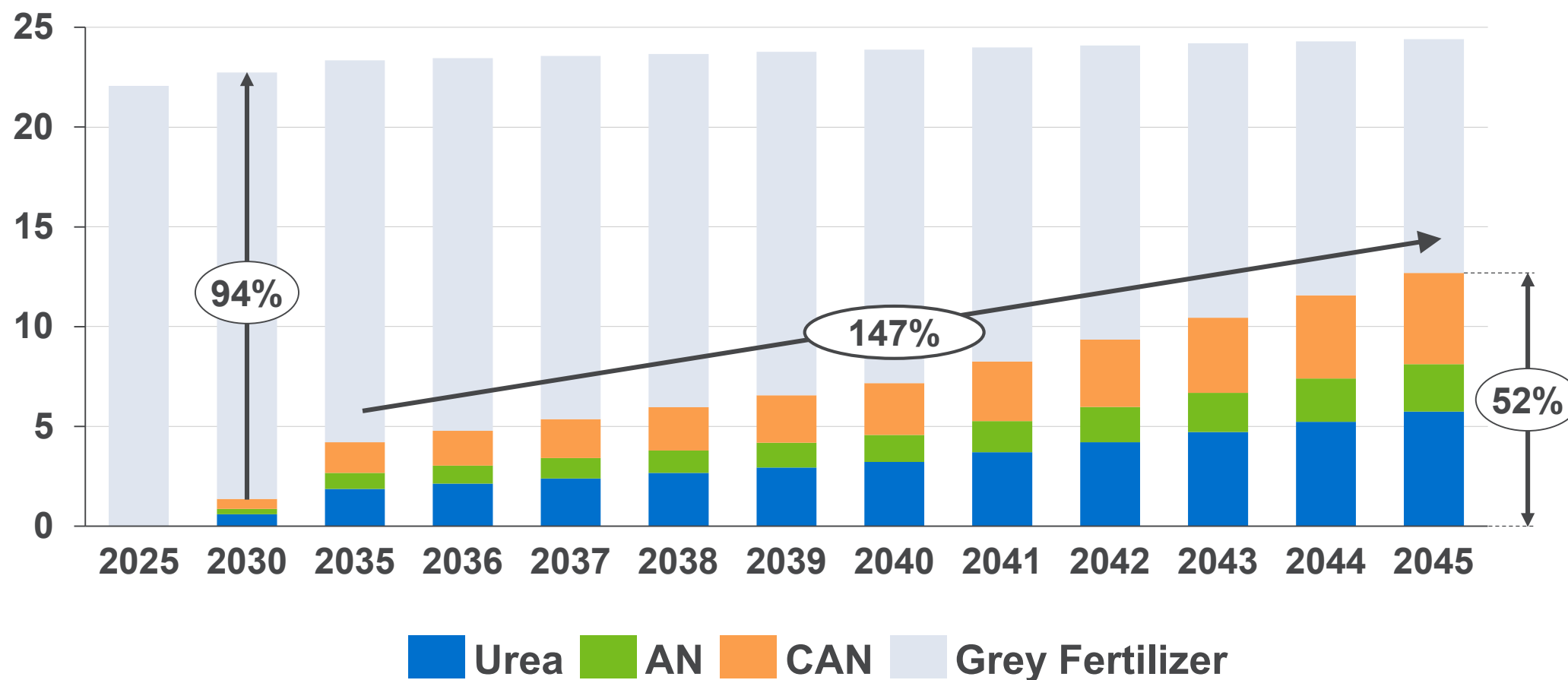
Western European urea production, consumption and Russian imports (million tons)



A sign of things to come?

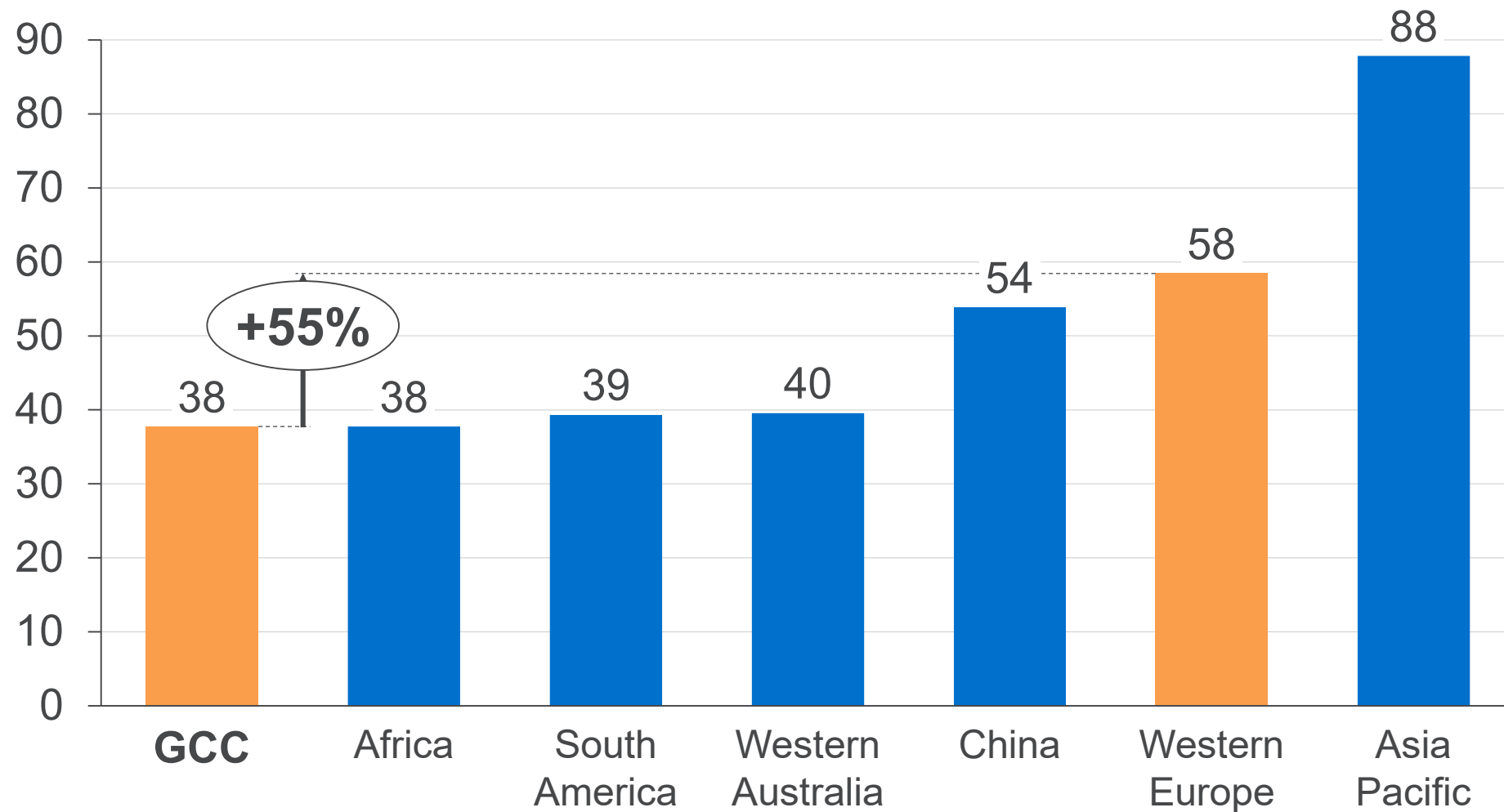
Western Europe low carbon fertilizer demand

(million tons)



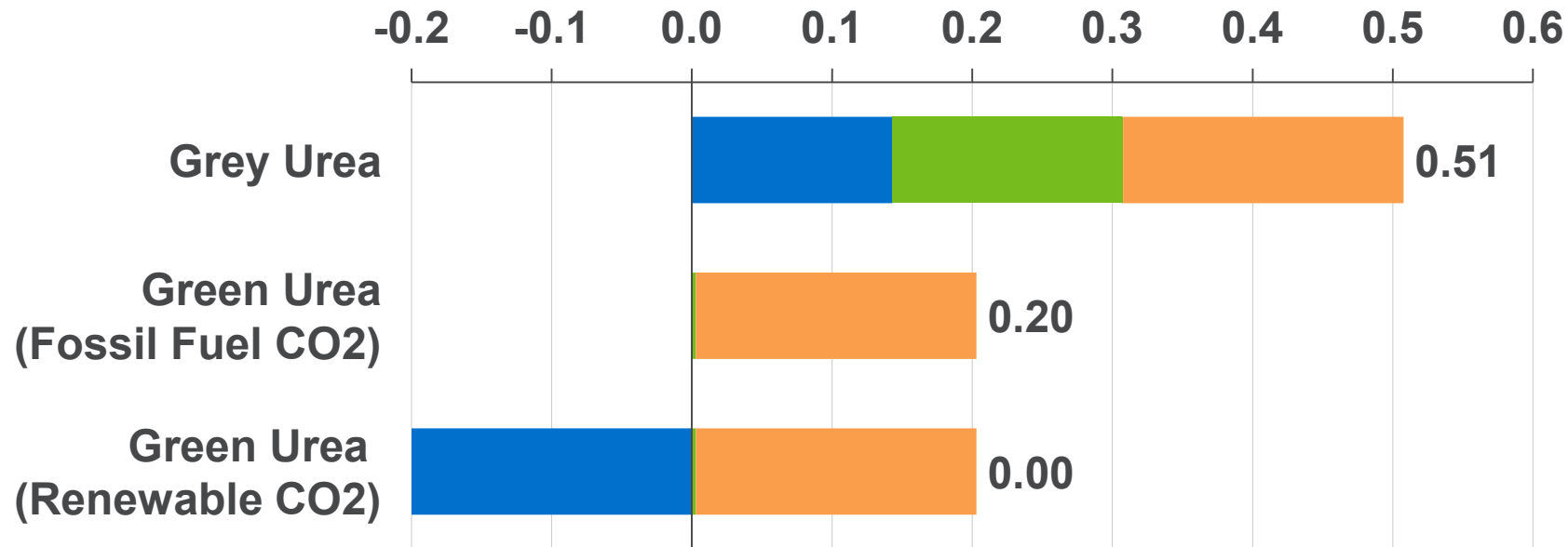
Why is the GCC well placed for this emerging market?

Levelized cost of renewable energy (US\$ per MWh)



Green Urea, a blessing or a curse?

Life Cycle Carbon Intensity of Urea (ton of CO₂eq per ton)



■ Scope 1
 ■ Scope 2
 ■ Scope 3 (Feedstock)
 ■ Scope 3 (Downstream)

NO_x emissions not considered
Integrated Plant

Where is there opportunity for GCC Agri-Nutrients?



- **Limitations on Chinese Agri-Nutrients exports**
- **New capacity could result in medium term challenges**
- **Long term sink for grey fertilizer for GCC producers**



- **Conflict has opened new doors for GCC material**
- **GCC has advantages in the green fertilizer arena**
- **Green urea poses both advantages and challenges**