

North West Europe Gas Market Review

March 2021



Aurora offers power market forecasts and market intelligence spanning Europe's key markets & Australia



Comprehensive Power Market Services

- ✓ Power market forecast reports
- ✓ Forecast data in Excel
- ✓ Global energy market forecast reports
- ✓ Strategic insight reports
- ✓ Regular subscriber group meetings
- ✓ Bilateral workshops
- ✓ Analyst support

Power Market Forecast Reports

- ✓ Power market forecast reports
- ✓ Forecast data in Excel
- ✓ Analyst support

Bespoke forecasts

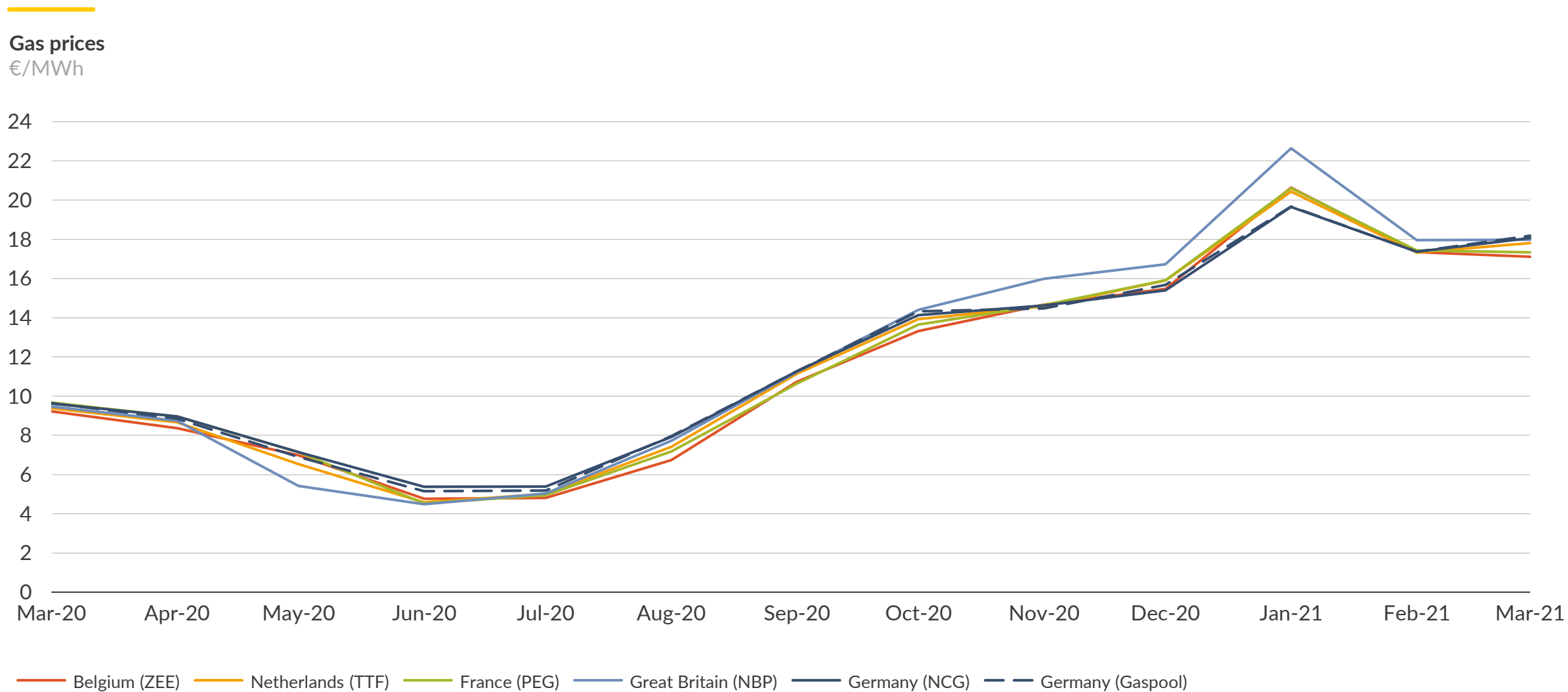
- ✓ Aurora can provide power market forecasts upon request



Executive Summary

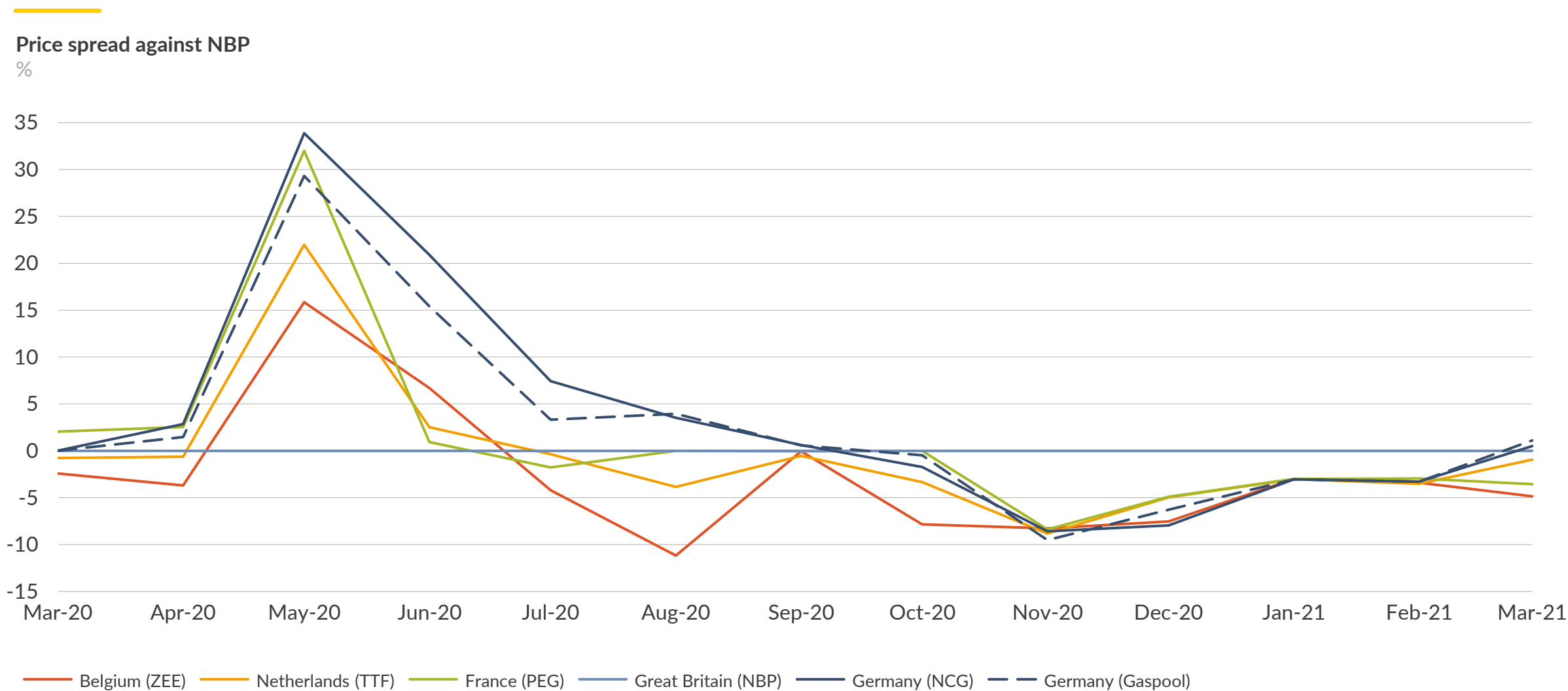
- Gas prices:** The average gas price in Northwest Europe fell by 15% m-o-m in February, to €17.5/MWh, due to lower gas demand. Concurrently, weak Asian LNG demand led to LNG cargoes being diverted to Europe, which helped to ease the supply tightness in the European gas markets. Despite a decline in gas demand, the gas price remained at the similar level in March, supported by the incident at the Suez canal at the end of March. **See slides 4-5**
- Consumption:** Total gas consumption in NW Europe dropped by 5bcm in February, to 30bcm, and further fell to 28bcm in March as mild weather reduced heating demand. **See slides 6-7**
- Supply:** LNG imports increased by 1.7bcm m-o-m in March, as LNG deliveries to Europe recovered due to decreased Asian demand. This led to the share of LNG in the total gas balance increasing from 9% to 15%. Nonetheless, LNG imports are 1.0bcm lower y-o-y with robust pipeline flows. Russia pipeline imports rose by 5bcm y-o-y, gaining 5%-points in EU market share. In contrast to the Russian pipeline, Norwegian imports fell by 1bcm, losing 1%-point over the same time period. **See slides 8-11**
- Indigenous production:** Dutch production was 5% and 2% higher y-o-y and m-o-m respectively at the expense of storage withdrawals. GB production fell by 9% m-o-m, but increased by 26% y-o-y to compensate for decreased LNG imports and replenish the storages.
- Pipeline imports:** Total pipeline imports rose by 8% versus the prior year, primarily due to 1.6bcm higher flows from Russia. Driven by high prices, Russia increased gas exports to Europe via all the major routes.
- LNG:** Total LNG send-out from NW European LNG regasification terminals was 18% lower y-o-y, led by GB. By contrast, France saw an increase in LNG imports to help balance the French gas market, causing the regasification terminal utilisation rate to rise to over 80%.
- Storage:** Following the January withdrawals, inventory levels in February remained below the 5-year average. Additional withdrawals in March caused the inventories in the Netherlands and Germany to fall to 40 days and 20 days of demand, around 40 days less than the inventories a year ago. **See slides 12**

North West European gas price development



1) Monthly prices are the averages prices of each month's daily prices. Prices are converted in € using the monthly averages of the daily exchange rates.

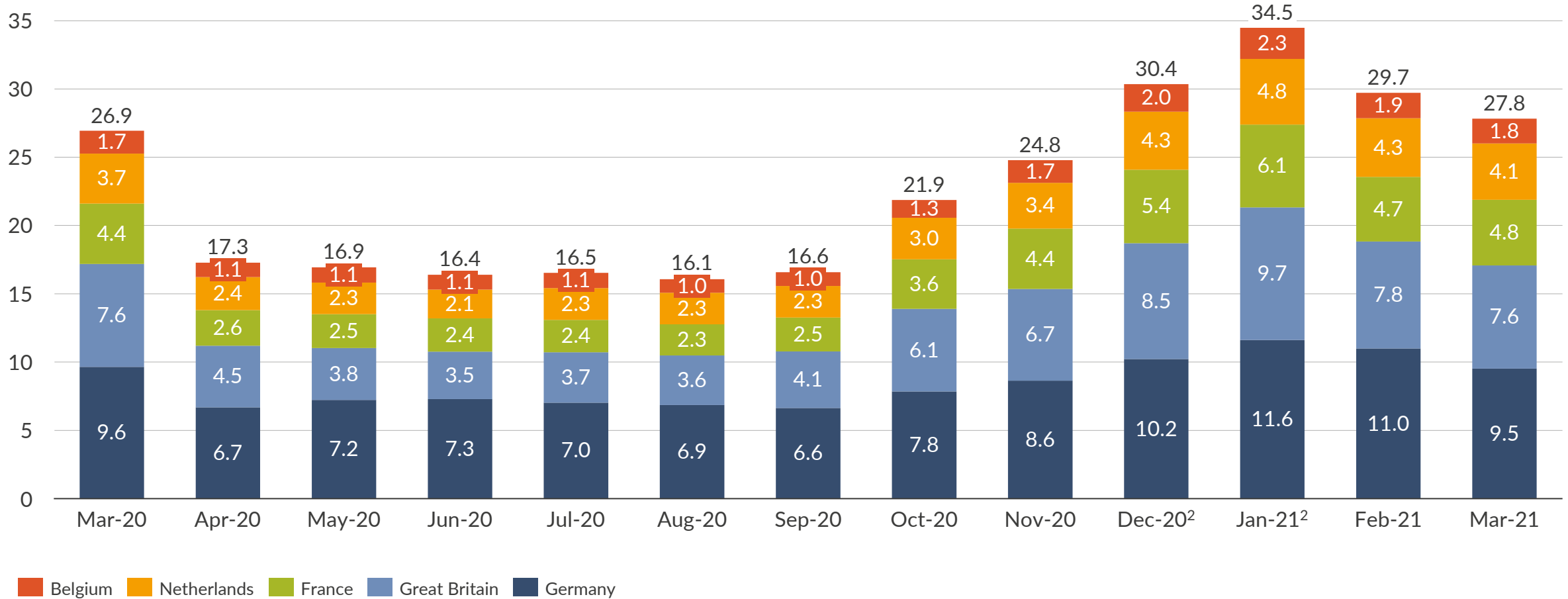
% Price spreads against NBP



1) Using the monthly averages prices of daily prices and the monthly averages of daily exchange rates.

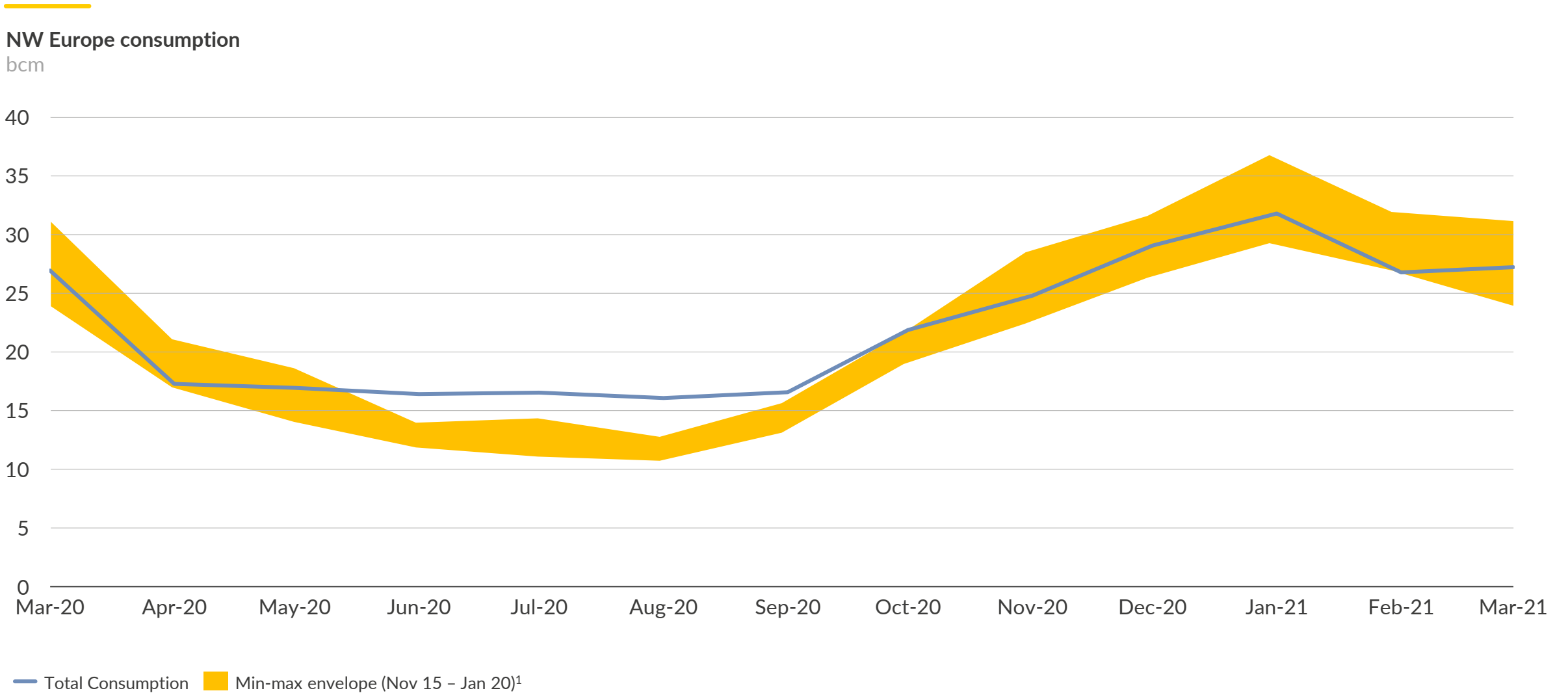
North West Europe monthly consumption¹

NW Europe consumption
bcm



1) Consumption excludes demand from interconnectors. 2) December and January gas consumption were revised

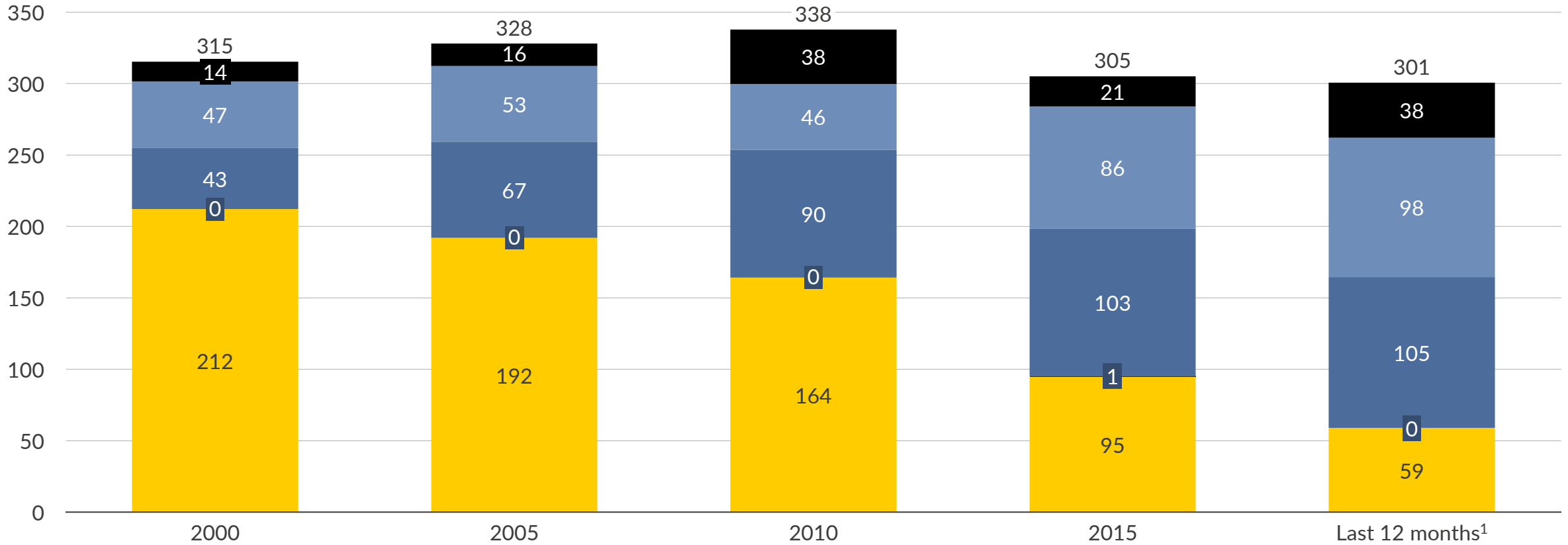
North West Europe consumption in min-max envelope



1) Envelopes are calculated by taking the maximum and minimum monthly values since November 2015.

North West Europe annual gas supply

NW Europe supply
bcm



■ LNG²
■ Russia Pipeline Supply³
■ Norway Pipeline Supply
 ■ Other Pipeline Supply⁴
■ Local Production

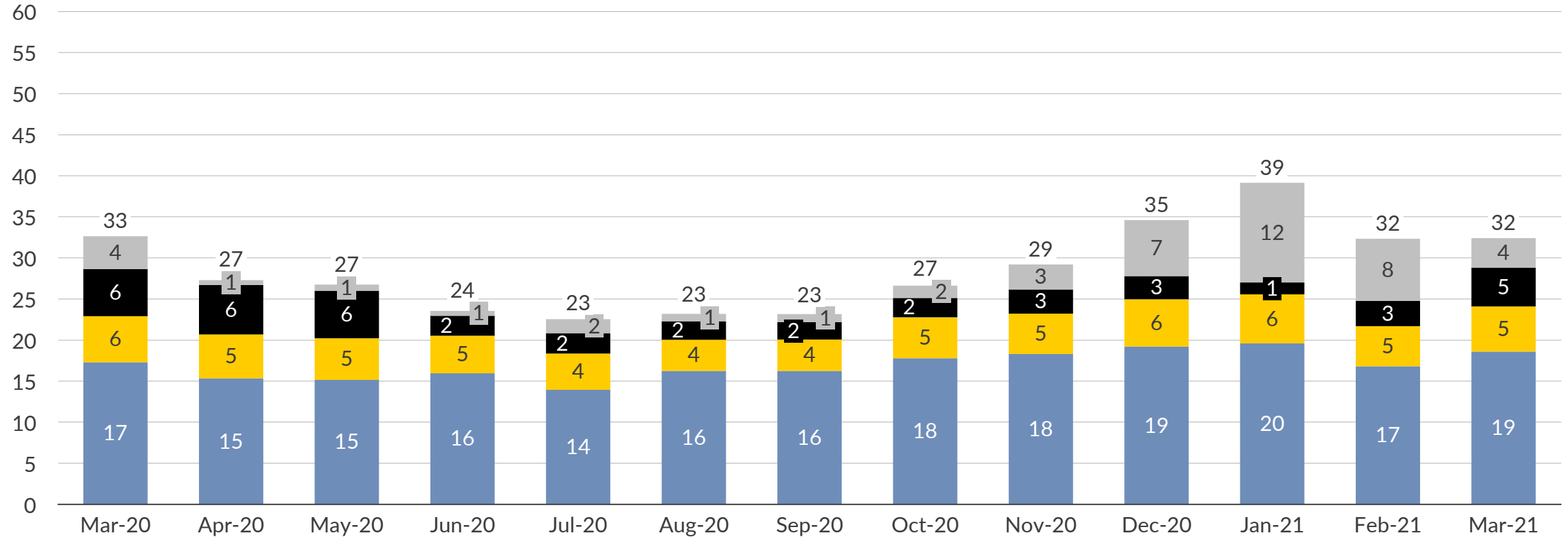
1) Year-to-date corresponds to the last 12 months. Previous years are calendar years. 2) LNG reflects regasification send-out to the high pressure network. 3) Russia pipeline supply includes pipe imports via Poland, Czech Republic, and Austria. 4. Other pipeline supply includes Denmark, Spain and Switzerland.

Sources: IEA, Aurora Energy Research EOS

North West Europe monthly gross gas supply

NW Europe supply

bcm

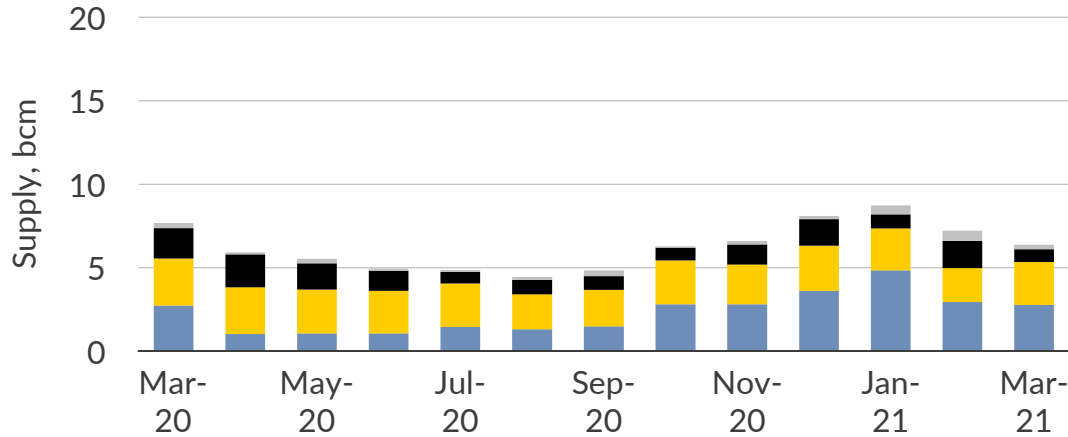


■ Storage Withdrawal
 ■ LNG¹
■ Local Production
 ■ Pipeline Supply²

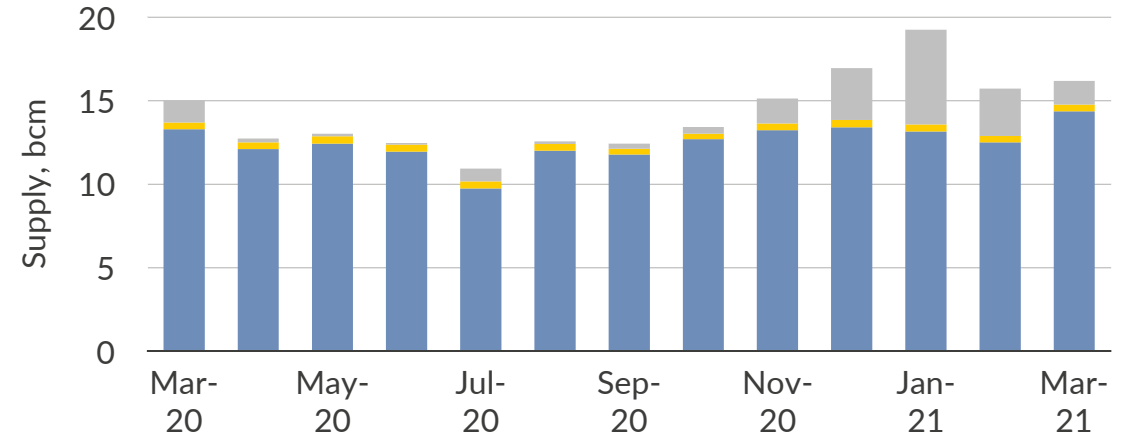
1) LNG reflects regasification send-out to the high pressure network. 2) Pipeline supply is from Russia (including via Poland, Czech Republic, and Austria), Norway, Denmark, Spain and Switzerland

Monthly gross gas supply by country

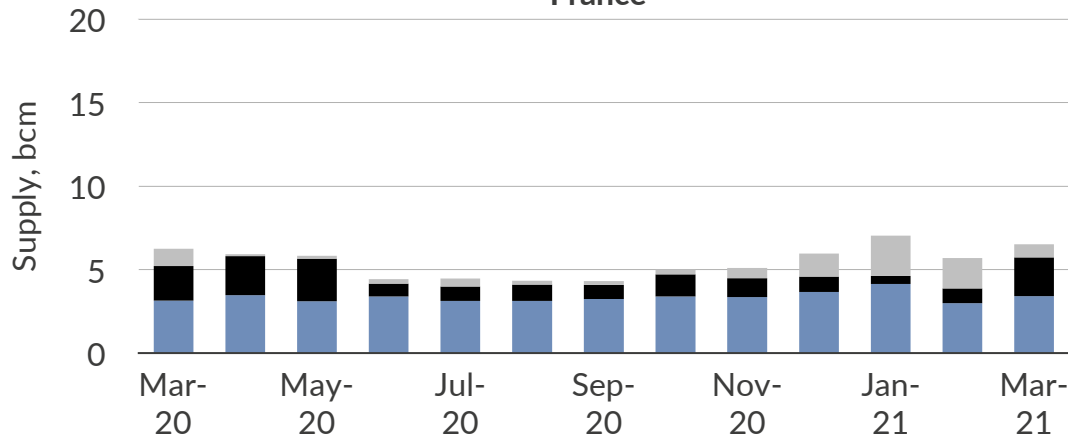
Great Britain



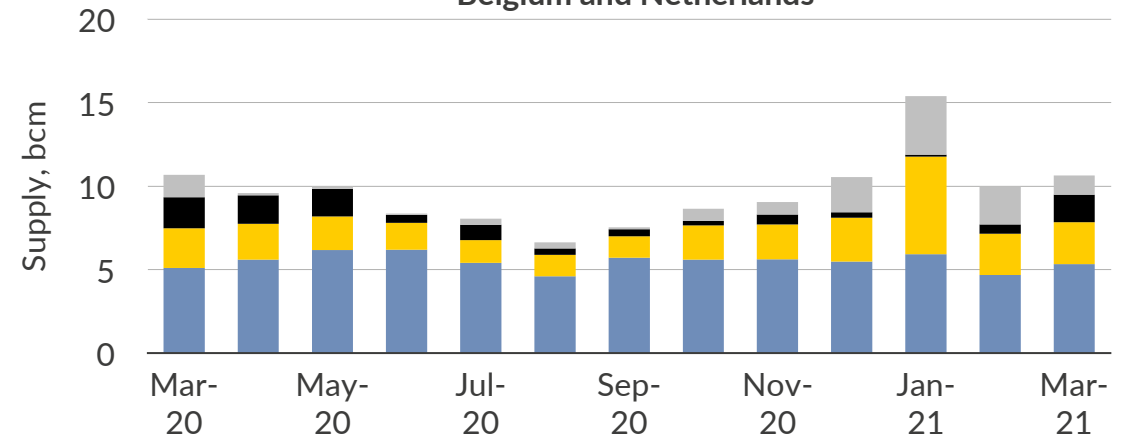
Germany



France



Belgium and Netherlands

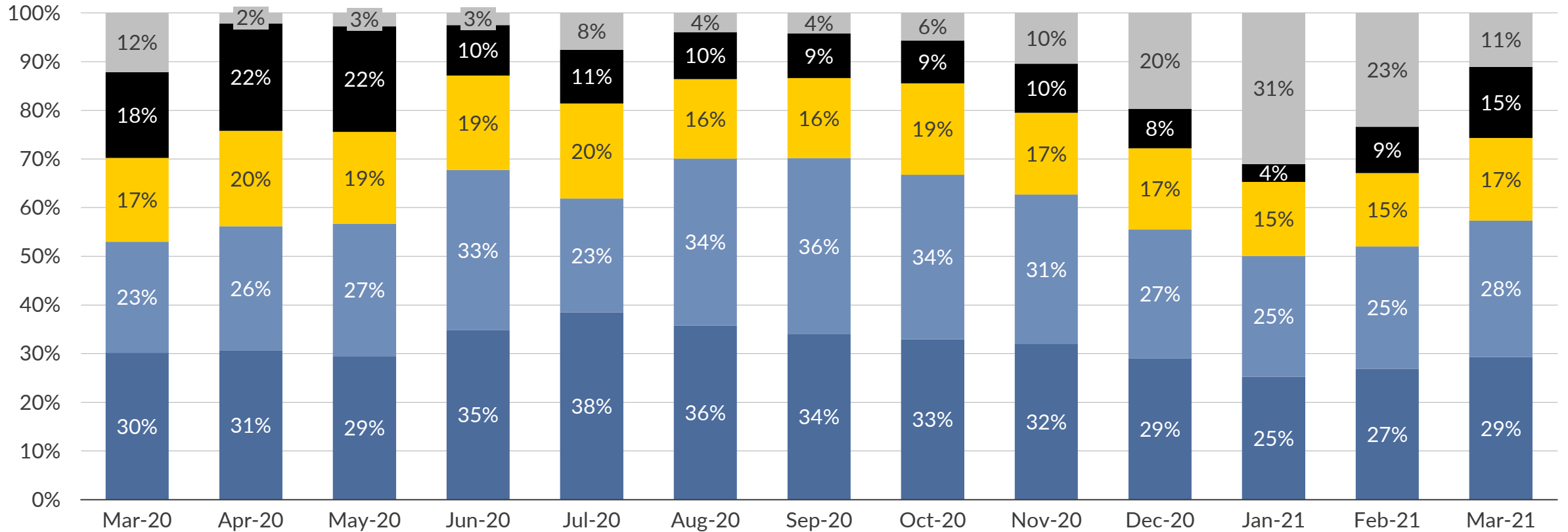


Storage Withdrawal
 LNG¹
 Local Production
 Pipeline Supply²

1) LNG reflects regasification send-out to the high pressure network. 2) Pipeline supply is from Russia (including via Poland, Czech Republic, and Austria), Norway, Denmark, Spain and Switzerland

North West Europe share of monthly gas supply

Share of gas supply
%

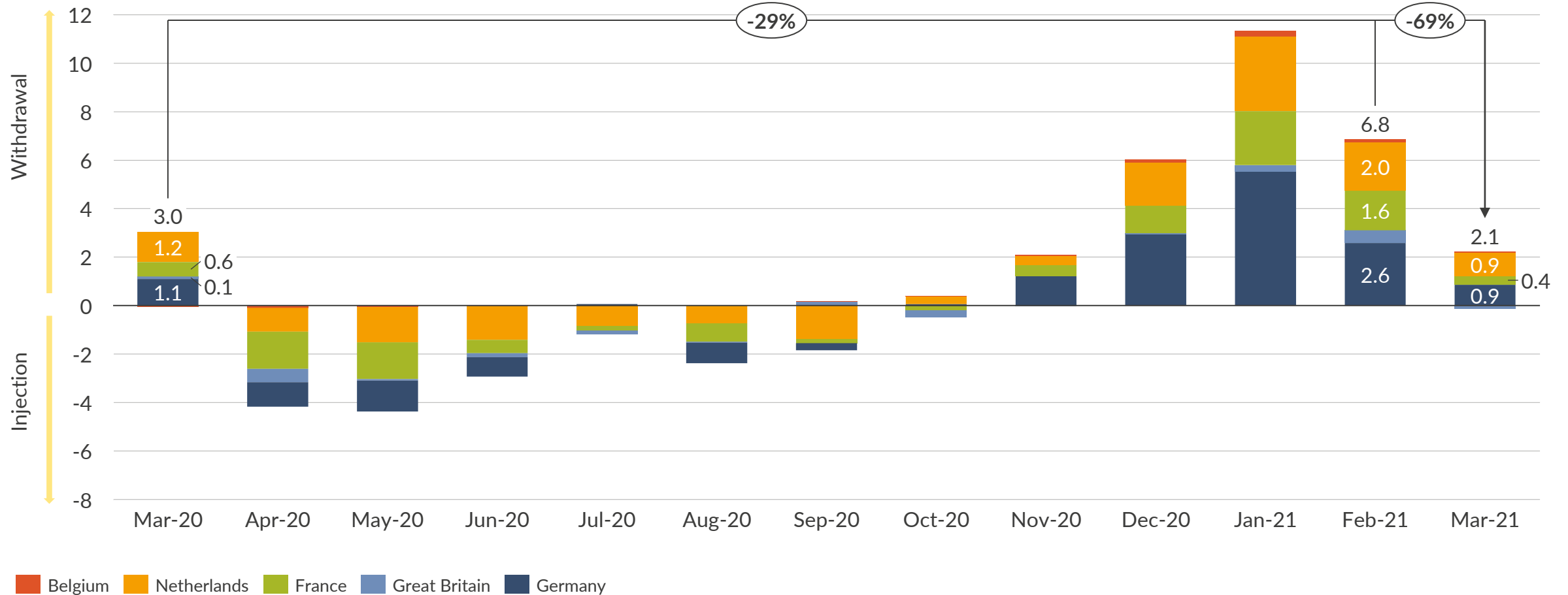


Storage Withdrawal LNG¹ Production Russia Pipeline Supply Norway Pipeline Supply

1) LNG reflects regasification send-out to the high pressure network. 2) Russia pipeline supply includes pipe imports via Poland, Czech Republic, and Austria.

North West Europe net gas supply from storage

Net supply from storage
bcm



1) Storage data is based on net daily flows.

General Disclaimer

This document is provided "as is" for your information only and no representation or warranty, express or implied, is given by Aurora Energy Research Limited and its subsidiaries Aurora Energy Research GmbH and Aurora Energy Research Pty Ltd (together, "**Aurora**"), their directors, employees agents or affiliates (together, Aurora's "**Associates**") as to its accuracy, reliability or completeness. Aurora and its Associates assume no responsibility, and accept no liability for, any loss arising out of your use of this document. This document is not to be relied upon for any purpose or used in substitution for your own independent investigations and sound judgment. The information contained in this document reflects our beliefs, assumptions, intentions and expectations as of the date of this document and is subject to change. Aurora assumes no obligation, and does not intend, to update this information.

Forward-looking statements

This document contains forward-looking statements and information, which reflect Aurora's current view with respect to future events and financial performance. When used in this document, the words "believes", "expects", "plans", "may", "will", "would", "could", "should", "anticipates", "estimates", "project", "intend" or "outlook" or other variations of these words or other similar expressions are intended to identify forward-looking statements and information. Actual results may differ materially from the expectations expressed or implied in the forward-looking statements as a result of known and unknown risks and uncertainties. Known risks and uncertainties include but are not limited to: risks associated with political events in Europe and elsewhere, contractual risks, creditworthiness of customers, performance of suppliers and management of plant and personnel; risk associated with financial factors such as volatility in exchange rates, increases in interest rates, restrictions on access to capital, and swings in global financial markets; risks associated with domestic and foreign government regulation, including export controls and economic sanctions; and other risks, including litigation. The foregoing list of important factors is not exhaustive.

Copyright

This document and its content (including, but not limited to, the text, images, graphics and illustrations) is the copyright material of Aurora, unless otherwise stated.

This document is confidential and it may not be copied, reproduced, distributed or in any way used for commercial purposes without the prior written consent of Aurora.

AURORA



ENERGY RESEARCH