

SMU Community Chat

March 9, 2022

Starting at 11 AM Eastern

Michael Cowden, Steel Market Update

Dr. Johnny Sjöström, SSAB Special Steels



[SteelMarketUpdate.com/Blog/SMU-Community-Chat-Webinars](https://www.steelmarketupdate.com/blog/smu-community-chat-webinars)

Steel Market Update



SMU Newsletter developed for active buyers & sellers of flat rolled steel.

Prices – Momentum – Trends – Analysis – with a guarantee

For more information visit www.SteelMarketUpdate.com

Upcoming Events

Date	Event	Status	Venue
April 19-20	SMU Steel 101 Workshop	Live	Memphis, Tennessee
April 26-27	SMU Introduction to Steel Hedging Workshop	Virtual	Online
April 26-28	CRU Steel Decarbonisation Strategies 2022	Virtual	Online
July 19-20	SMU Steel 101 Workshop	Virtual	Online
August 22-24	SMU Steel Summit Conference	Live	Georgia International Convention Center, Atlanta, Georgia

If you would like more information about any of our workshops, you may visit SteelMarketUpdate.com/Events or e-mail our team at Events@SteelMarketUpdate.com



Steel 101 Workshop, Severstal Dearborn 2012

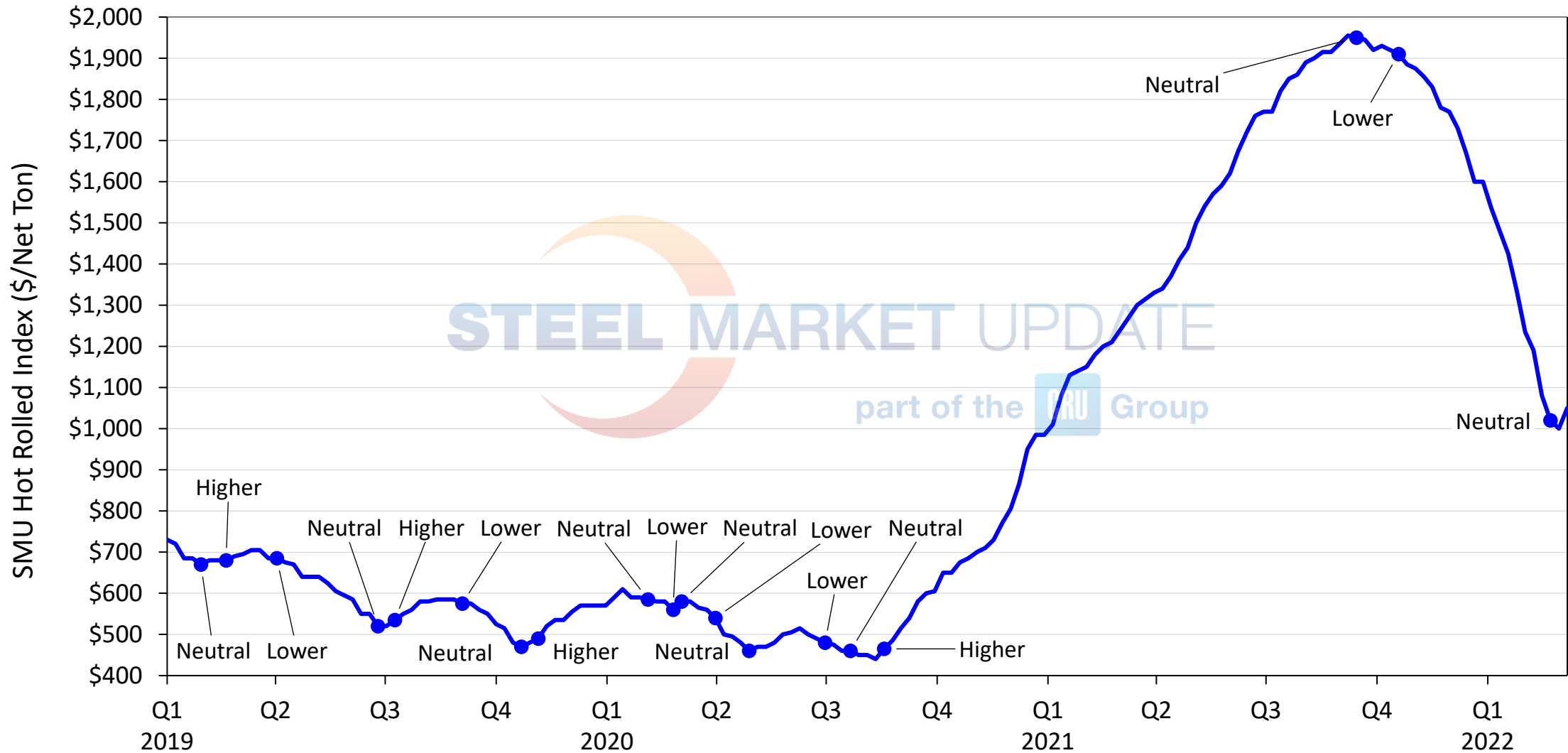
Our goal is to provide quality information to the flat rolled steel industry.

We invite over 500 companies to participate in our surveys.

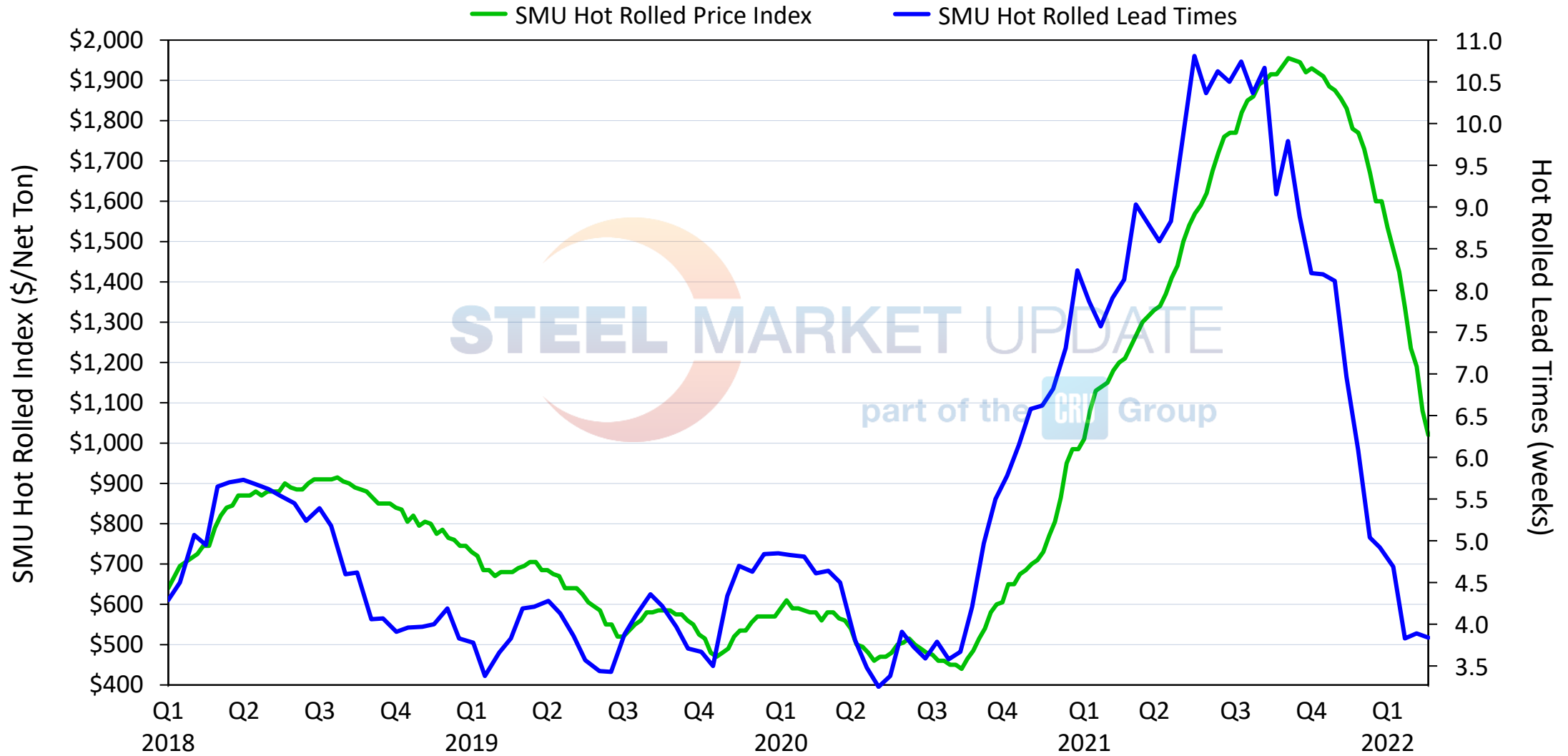
All responses are kept confidential and are never attributed to the individual or company responding.

To become a data provider, contact Brett@SteelMarketUpdate.com

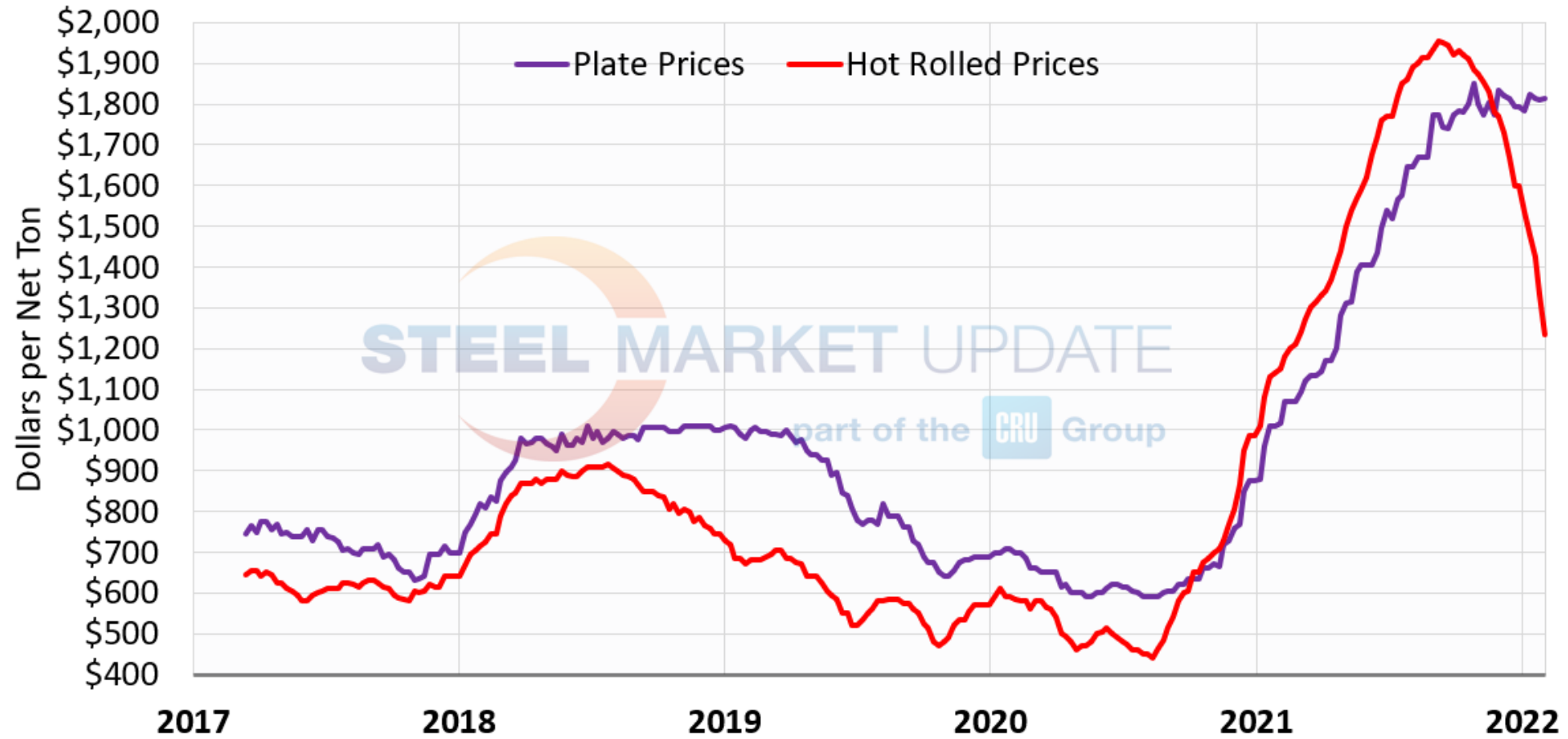
SMU Price Momentum Indicator History



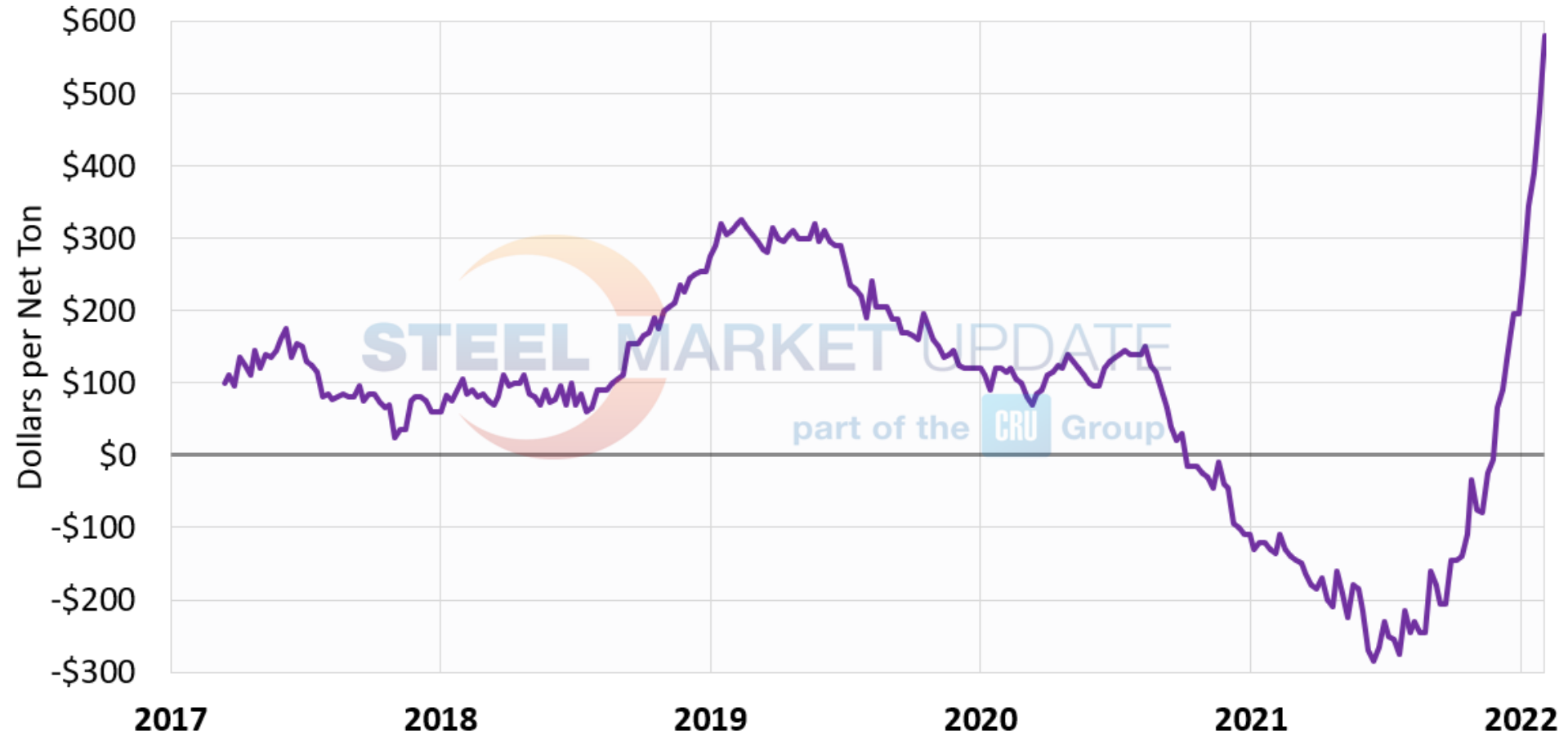
SMU Hot Rolled Index vs Lead Times



HRC vs Plate Prices



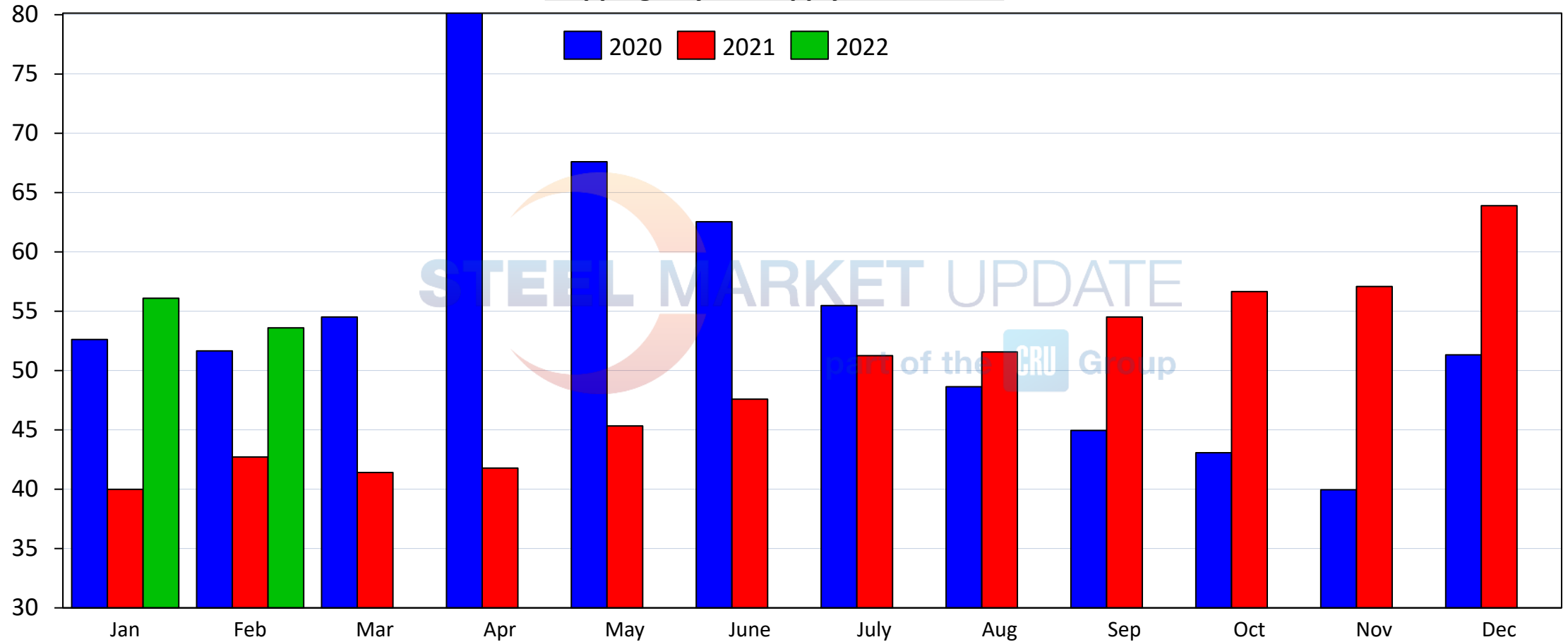
HRC-Plate Spreads



© Steel Market Update 2022

Service Center Inventories

Shipping Days of Supply – Flat Rolled



* Preliminary data shown for February 2022

© Steel Market Update 2022



SSAB Special Steels

Dr. Johnny Sjöström

SSAB Special Steels

SSAB

Agenda

- ▶ Introduction of Johnny Sjöström
- ▶ Introduction of SSAB Special Steels
- ▶ Impact from Russia's invasion on Ukraine
- ▶ Global market forecast prior to Russia's invasion
- ▶ Summary



Resumé Dr. Johnny Sjöström

- ▶ President/CEO/EVP SSAB Special Steels
- ▶ President Uddeholm, Sweden
- ▶ President Leshan-Scana, China
- ▶ VP, Outokumpu, Sweden

- ▶ Professor at Luleå University
- ▶ Doctorate in Material Science, Karlstad University
- ▶ Master's degree in Physics, Karlstad University
- ▶ MBA, Stockholm School of Economics



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SSAB in Brief

10 BILLION
USD
Revenue in 2021



Annual steel
production capacity:
8.8 MILLION
TONNES

Steel making since
1878

14,000
professionals
over in 50 countries

OUR BUSINESSES:

SSAB Special Steels,
SSAB Europe,
SSAB Americas, Tibnor,
Ruukki Construction

Our Businesses

– Leaders in their Respective Sectors



SSAB SPECIAL STEELS

Global steel supplier and service partner in Quenched & Tempered Steels (Q&T) and Advanced High-Strength Steels (AHSS)



SSAB EUROPE

Leading Nordic-based steel producer of high-quality strip, plate and tube products



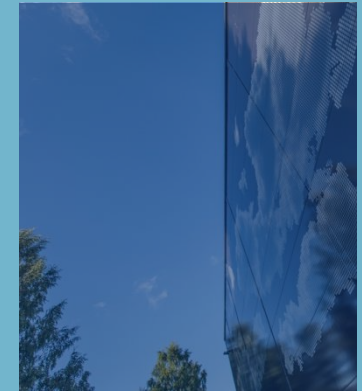
SSAB AMERICAS

Market-leading North American producer of quality steel plate and coil



TIBNOR

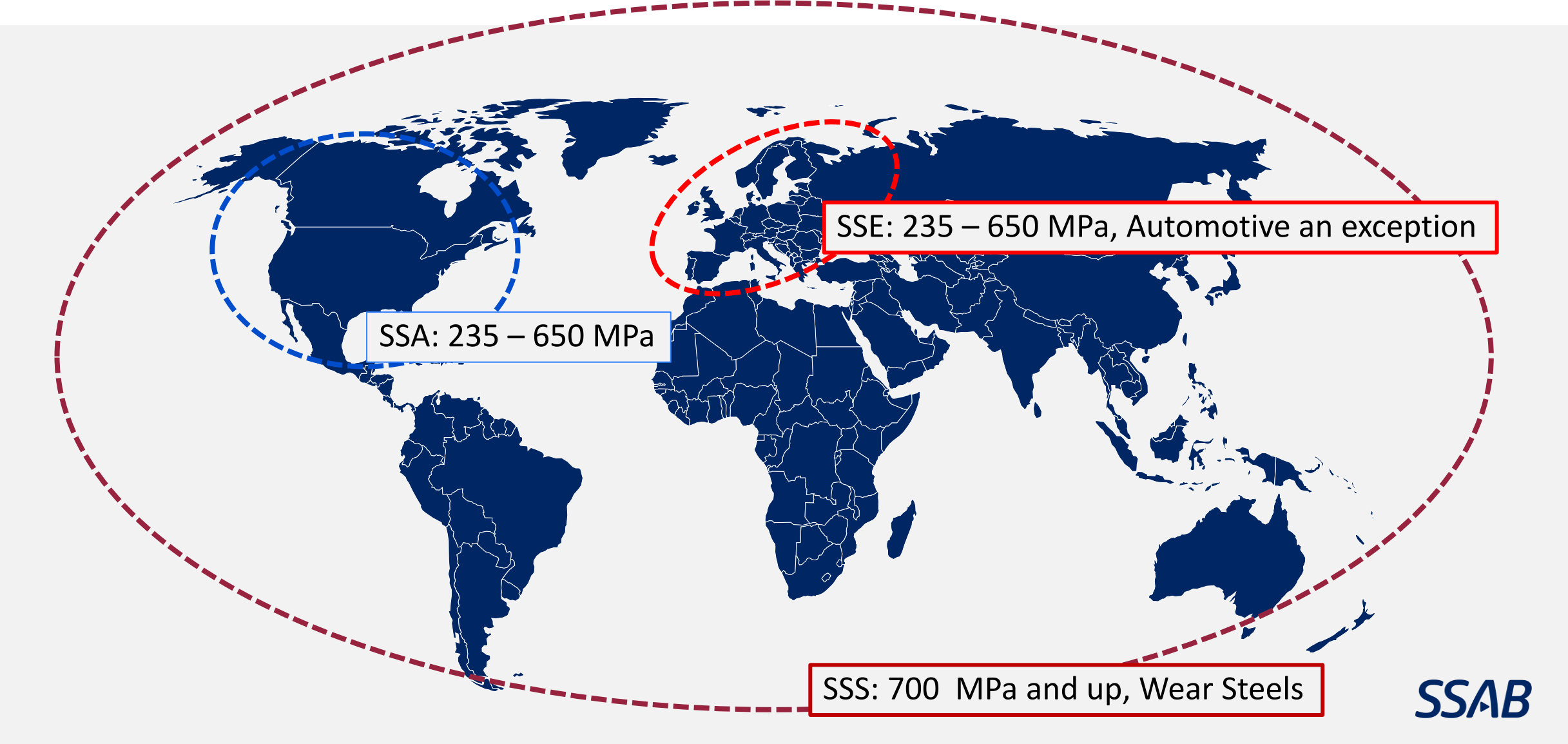
Leading Nordic supplier of steel, other metals and processing services



RUUKKI CONSTRUCTION

Sustainable building and construction products and services in Europe

Markets for SSAB Steel Divisions



SSA: 235 – 650 MPa

SSE: 235 – 650 MPa, Automotive an exception

SSS: 700 MPa and up, Wear Steels



Two Production Facilities in the U.S.

Montpelier, Iowa

- ▶ Established: 1997
- ▶ Heavy plate mill
- ▶ Scrap-based EAF steel production
- ▶ R&D Center
- ▶ SSAB Americas division
- ▶ Employees: 500



Mobile, Alabama

- ▶ Established: 2001
- ▶ Heavy plate mill
- ▶ Scrap-based EAF steel production
- ▶ SSAB Special Steels division
- ▶ Employees: 700



- SSAB Production sites
- Wear Solutions

Across all SSAB divisions, ~2 Mn tons of steel is sold in the U.S. at an approximate value >2,5 BN USD

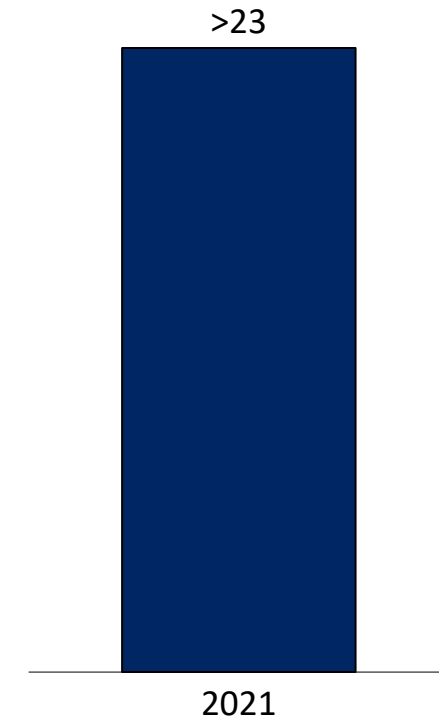
Volume sold 2021 in the US

Million metric tons



Value of sales 2021¹⁾

Billion SEK



Sources: SSAB Sales Analytics Tool – sold to U.S.
Notes: calculated as sales volume X average price

Our Businesses

– Leaders in their Respective Sectors



SSAB SPECIAL STEELS

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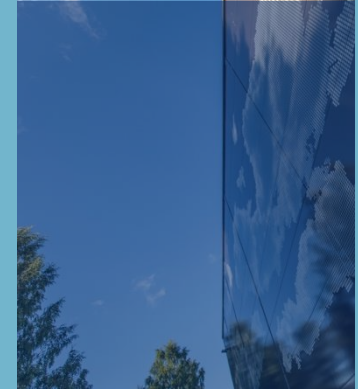
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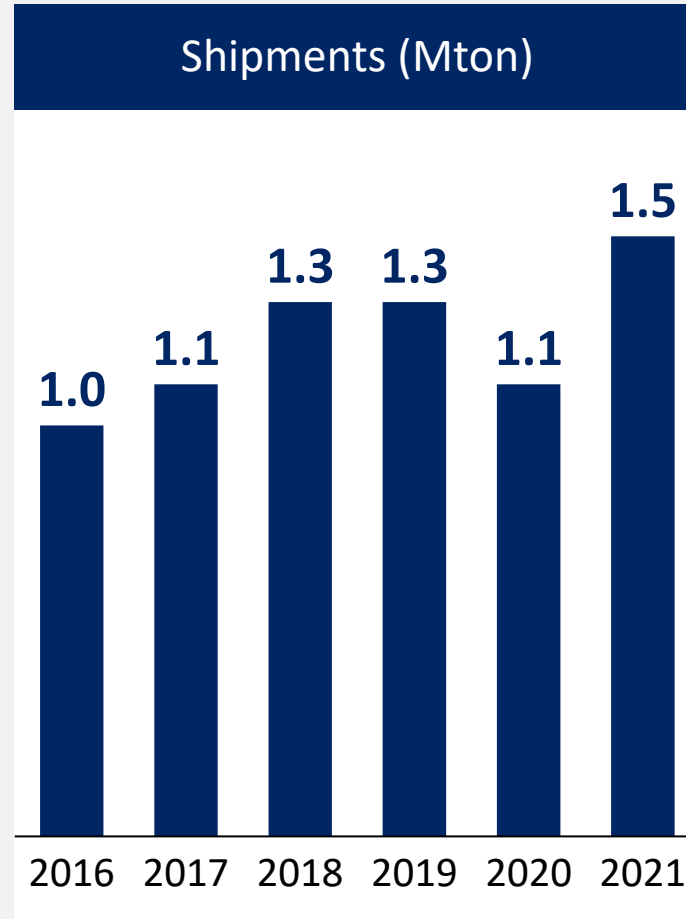
Leading Nordic supplier of steel, other metals and processing services



RUUKKI CONSTRUCTION

Sustainable building and construction products and services in Europe

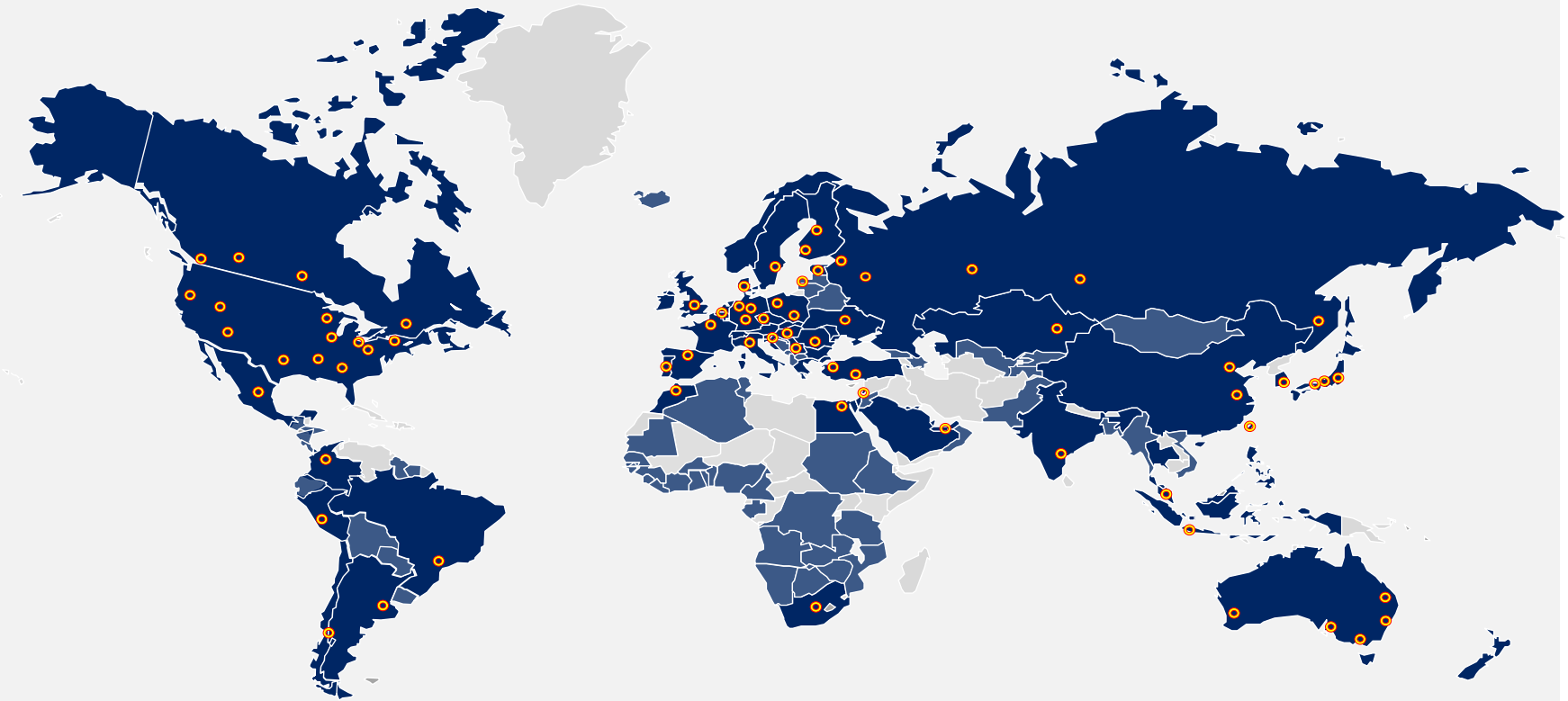
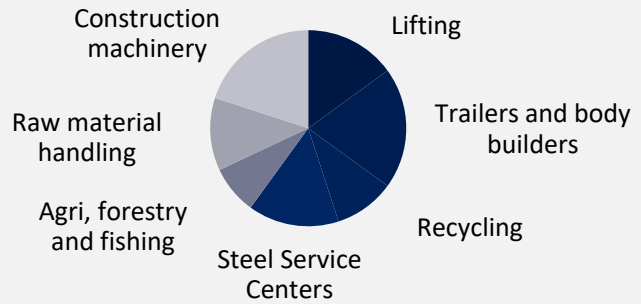
Brief Overview: SSAB Special Steels



Local Worldwide – a Unique Business Model

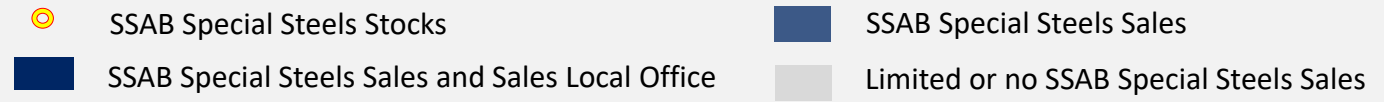
MARKET DIVERSIFICATION

- Geographical Markets
- Customers +10,000
- Segments
- Applications



SUPPORTED BY

- Global Organization
- Local Support & Service



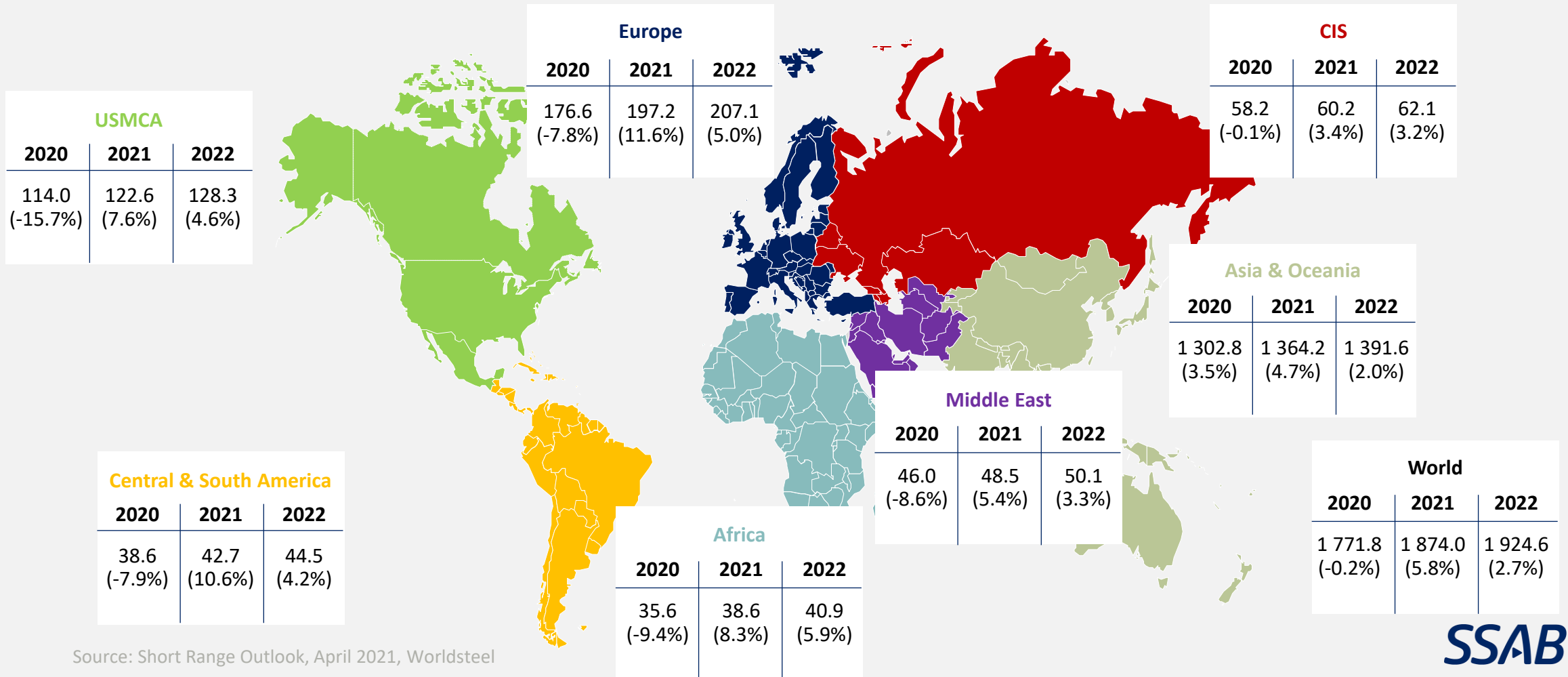
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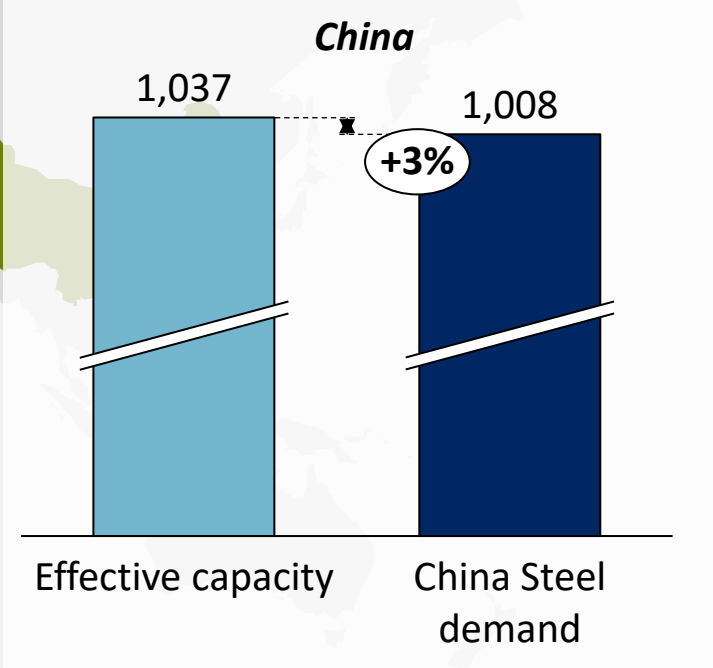
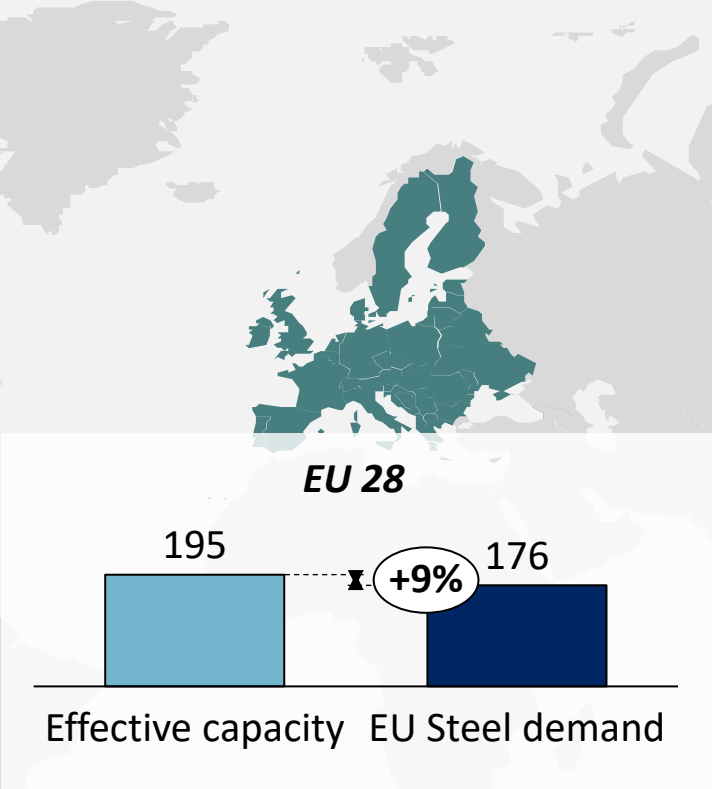
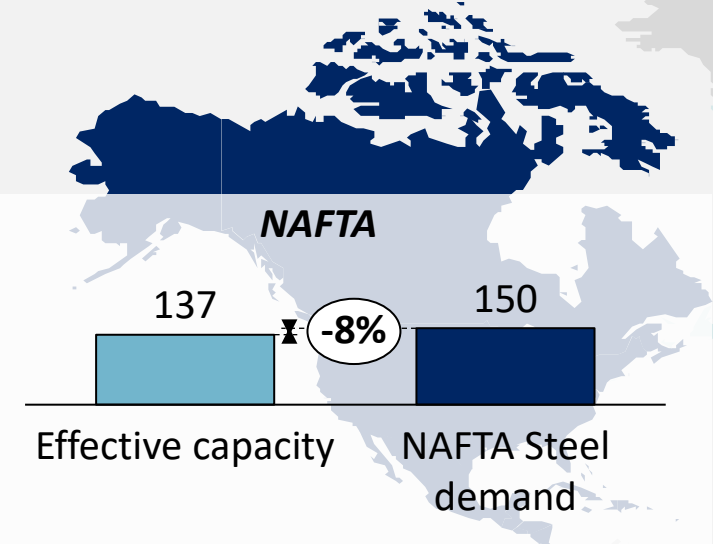


The Global Steel Demand

Short Range Demand Outlook, MTON (y-o-y growth rate)

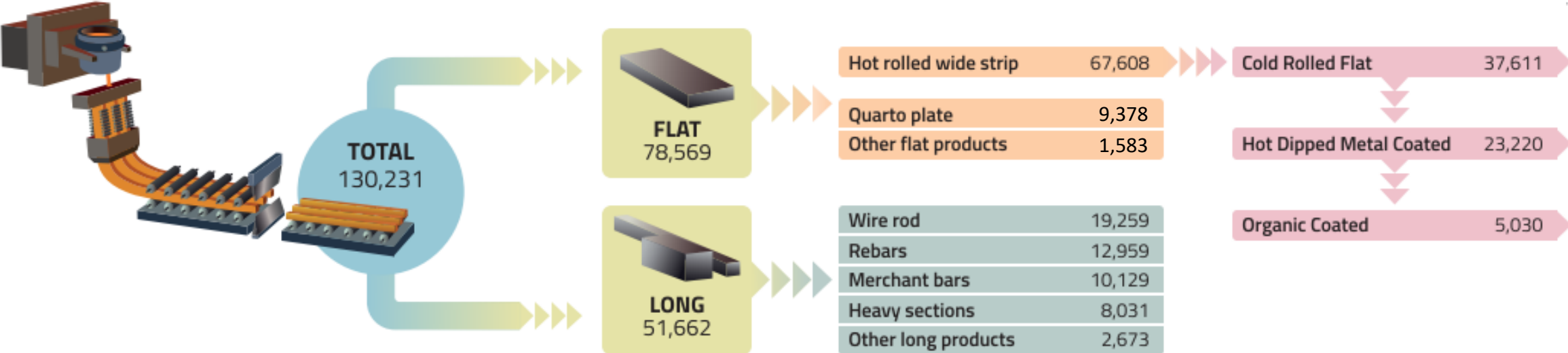


In 2019, the three main regions were more or less in balance



Source: World Steel Association; OECD steel committee.
Effective capacity = nominal capacity*90%; Steel demand = Apparent steel use / yield of 90%

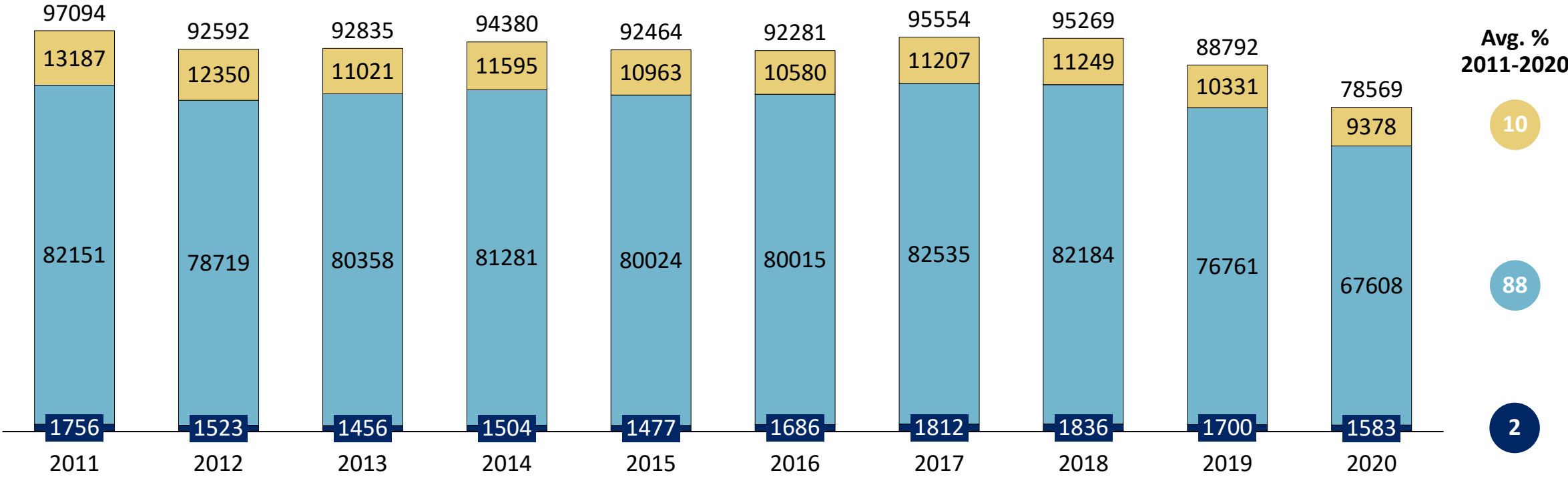
EU28 Production Flow 2020 (KTON)



EU28 Production of Flat Products

Hot rolled flat products
KTON

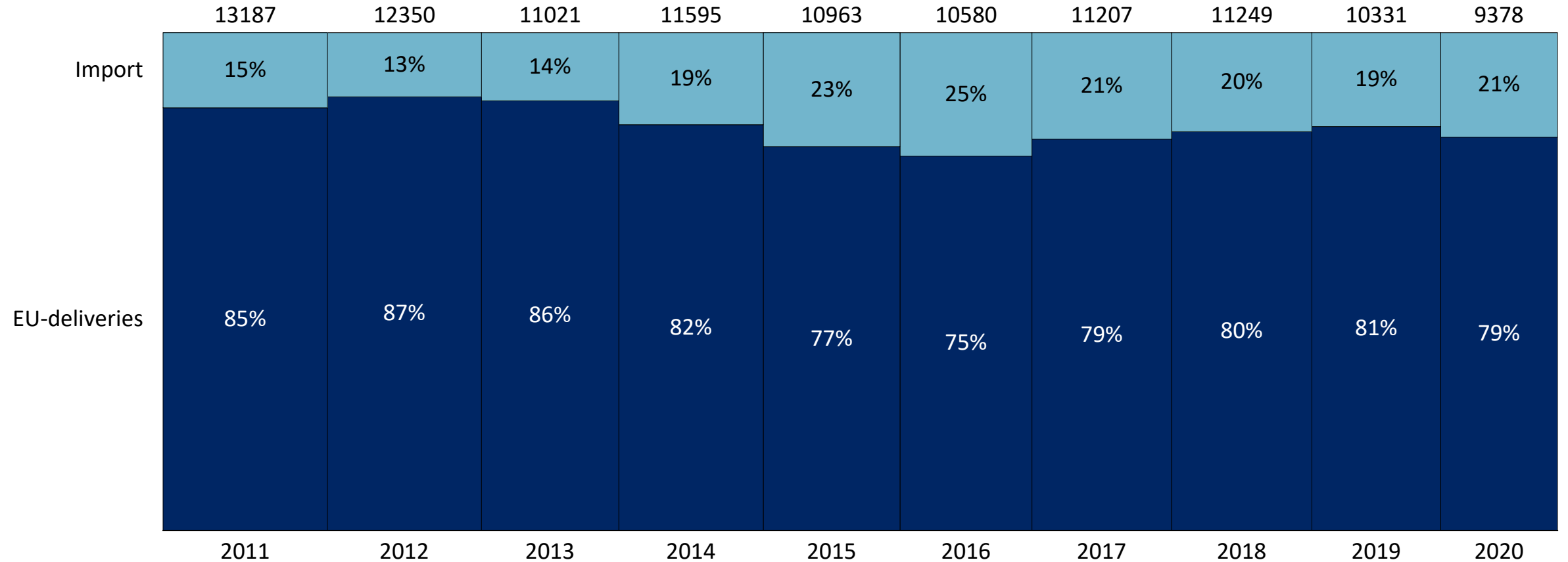
Quarto plate Hot rolled wide strip Other flat products



EU28 Market Supply of Quarto Plate

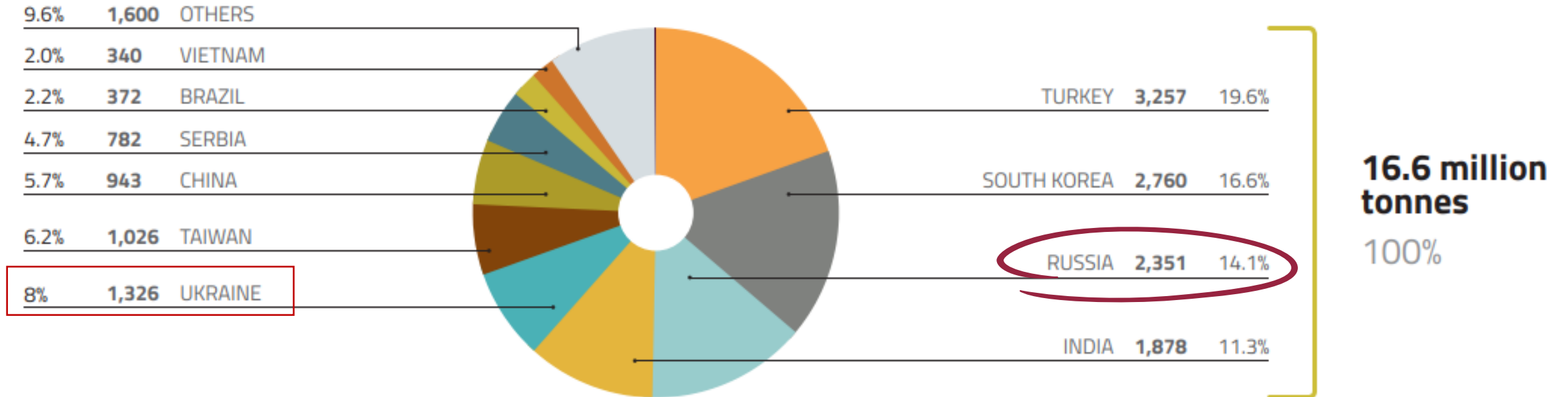
Hot rolled flat products

KTON



EU28 Top 10 Import Countries of Flat Products

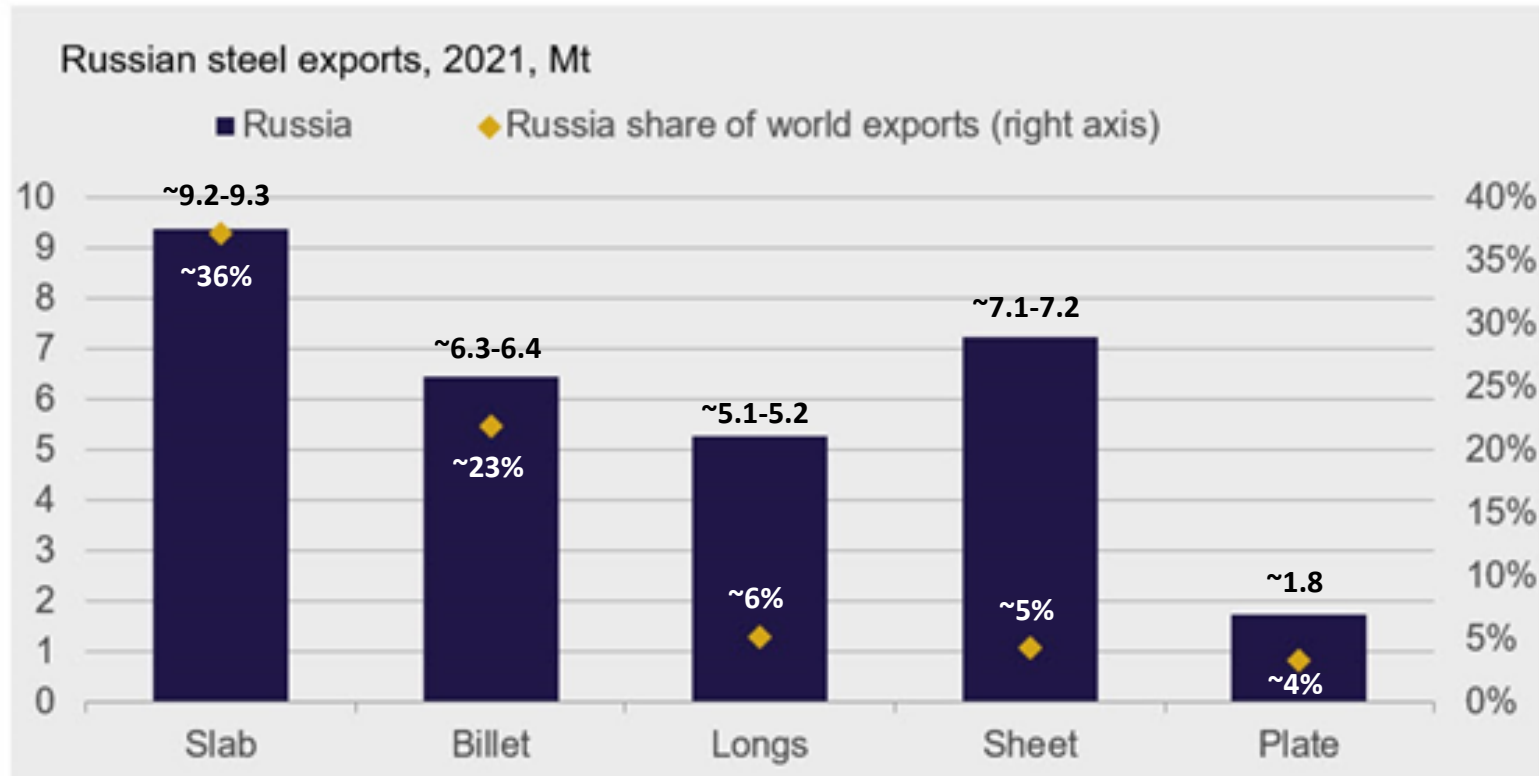
Top 10 countries flat products imports
Percentage



Russia is a huge supplier of semis to the world. Less important but still key for finished steel

Russia trade figures

Million tonnes & %



DATA: CRU, IHS Markit

Global export figures (based on graph):

- **Semi-finished:** 53 mt
- **Finished:** 272 mt
- **Slabs:** 26 mt
- **Plate:** 45 mt

Russia export figures (based on graph):

- **Semi-finished goods e.g. slabs and billets:** ~29% of world exports
- **Finished goods e.g. longs, sheets and plate:** ~5% of world exports

Sources: CRU, IHS Market – internal connection Johan Säfström SSAB

Note: exact figures and percentage, SSAB est. based on visual impression

Assumed Russian Slab Exporters

(based on SSAB discussion with steel trader contact (2020))

Slab sales & buy by producer

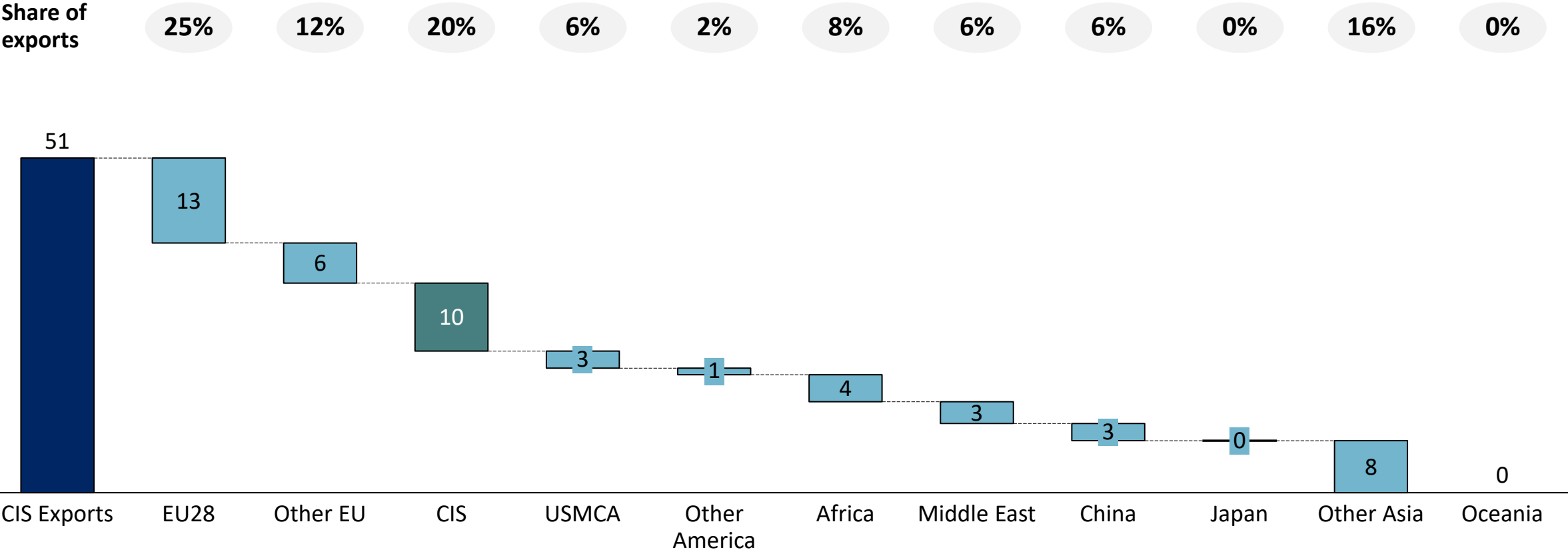
KTON

Producer	Estimated 2021 sell (global)	Estimated 2021 buy (global)
Severstal	500	0
 EVRAZ (Nizhny Tagil (NTMK))	1,745	0
 EVRAZ (W.Siberia (ZSMK))	1,646	0
 MECHEL (Chelyabinsk)	200	0
 NLMK (Novolipetsk)	6,500	0
 OMK (plate mill for pipe)	0	1,000
Kuzmin (Novosibirsk)	0	200
SUM	10,591	1,200
Export – balance	9,391	

World Trade in Steel by Region/Geography

Exported steel from CIS area to other destinations 2020

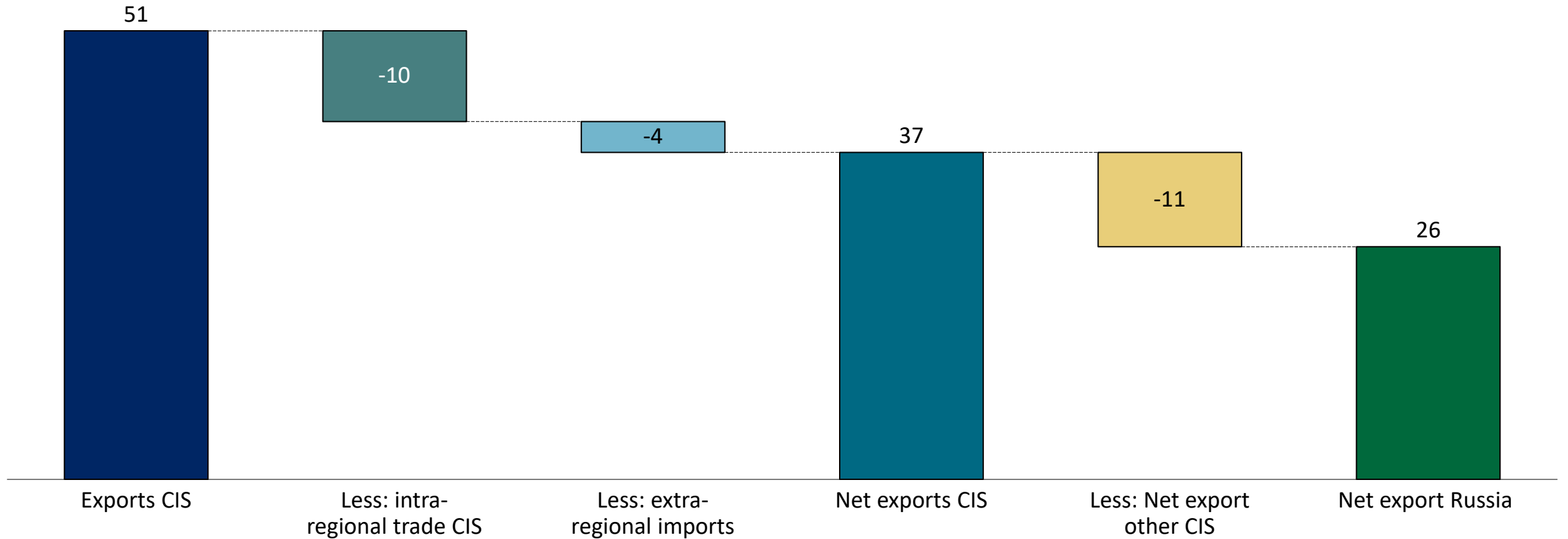
Million tonnes



World Trade in Steel by Region/Geography

Net exports CIS & Russia 2020

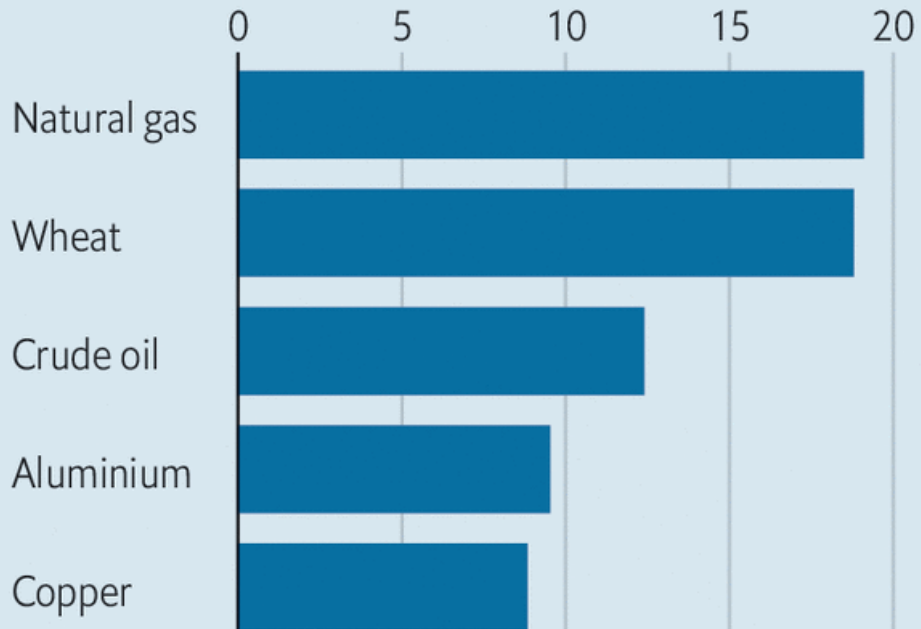
Million tonnes



Global Dependency on Russian Supplies

Market muscle

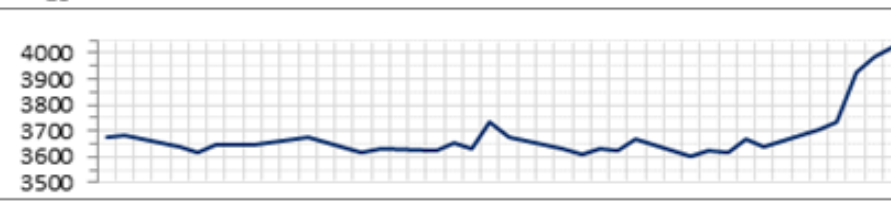
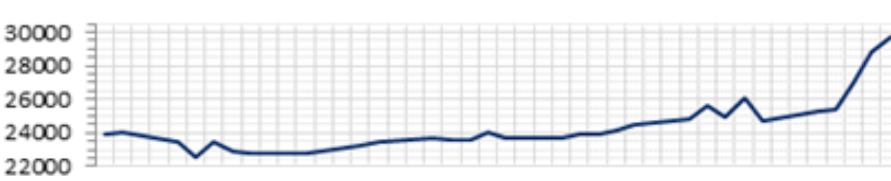
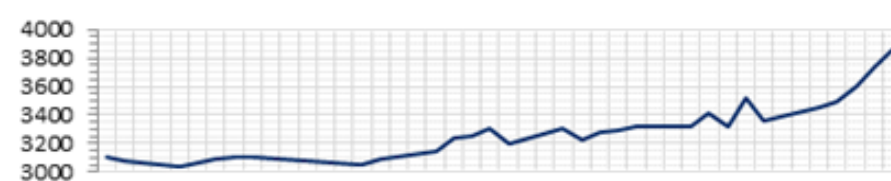
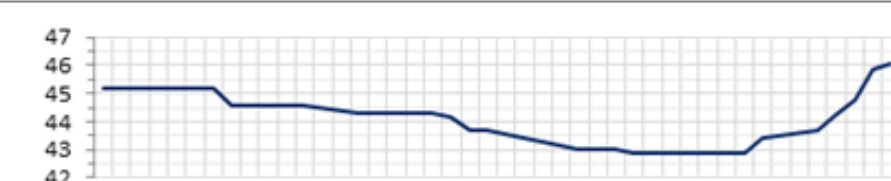
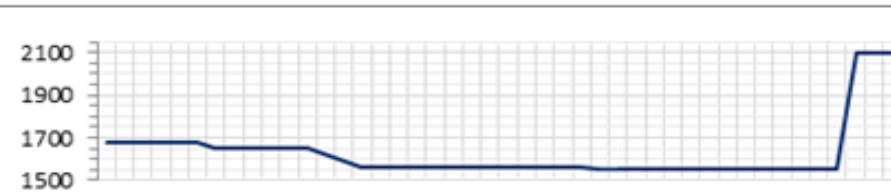
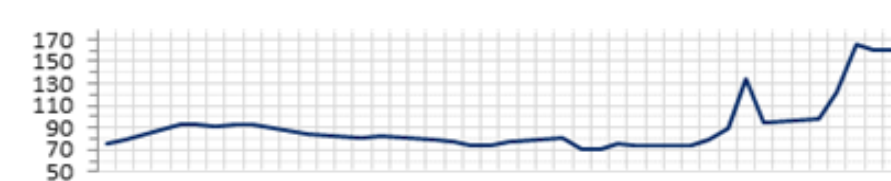
Russia's exports, share of world total, %
2020



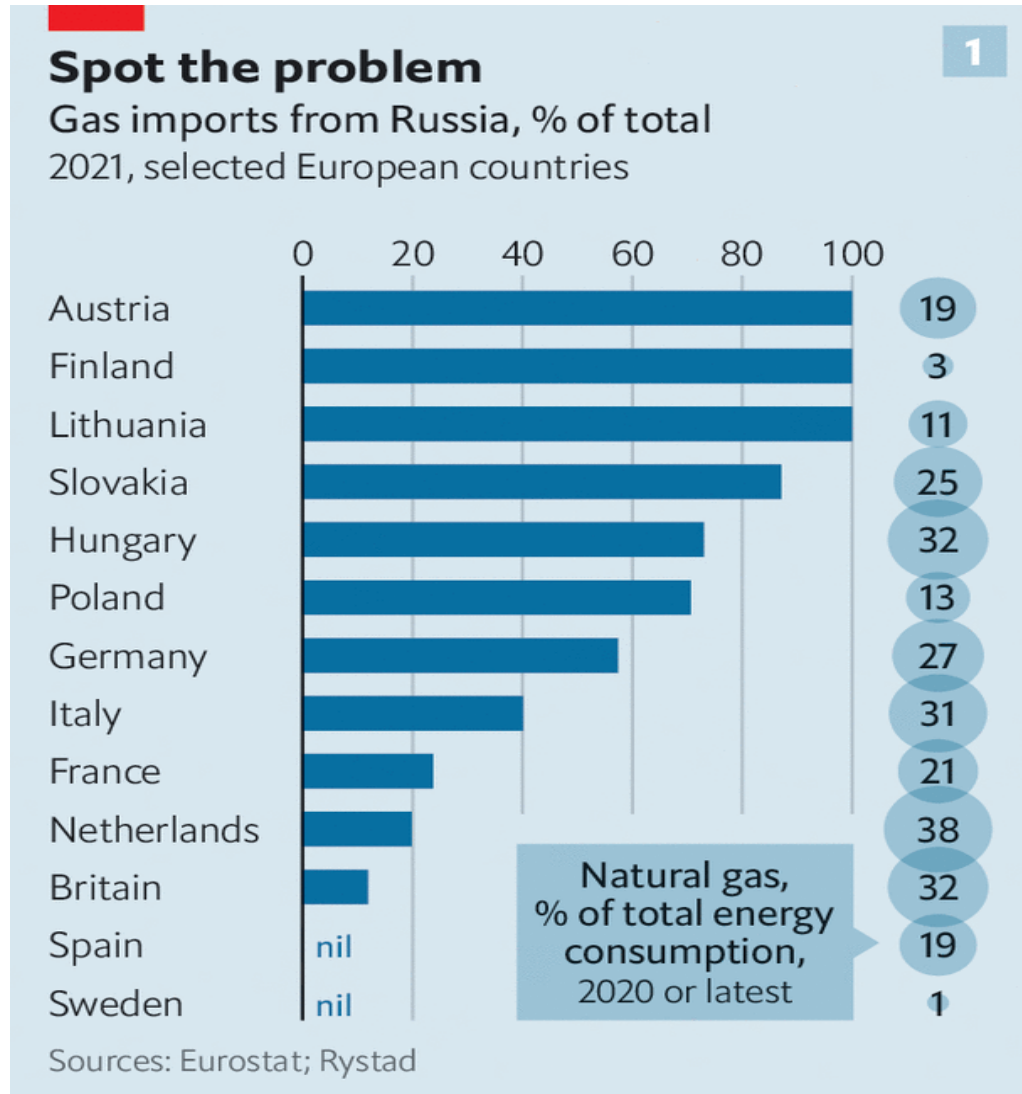
Sources: BP Statistical Review; FAO;
World Bureau of Metal Statistics

- ▶ Russia has a very strong position on the natural gas market in Europe.
- ▶ We have already seen prices peak to over 300 Euro/MWh, average in 2021 was 70 Euro/MWh
- ▶ We have also already seen Ni, Al, Zn, Mn prices increase since Russia has a large exports of these minerals (except for Mn)

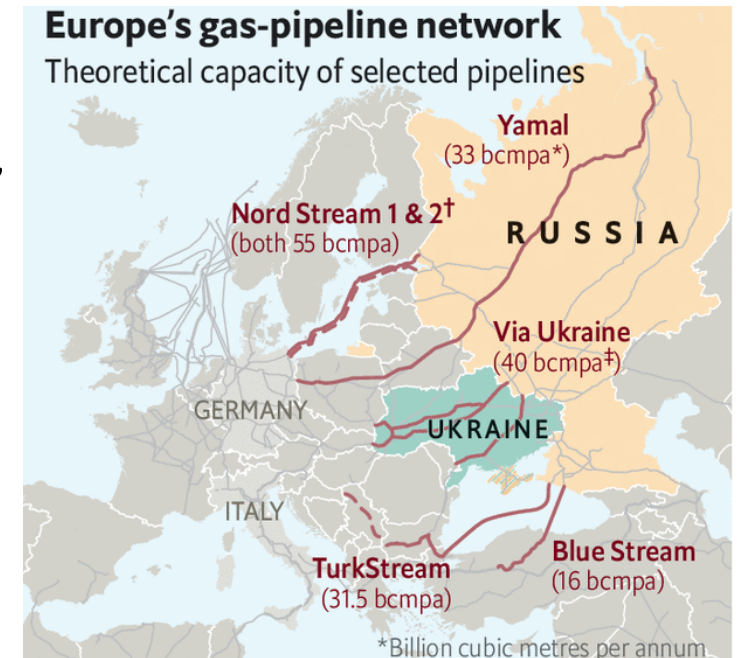
Alloy Prices are Increasing

Zinc	LME Zinc Cash Official Price [USD/t]	4024,25	+10,6%	+9,5%	
Nickel	LME Nickel Cash Official Price [USD/t]	29775	+20,6%	+24,6%	
Aluminium	LME Aluminium Cash Official Price [USD/t]	3850,5	+14,8%	+23,8%	
Molybdenum	Ferromolybdenum 65% European in warehouse Rdam [USD/kg Mo]	46,05	+6%	+1,9%	
Manganese	Silicomanganese 65:16 DDP NWE [EUR/t Mn]	2100	+35,5%	+25,4%	
LNG	Dutch TTF Natural Gas [EUR/MWh]	161	+70,3%	+113,8%	

European Dependency on Russian Gas is a Major Problem

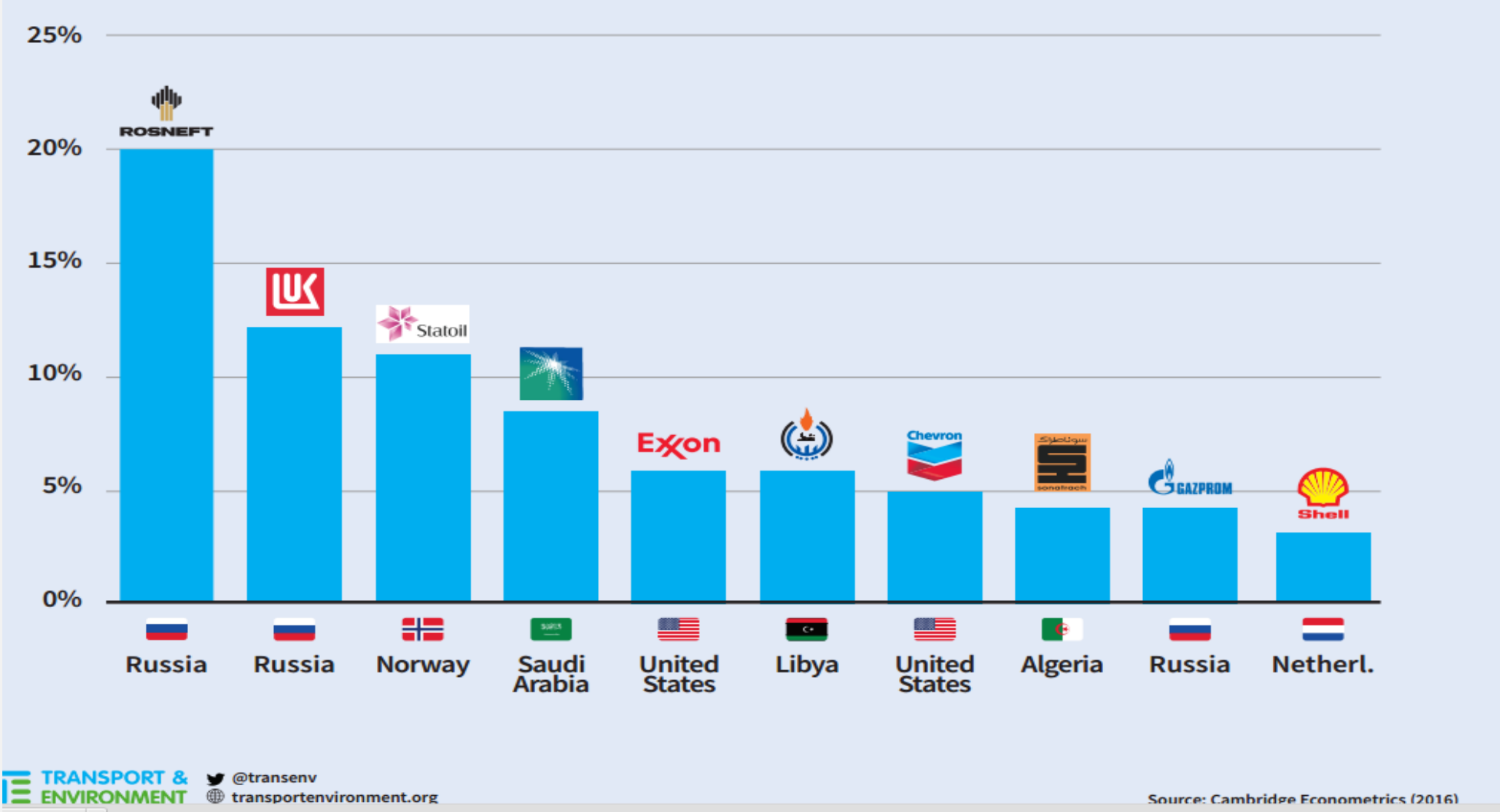


- ▶ Some gas suppliers (owners) are on the sanction list
- ▶ Most gas suppliers cannot get paid due to the ban of Swift transfer to Russia
- ▶ Customers demands material with no Russian supply
- ▶ Without the gas large steel companies such as voestalpine, Liberty, Arcelor Mittal will have a limited production



SSAB

Russia's Supply of Oil to Europe



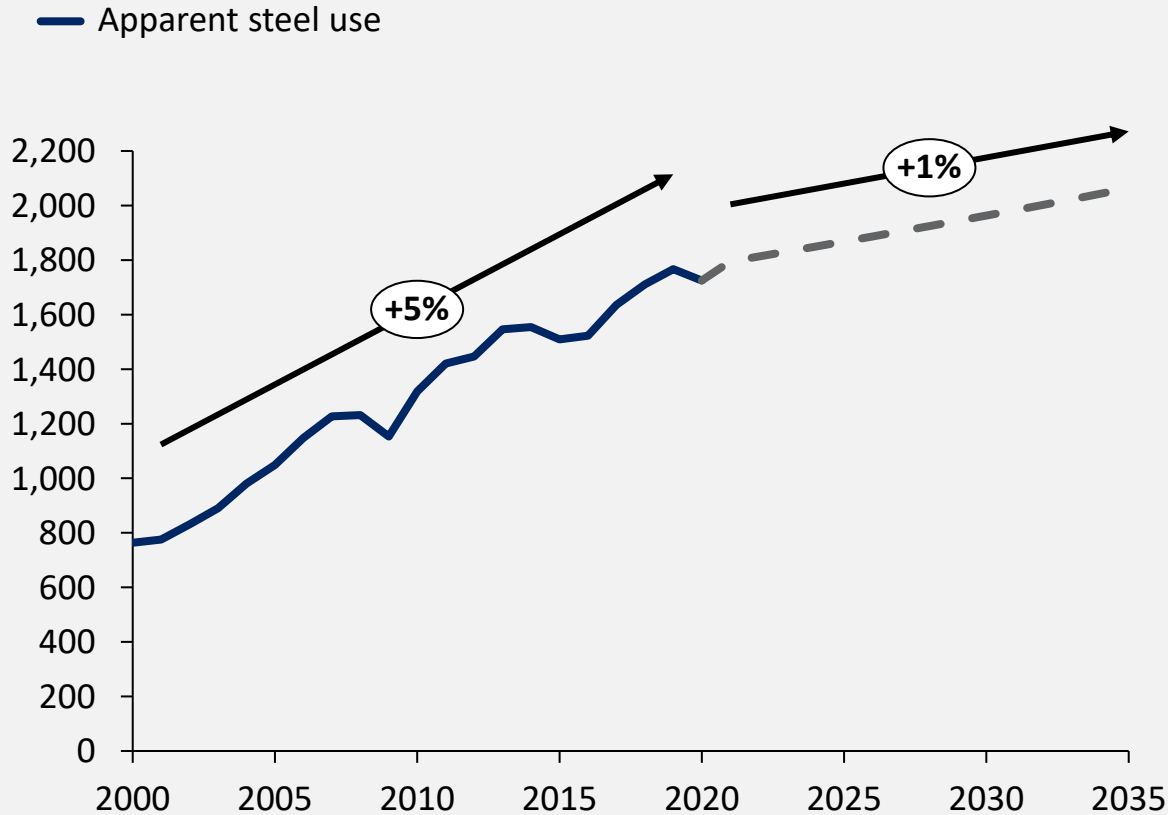
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Global steel demand is expected to grow towards 2 billion metric tons per year, but at a slower pace than historically

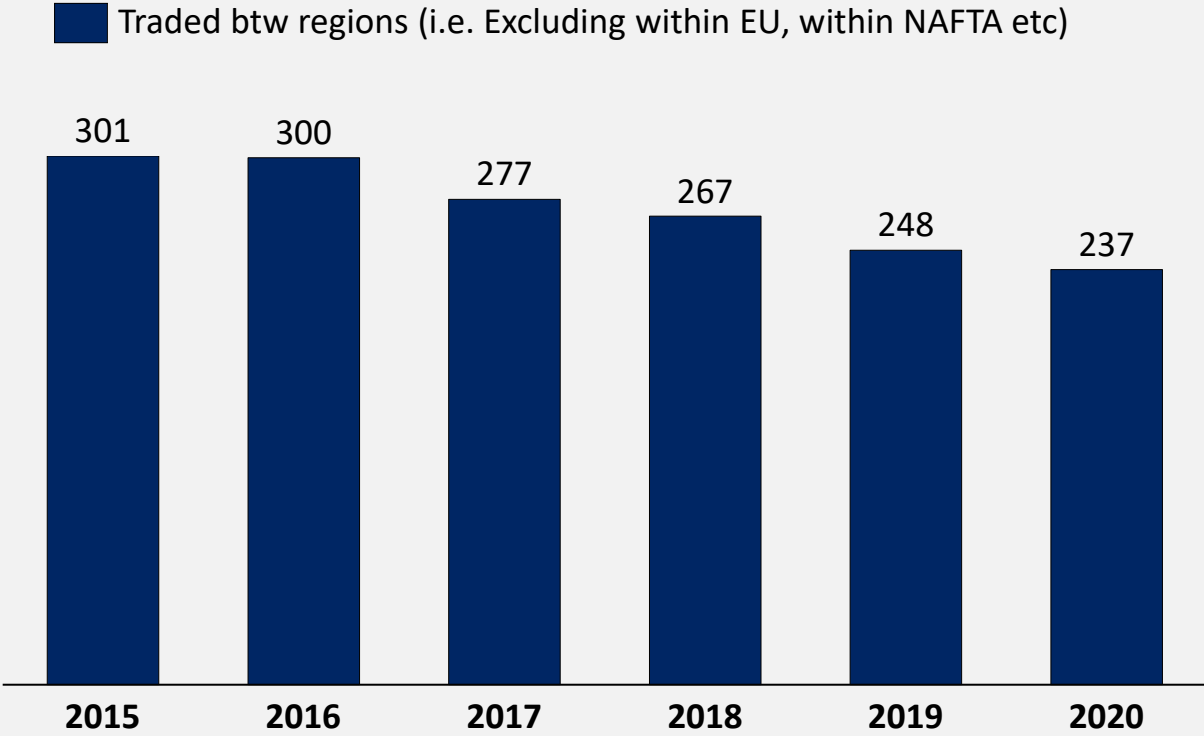
Global steel demand forecast



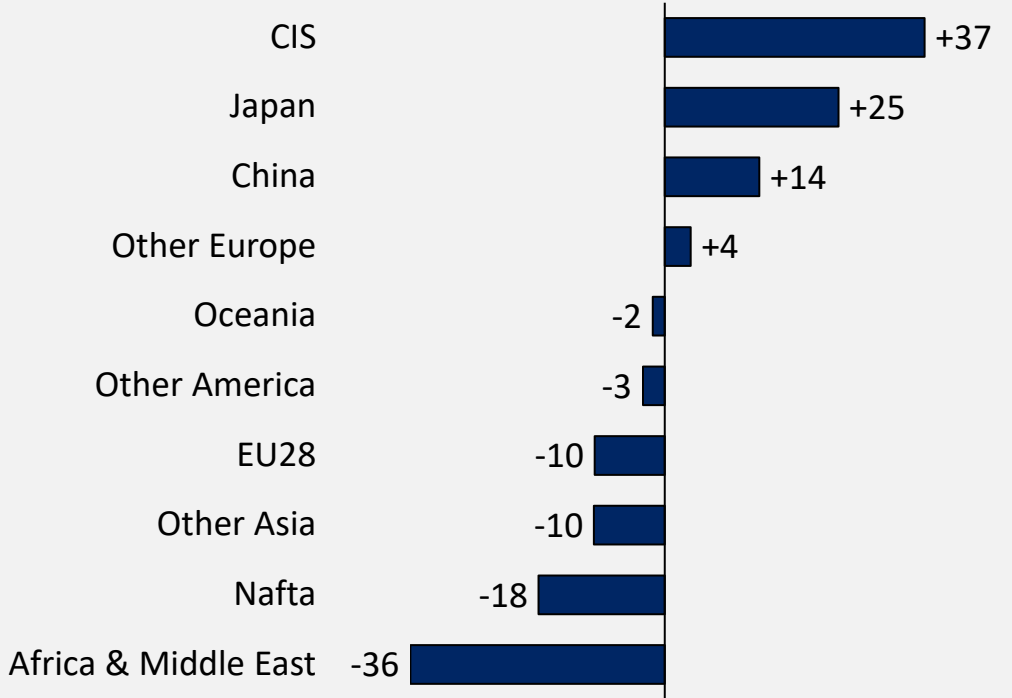
- ▶ Worldsteel estimates a growth rate of around 1% per annum could be expected until 2040, which would bring the global steel usage up to around 2 billion metric tons per annum
- ▶ Accenture Strategy expects a growth between 0.4% - 1.4% per annum until 2035, depending on the impact of disruptors. This would bring their expectations up to around 1.75 – 2.00 billion metric tons per annum (from a 2015 baseline)
- ▶ China has been the driver of steel demand in recent decades, but now demand in China has likely peaked and we should expect a flat development

Global Steel Trade between Regions Continues to Decrease

Steel world trade, mton

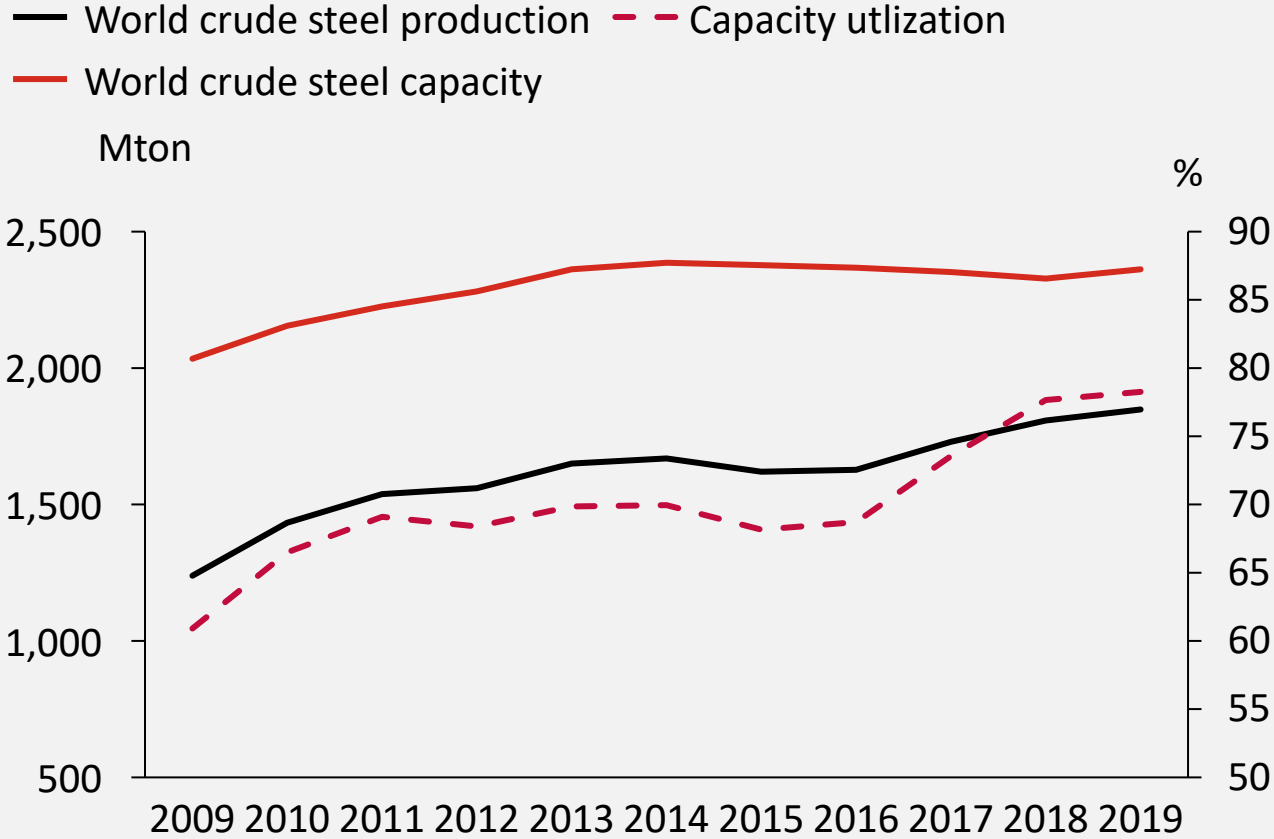


Regional trade balance 2020, mton



Before Covid-19 the global steel industry was back at healthy production and supply levels

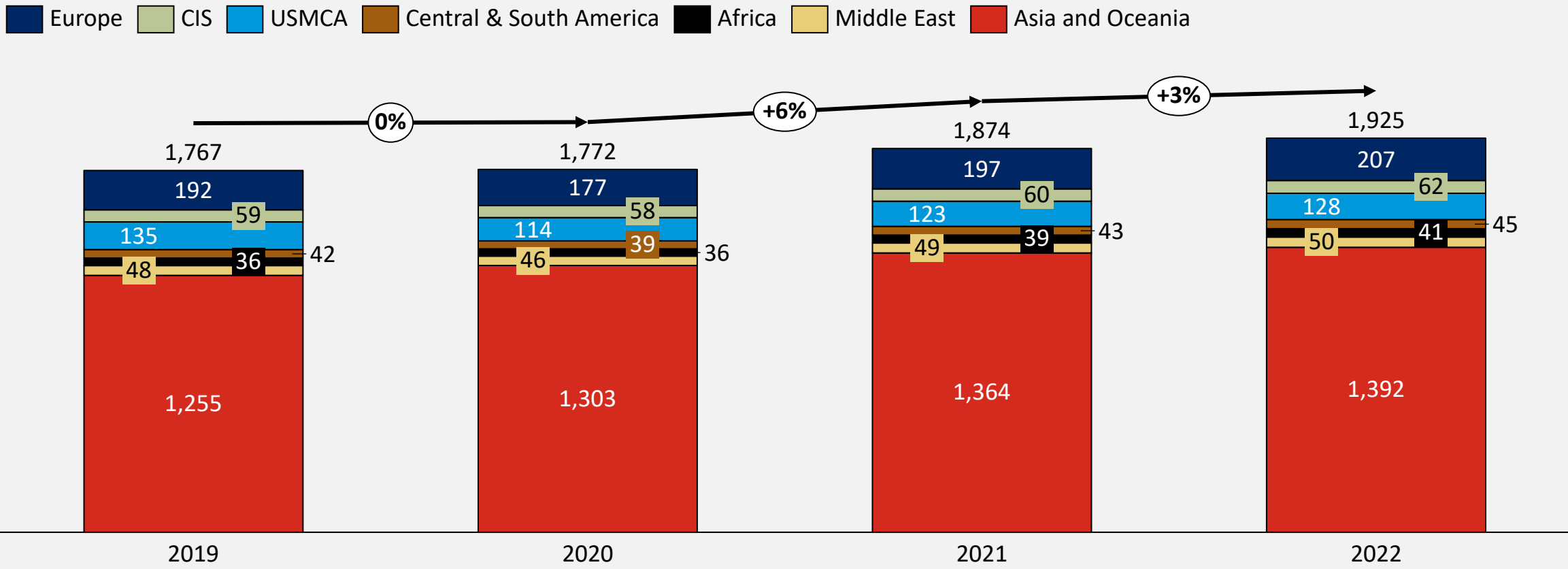
Global production and capacity balance



- ▶ Global steel industry approaching 80% utilization – a healthy level
- ▶ Saw an increase in global capacity for the first time since 2014, growing by 1.5% compared to 2018
- ▶ 2019 capacity development for selected regions:
 - Asia: +30 Mton (+2%)
 - NAFTA: -4 Mton (-2%)
 - EU: Flat
- ▶ 2020 crude steel production down 1% compared to 2019, capacity figures not yet released

Global steel demand did not drop during Covid-19, and the outlook indicates continued global growth

Relative size of regions, MTON steel demand



CO2 emissions in the European Union are no longer 'cheap' with expectations going up

Daily EU ETS carbon market price (€ per tonne)



- ▶ Current emission prices is an all-time high, and has reached 96 EUR per ton
- ▶ Draft of EU commission's impact assessment projects 2030 prices to go up to 85 EUR, assuming complementary Green Deal policies
- ▶ Some analysts expect prices to go even higher >130 EUR per ton
- ▶ In addition, proposals to reduce and/or completely phase out free emission allowances for e.g. the European steel industry

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Summary

- ▶ Russia's attack on Ukraine might last a long time
- ▶ Steel production cost in Europe is increasing fast
- ▶ Raw material prices have already increased significantly
- ▶ It is likely that steel availability will decrease 15-20% due to lower imports and an additional 15-20% due to lower production due to lack of raw material or energy
- ▶ The U.S. will short term suffer from the lack of pig iron, but new supply routes will be set up soon.
- ▶ Global steel prices are increasing production, and the U.S. has a favorable cost position

Thank You

Thank you for attending our SMU Community Chat. And a special thank you to Dr. Sjöström for his participation today.

To contact Michael Cowden: Michael@SteelMarketUpdate.com

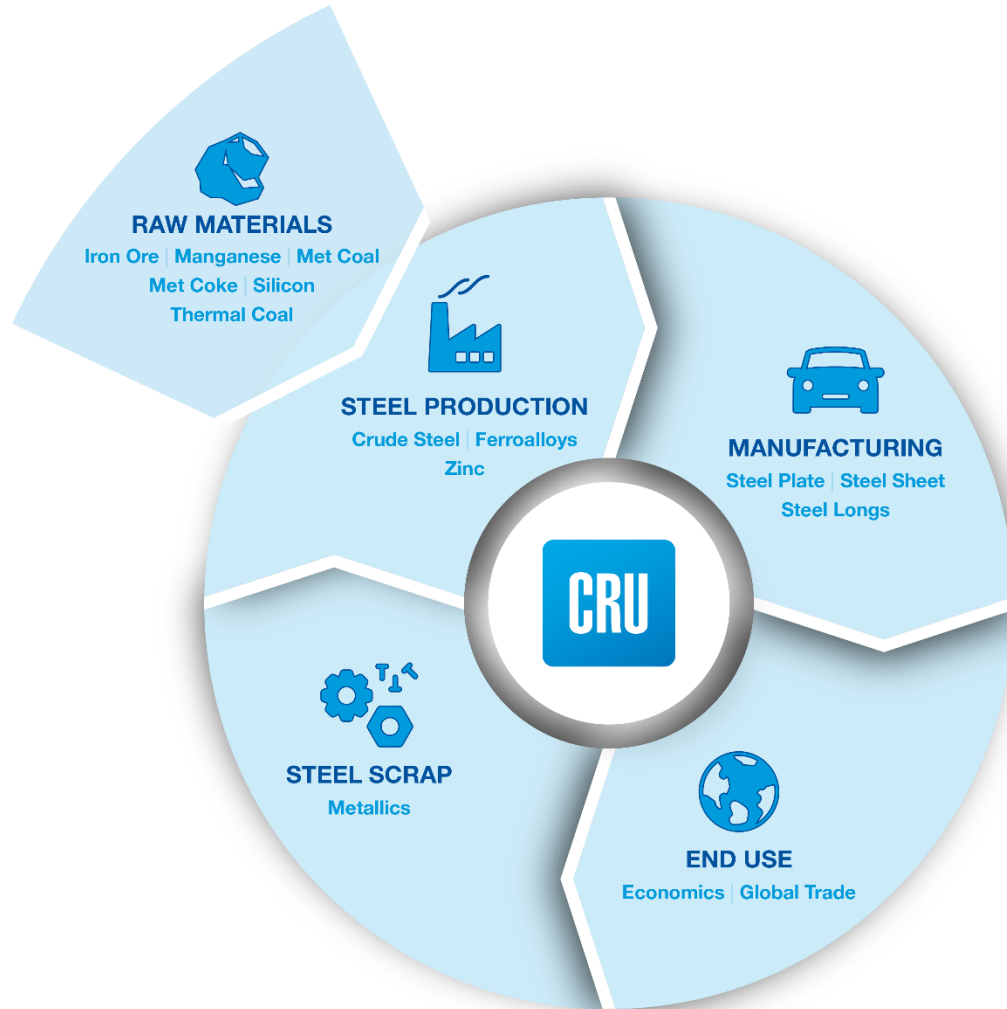
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To become a data provider for our service center inventory report, contact Estelle Tran:
Estelle.Tran@CRUGroup.com

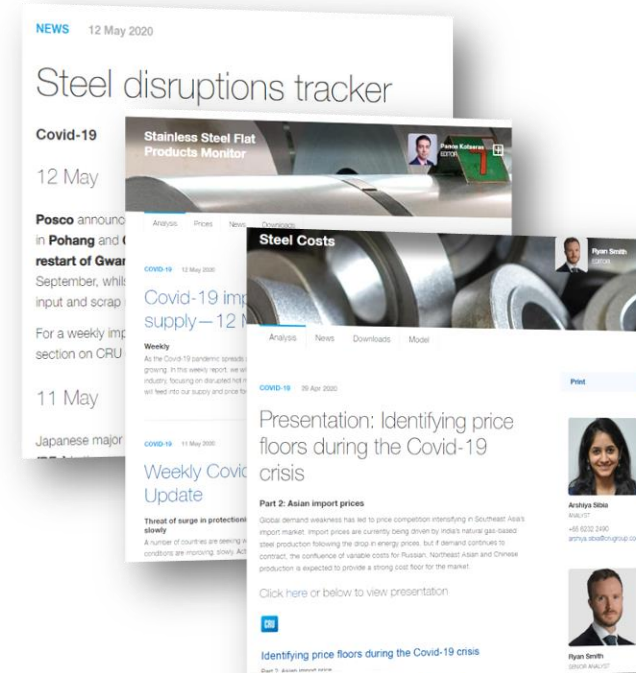
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The logo features a stylized circular shape composed of two curved segments. The top segment is orange and the bottom segment is red, meeting at a central point on the left side. The text "STEEL MARKET UPDATE" is written in white, bold, uppercase letters across the center of the logo.

STEEL MARKET UPDATE

part of the  Group

When you need answers... www.SteelMarketUpdate.com