

European Methanol Outlook: Post-COVID-19, Pre-Decarbonization

Prepared for the:

2021 International Methanol Conference
November 2nd – 3rd , 2021

By:

Kristian Aas
Senior Consultant



Methanol Market Services Asia Pte. Ltd.
77 Robinson Road
Level 34
Singapore 068896
Phone: +65 6465 2720
E-mail: services@methanolmsa.com

- An exciting time to follow markets
 - COVID-19: Recovery quicker than expected - risk of setbacks remains
 - Energy crunch in Europe
 - Desired development of energy sources - unwanted effects
 - Global impact via LNG
 - Limited effect on methanol
- Supply-Demand for methanol
 - A tough year for European producers
 - Trinidad and Tobago increase market share
 - Demand continues to grow
 - although volumes will be small in a global perspective
 - Waterfront & MOL, Proman & Stena, Maersk drive methanol as shipping fuel
- MMSA EU CP survey
 - Assisting the industry's price finding mechanism since 2018
 - Spot price moved up on high volumes, continued to rise after the settlement

- An exiting time to follow markets
 - COVID-19: Recovery quicker than expected - risk of setbacks remains
 - Energy crunch in Europe
 - Desired development of energy sources - unwanted effects
 - Global impact via LNG
 - Limited effect on methanol
- Supply-Demand for methanol
 - A tough year for European producers
 - Trinidad and Tobago increase market share
 - Demand continues to grow
 - although volumes will be small in a global perspective
 - Waterfront & MOL, Proman & Stena, Maersk drive methanol as shipping fuel
- MMSA EU CP survey
 - Assisting the industry's price finding mechanism since 2018
 - Spot price moved up on high volumes, continued to rise after the settlement

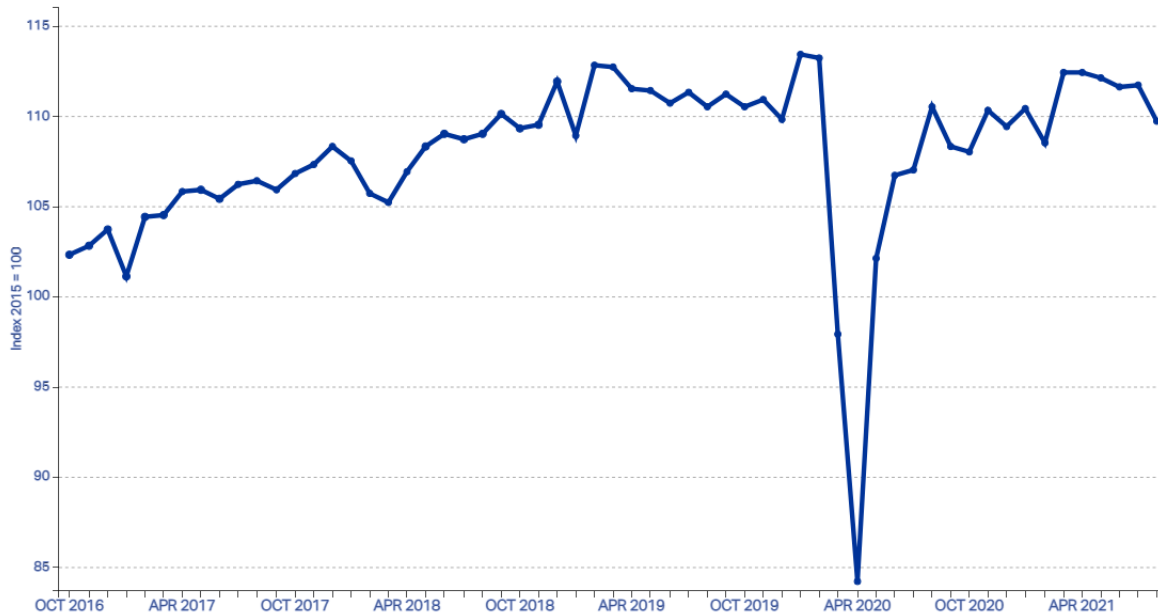
COVID-19

European production recovered quickly



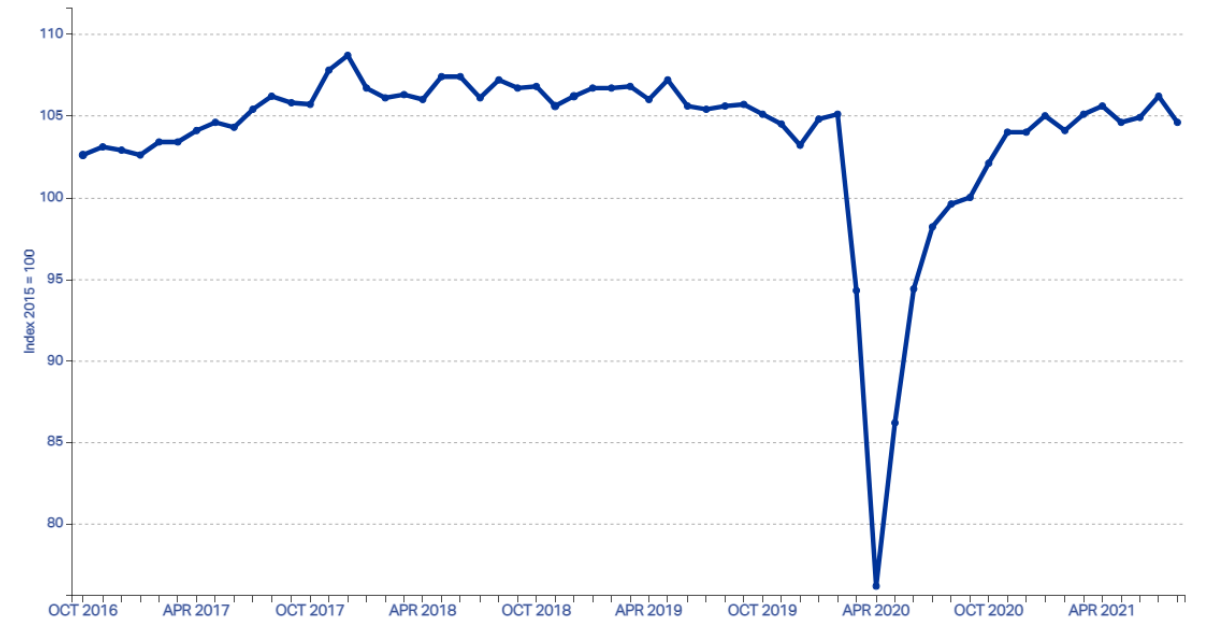
Production in construction i

Index 2015 = 100



Industrial production i

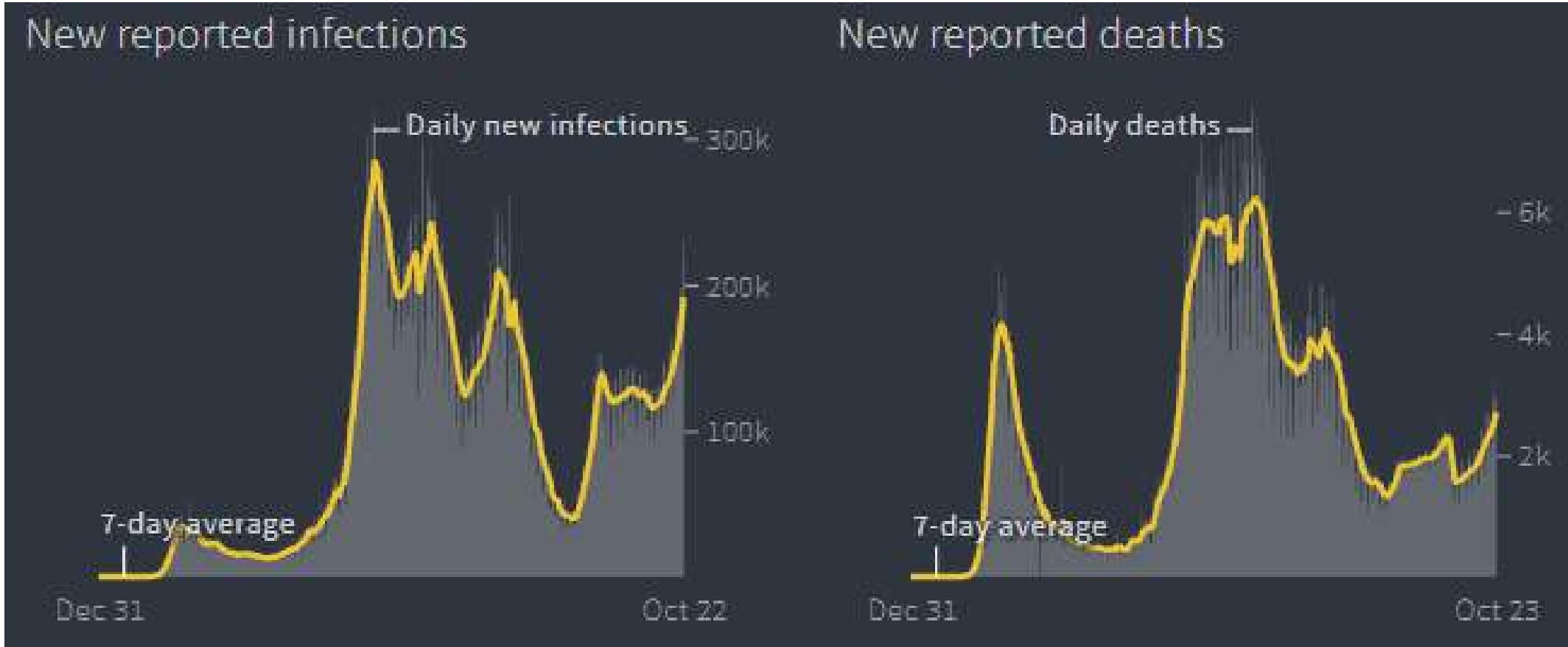
Index 2015 = 100



Source: <https://ec.europa.eu/eurostat>

COVID-19

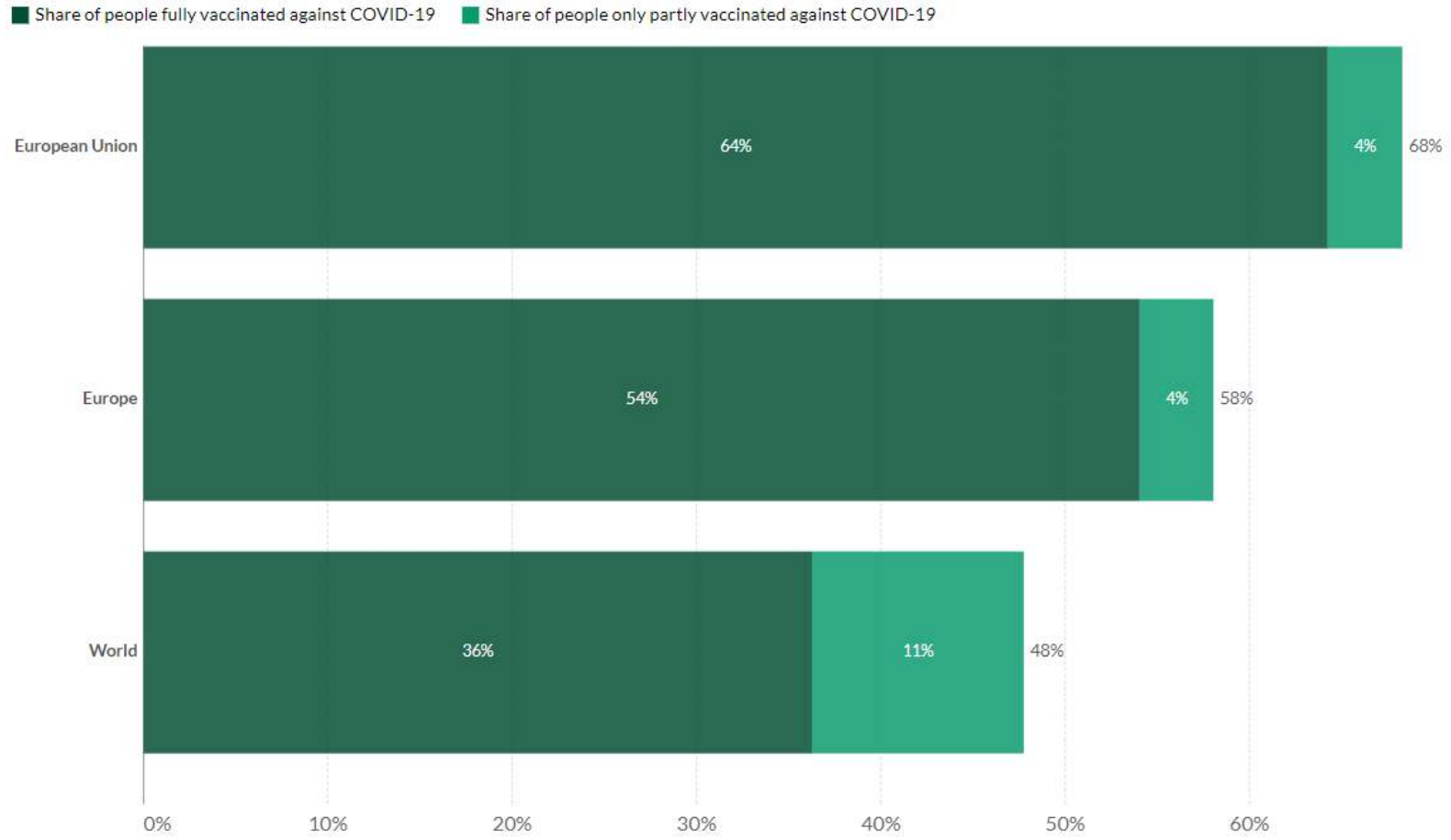
Infections and deaths are increasing again



Source: <https://graphics.reuters.com/world-coronavirus-tracker-and-maps/regions/europe/>

COVID-19

Vaccinations EU, Europe and World



Source: Official data collated by Our World in Data. This data is only available for countries which report the breakdown of doses administered by first and second doses in absolute numbers. CC BY

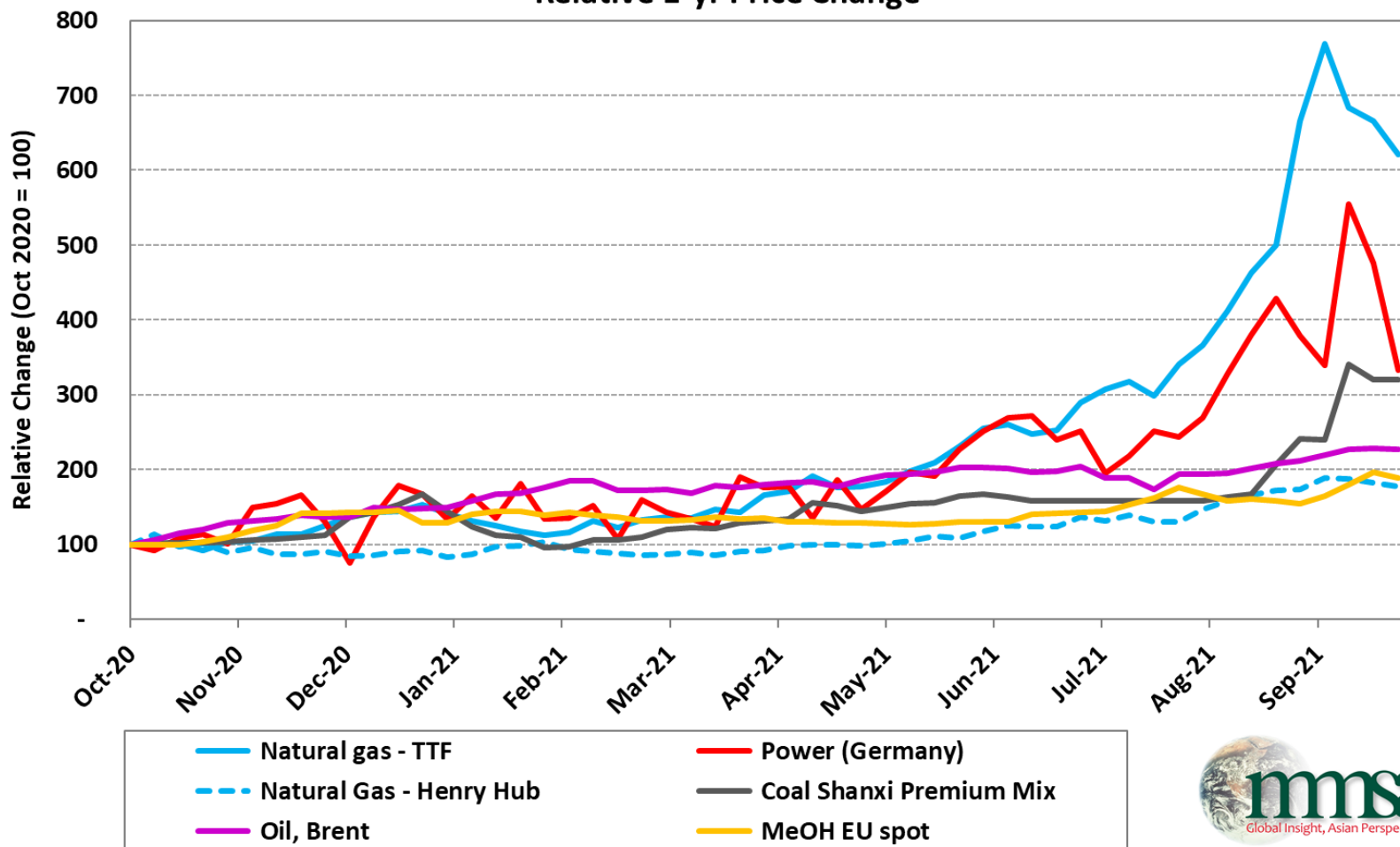
- Not over until >90% has a degree of immunity through vaccination or infection
- Vaccination rollout has slumped in rich countries
- New strains pose a threat to recovery

Source: <https://ourworldindata.org>

European energy crunch has limited effect on Methanol



Energy, MeOH Feedstock Relative 1-yr Price Change

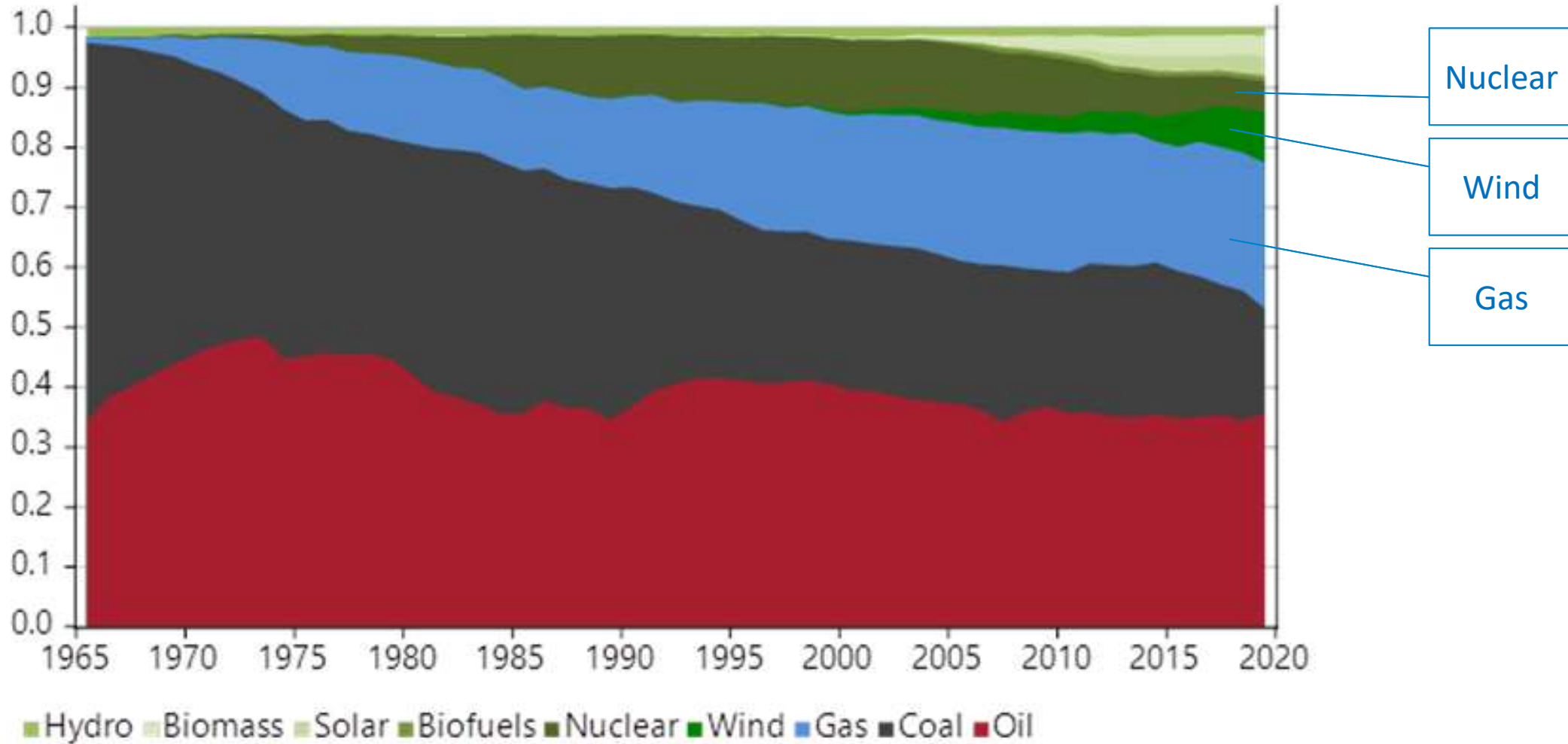


- One plant in Europe with market-priced gas as feedstock
- TTF around 30 USD/mmbtu
- Brent around 86 USD/bbl



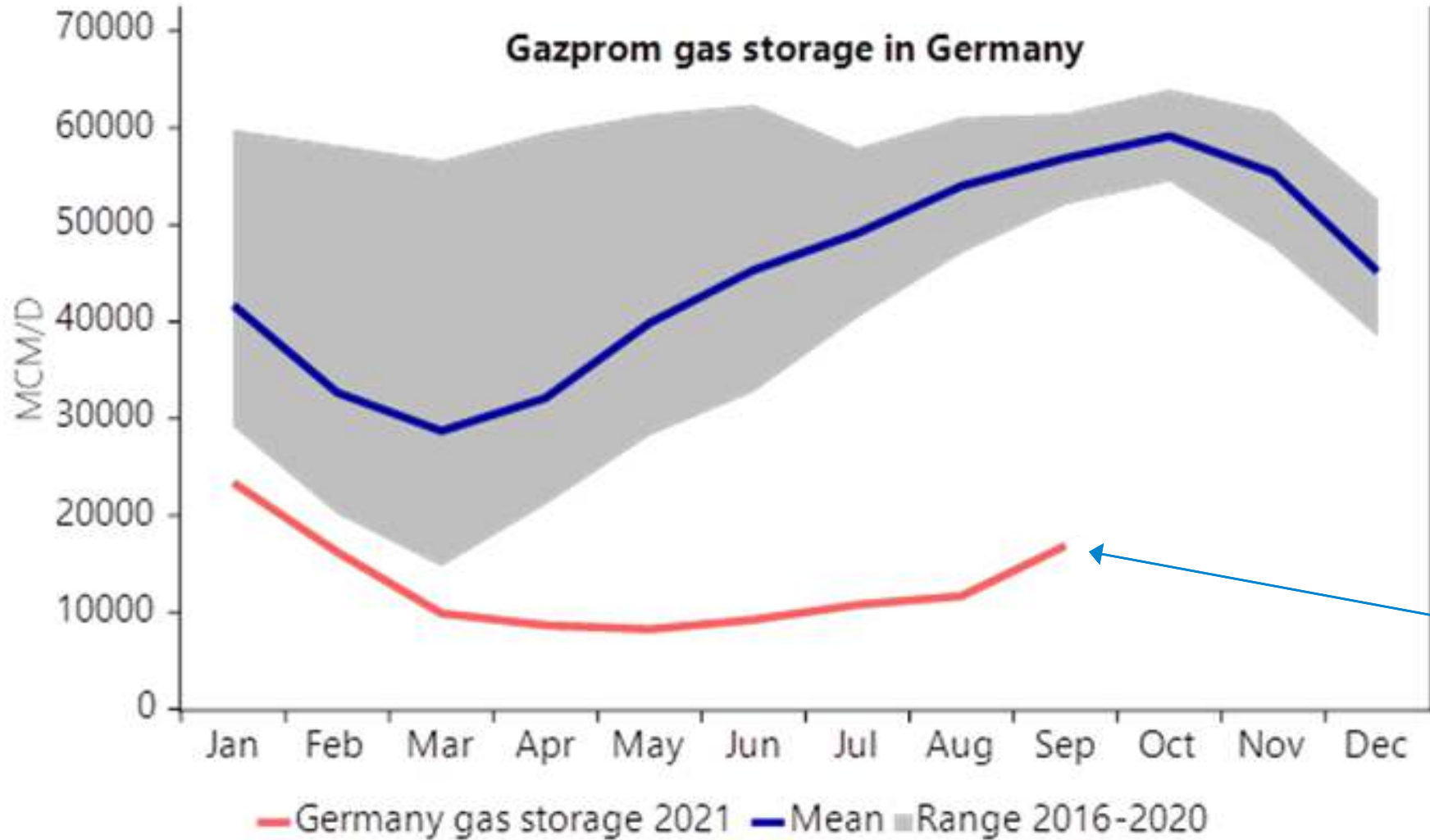
Why European energy crunch?

Desired development – unwanted effects



Source: Nordex and Macrobond

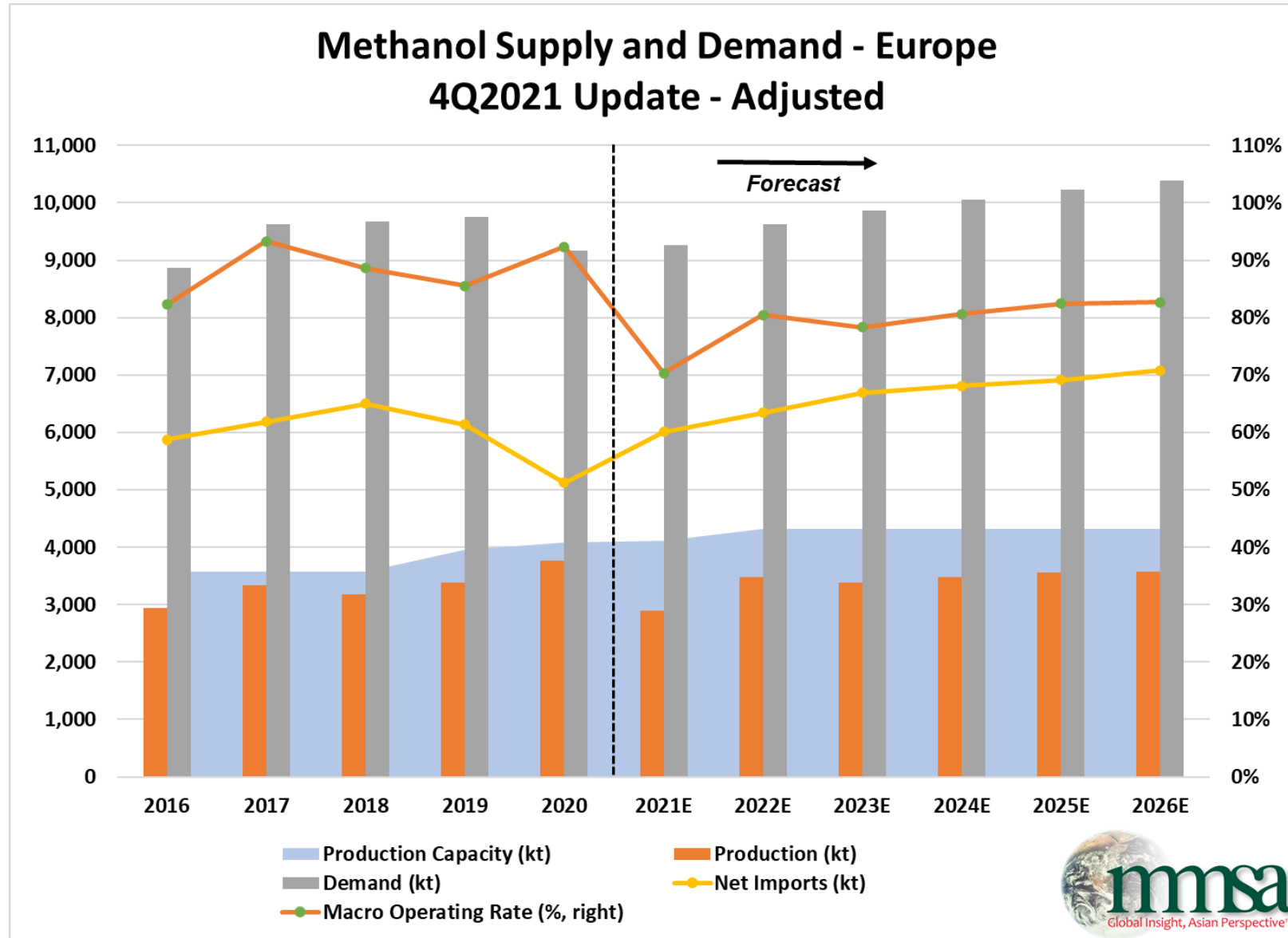
Less wind increases the need for natural gas



Source: Macrobond and Nordea

- An exiting time to follow markets
 - COVID-19: Recovery quicker than expected - risk of setbacks remains
 - Energy crunch in Europe
 - Desired development of energy sources - unwanted effects
 - Global impact via LNG
 - Limited effect on methanol
- Supply-Demand for methanol
 - A tough year for European producers
 - Trinidad and Tobago increase market share
 - Demand continues to grow
 - although volumes will be small in a global perspective
 - Waterfront & MOL, Proman & Stena, Maersk drive methanol as shipping fuel
- MMSA EU CP survey
 - Assisting the industry's price finding mechanism since 2018
 - Spot price moved up on high volumes, continued to rise after the settlement

European demand recovers as forecast, local production disappoints



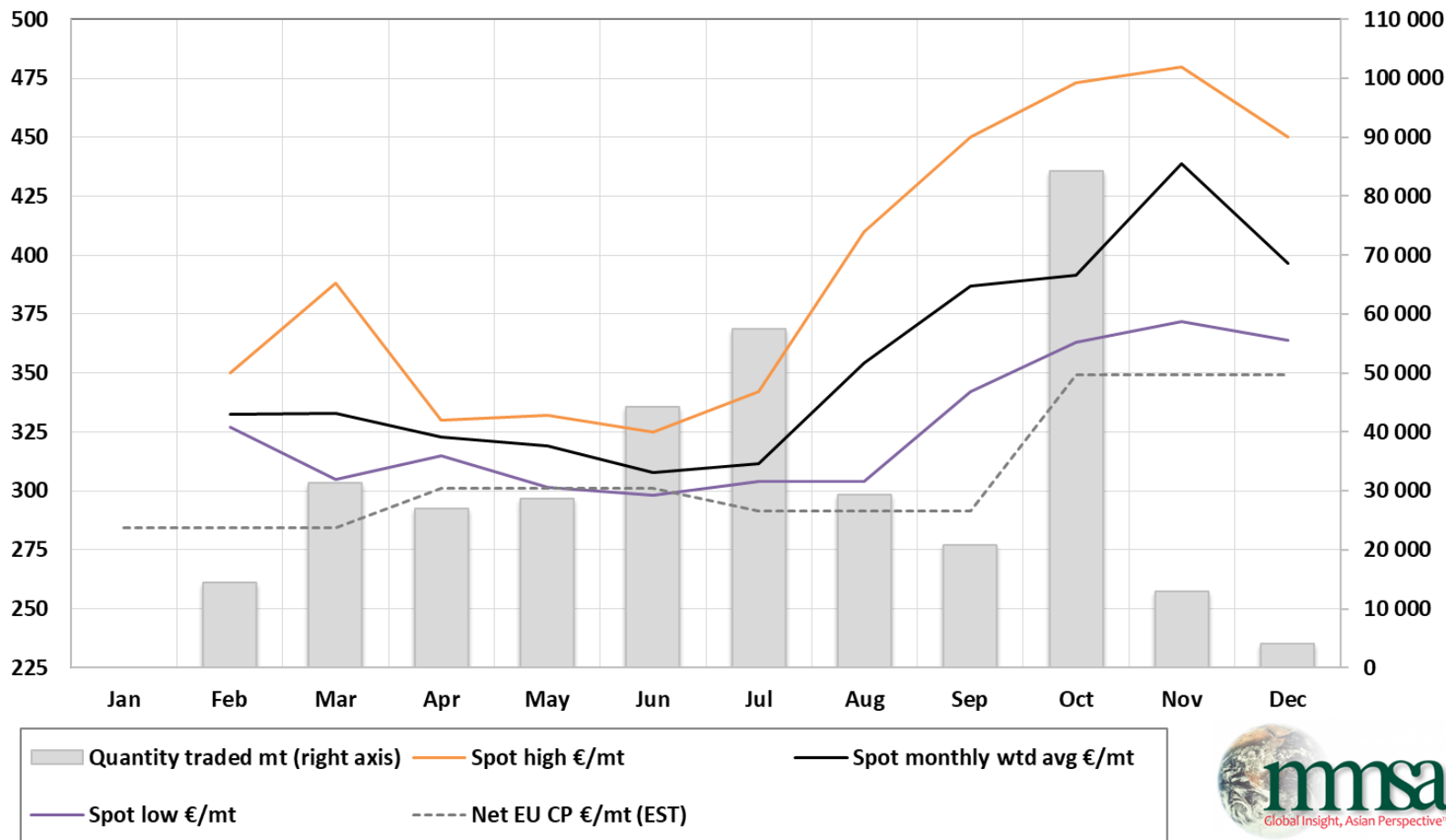
- With disappointing local production YTD, T&T moved in to capture almost 80% of increased imports 2021E vs 2020
- European demand grows steadily, however small volumes in a global perspective
- Europe’s dependency on imports increase
- Future operating rates at mercy of natural gas affordability

Production losses overwhelm the “public” spot market

Spot shortages yield spot price fly-up



Spot volume (mt) per delivery month 2021 & Monthly weighted average with high/low & Estimated Net EU CP



- Record spot volumes traded for physical delivery in October – 84kt in total
- Estimate: more than 1 mill mt in production shortfall for the year, including turnarounds
- “Public” spot trades only a fraction of lost production
- Balance supplied by imports through private, bi-lateral deals
- Prices increased along with spot volume requirements
- Demand destruction, lower coal prices, and improved methanol operating rates expected to lead prices down



Press releases

A.P. Moller - Maersk accelerates fleet decarbonisation with 8 large ocean-going vessels to operate on carbon neutral methanol

24 August 2021

The series will replace older vessels, generating annual CO2 emissions savings of around 1 million tonnes. As an industry first, the vessels will offer Maersk customers truly carbon neutral transportation at scale on the high seas.

Proman and Stena jointly develop methanol as the pathway to sustainable shipping

NEWS • 21 OCTOBER 2021

Building a Supply Chain

The ships will consume **35,000-45,000 mt/year** each of green methanol.

Waterfront Shipping welcomes new methanol dual-fuel MR tanker

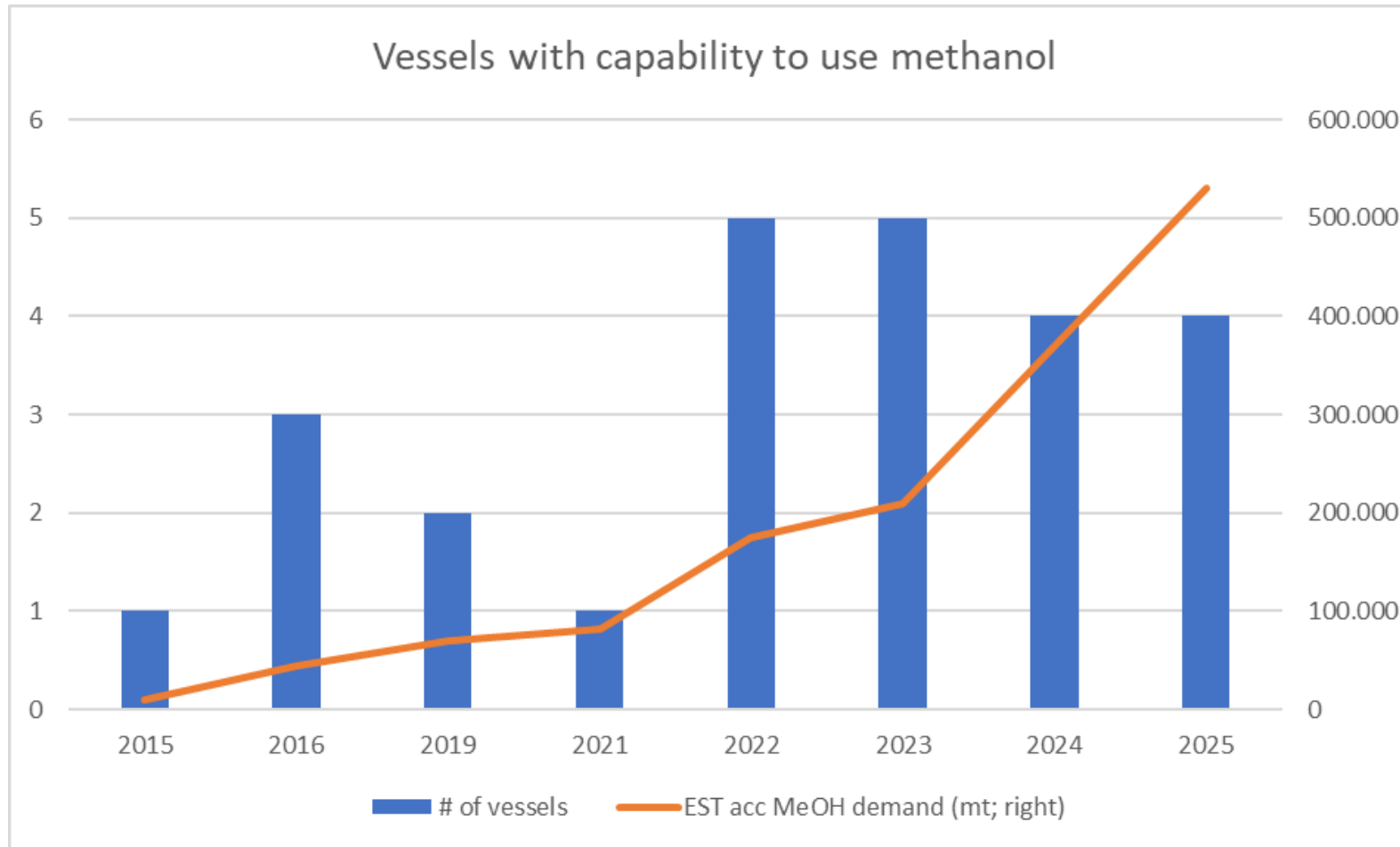
VESSELS

October 7, 2021, by Fatima Bahtić

Canada-based Waterfront Shipping Company (WFS), a subsidiary of Methanex Corporation, has taken delivery of the fifth in a series of eight methanol dual-fuel tankers from South Korean shipyard Hyundai Mipo Dockyard.

Source: shipandbunker.com; maersk.com, offshore-energy.biz

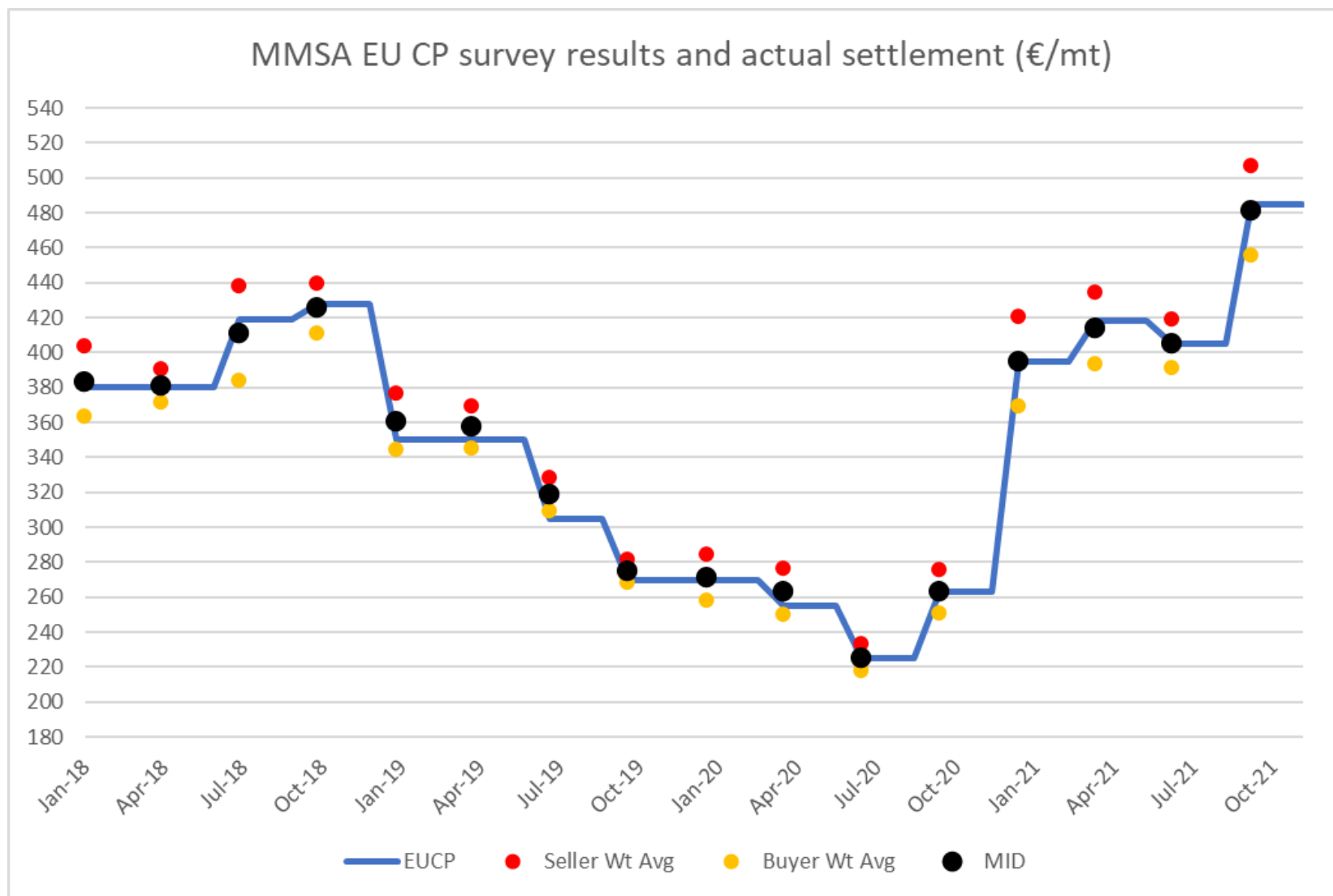
Vessels adding significant capacity to consume methanol



- Shipping accounts for 3% of world's energy consumption
- Announcements for 4-5 vessels delivered each of the coming years
- **Could** increase methanol demand by more than 500kt pa (renewable and conventional)
- Uncertain volumes and location of bunkering
- MMSA will add this demand to forecasts as certainty improves

- An exiting time to follow markets
 - COVID-19: Recovery quicker than expected - risk of setbacks remains
 - Energy crunch in Europe
 - Desired development of energy sources - unwanted effects
 - Global impact via LNG
 - Limited effect on methanol
- Supply-Demand for methanol
 - A tough year for European producers
 - Trinidad and Tobago increase market share
 - Demand continues to grow
 - although volumes will be small in a global perspective
 - Waterfront & MOL, Proman & Stena, Maersk drive methanol as shipping fuel
- MMSA EU CP survey
 - Assisting the industry's price finding mechanism since 2017
 - Spot price moved up on high volumes, continued to rise after the settlement

MMSA EU CP survey hits the mark

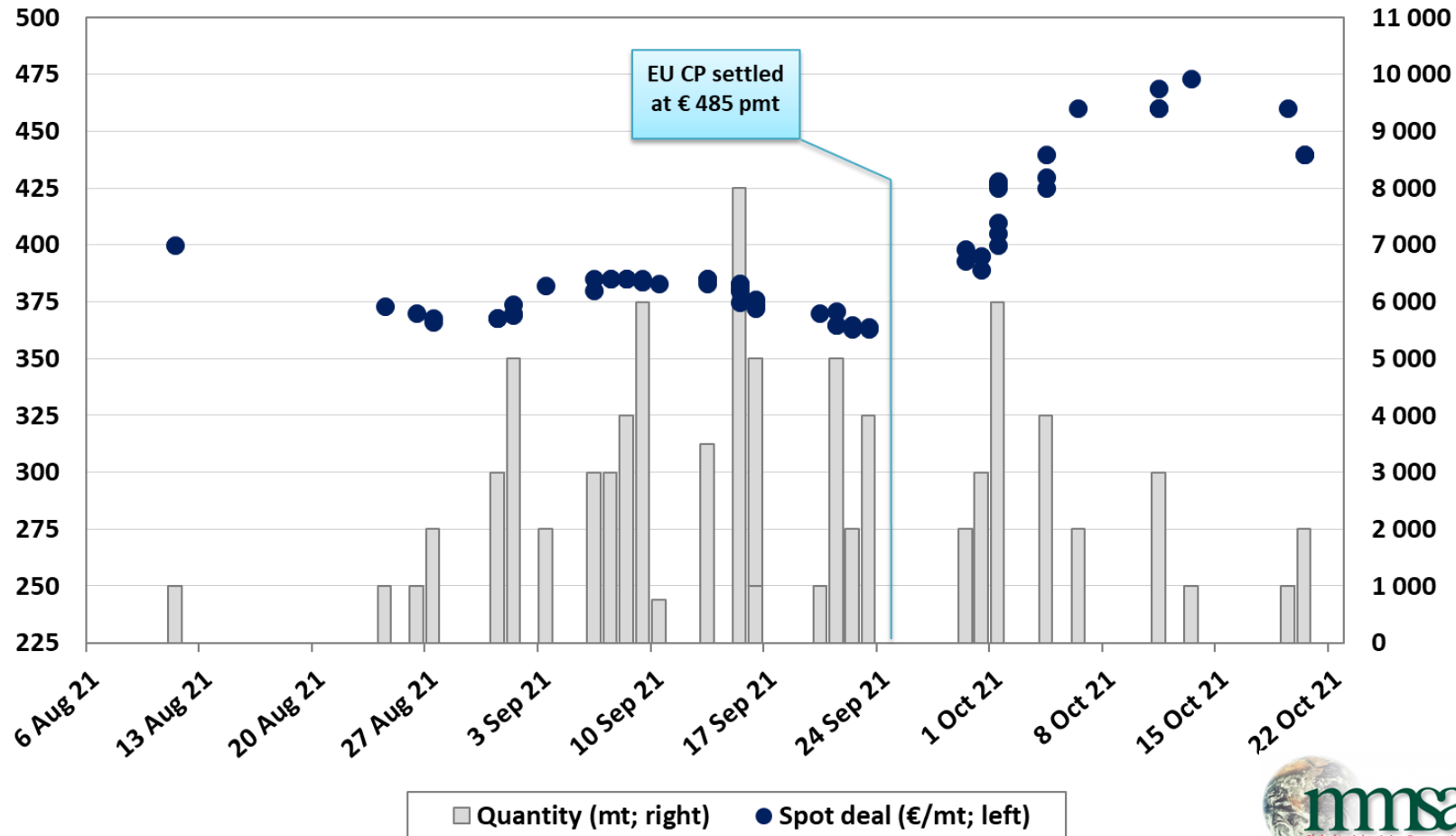


- MMSA EU CP survey conducted every quarter from mid-2017
- Survey in response to requests from industry to increase sample size of market sentiment in determining 3-month forward methanol values in Europe
- Roughly 25 responses per quarter
- Survey midpoints are very close to actual settlements of current process

Setting the price 3 months ahead can be fraught with risk



Trades with delivery in October 2021
Trade date, volume (mt) and price (€/mt)



- High October volumes – 84kt in total
- October 2021 trade values (which started in August) surged in October (after the 4Q EU CP settlement)
- Underscores risks of 3 month forward price settlements



Today's Takeaways & Remember to register for the live conference in Frankfurt 1-2. December!



- An exciting time to follow markets
 - COVID-19: Recovery quicker than expected - risk of setbacks remains
 - Energy crunch in Europe
 - Desired development of energy sources - unwanted effects
 - Global impact via LNG
 - Limited effect on methanol
- Supply-Demand for methanol
 - A tough year for European producers
 - Trinidad and Tobago increase market share
 - Demand continues to grow
 - although volumes will be small in a global perspective
 - Waterfront & MOL, Proman & Stena, Maersk drive methanol as shipping fuel
- MMSA EU CP survey
 - Assisting the industry's price finding mechanism since 2018
 - Spot price moved up on high volumes, continued to rise after the settlement



mmsa

Global Insight, Asian Perspective™