



*“Dear business partners,*

*The very challenging year 2022 has fundamentally affected the energy markets and the lives and businesses of all of us. Especially during such turbulent times, it is a blessing to have such great customers and partners, and we would like to thank you for your excellent cooperation in 2022 and send our warmest wishes to you and your close ones for the new year!*

*In addition to the changes in the Czech energy legislation, this issue of NEWS4SHIPPERS mainly focuses on our decarbonisation agenda, including an update of the status of the Central European Hydrogen Corridor project and information on the Central & South-Eastern Europe Decarbonisation Report 2022 published by GIE. We also provide you with information on natural gas transmission prices in the Czech Republic and further relevant gas transmission and auction data.*

*Enjoy your reading!*

Tomáš Vyležík, Senior Manager, Client and Contract Management

## CONTENTS

Price Decision for the calendar year 2023 .....	1
Czech regulation on gas storage contracts' utilization ....	2
Initial analysis supports the feasibility of the Central European Hydrogen Corridor .....	2
Go-live of the new capacity management system (CAMS) planned later in 2023 .....	3
Central & South-Eastern Europe Decarbonisation Report 2022.....	3
NET4GAS capacity offer and utilization .....	4
Planned maintenance work of NET4GAS infrastructure .	5
Upcoming auctions of NET4GAS capacities .....	5

## Price Decision for the calendar year 2023

- Firm gas storage transmission tariffs and variable fees for both border and storage points remain unchanged
- Firm prices for border points have already been published in *Price Decision No. 3/2022* on 30 May 2022

### PRICES

On 14 November 2022, the Energy Regulatory Office (ERO) published its new *Price Decision No. 12/2022* with the transmission tariffs for virtual gas storage points and variable transmission price for border exit points for the calendar year 2023. Moreover, the Price Decision lays down regulated prices for distribution system operators and customers directly connected to the transmission system of NET4GAS. This Price Decision became effective on 1 January 2023.

The variable price for transported natural gas at the Czech exit border points remains unchanged at  $0.0058 \times C_{OTE}$ , whereas  $C_{OTE}$  is determined by the Czech gas market *OTE Index* published by the Czech gas market operator.

Furthermore, there has been no change in the transmission prices for virtual gas storage effective since 10 May 2022. Fixed transmission tariffs for both TSO entry and exit are equal to 0 CZK/MWh/d/y, and the variable price for the TSO exit to virtual gas storage is equal to 0.74 CZK/MWh.

Fixed transmission tariffs for the border points were previously published on 30 May 2022 in *Price Decision No. 3/2022*.

For more detailed information, please see the Price Decision published on the *ERO website* or visit the NET4GAS *website*.

David Urban

## Czech regulation of gas storage contracts' utilization

- Obligation to have minimum gas quantities in the gas storage facilities effective from 1 May 2023

### STORAGES

In view of the current geopolitical and market situation, the European and Czech authorities have adopted several legislative measures to strengthen the security of gas supplies.

One of the key objectives is to ensure sufficient gas storage levels in the EU member states. Since the middle of 2022, this is also supported by the Czech Energy Act, which sets out the obligation to use storage capacity and procedures in case of its non-usage.

If a trader holding a gas storage contract with fixed injection and withdrawal rates has not stored the required minimum quantity of gas in any of the specified time periods during the storage year, the right to use the respective and unused part of the storage capacity together with a proportionate part of the injection and withdrawal rates shall expire for the rest of the gas storage year. At the same time, the trader shall also lose the right to use the reserved transport capacity from and to the gas storage facility to the extent of the corresponding amount. The obligation of the trader to pay the price for the reserved storage and transmission capacities shall not be affected.

Minimum gas quantities (as a percentage of the contract volumes) effective from 2023 for individual time periods during the storage year are set forth in Annex No. 7 to

Decree No. 344/2012 Coll., on the state of emergency in the gas industry and on the method of ensuring the safety standard of gas supply. They are, as of the gas storage year 2023/2024, as follows:

	1 May	1 July	1 Sep.	1 Nov.
Min. volumes	5%	30%	60%	90%

The unused storage capacity, i.e. the difference between the minimum stored quantity of gas required on a given gas day and the quantity of gas actually stored on that day, is auctioned at a zero or negative bid price for the gas storage service pursuant to the Energy Act.

For gas storage contracts with a duration of less than 12 months in a given storage year, the milestones set out in Annex No. 7 to this Decree are not applicable. The only resulting milestone shall be the maximum period of filling 90 % of the storage capacity which is for each virtual gas storage set forth in Annex 8 to this Decree.

Michal Mareš

## Initial analysis supports the feasibility of the Central European Hydrogen Corridor

- Technical feasibility to transport 120 GWh/d of hydrogen through Central Europe (mainly based on existing infrastructure) by 2030 is supported

### HYDROGEN

In September 2021 four participating transmission system operators (TSOs) - Open Grid Europe, NET4GAS, eustream and the Gas TSO of Ukraine started with the development of a hydrogen "highway" through Central Europe called the Central European Hydrogen Corridor (CEHC).



The main focus of the initiative is to transport green hydrogen from Ukraine that offers excellent conditions for

large-scale production, via Slovakia and the Czech Republic, to large hydrogen demand areas in Germany and the EU.

Despite the remaining existing uncertainties, the results of the pre-feasibility study clearly indicate that it is technically feasible to meet the objective and to transport 120 GWh/d of hydrogen through Central Europe by 2030. With an overall transport capacity of up to 1.3 million tonnes of renewable hydrogen per year, the CEHC provides an equivalent of 13 % of the new renewable hydrogen import target set by the REPowerEU Plan.

The TSOs have also analysed the potential costs of the project, including the repurposing of current natural gas pipelines for the transport of hydrogen and investments needed in new dedicated hydrogen infrastructure. Since the 1,225-kilometer part of the CEHC from the Ukrainian / Slovak border to Germany assumes repurposing of relevant natural gas pipelines to carry 100% hydrogen, the costs are significantly lower than building new pipelines.

The total expected levelized cost of hydrogen transmission is estimated to be in the range of 0.10 - 0.15 EUR/kg per 1000 km, which is in the lower range of the cost estimated by the European Hydrogen Backbone initiative of 0.11 - 0.21 EUR/kg per 1,000 km.

### Central European Hydrogen Corridor

Countries:	UA, SK, CZ, DE
Capacity:	120 GWh per day 1.3 million tonnes per year
Length:	1225 kilometres*
Investment:	1000 – 1500 million EUR*
Transport cost:	0.10 - 0.15 EUR/kg/1000 km
Implementation:	2030

\* Investment cost of the part of CEHC from the Ukrainian/Slovak border to large hydrogen demand areas in Southern Germany (without residual value of repurposed assets)

The TSOs are actively discussing the project with policy makers and have nominated the CEHC for the EU Ten-Year Network Development Plan. Moreover, an application for the status of Project of European Common Interest (PCI) has already been submitted. However,

turning this project into reality by 2030 still requires the adoption of an appropriate legal and regulatory framework and the necessary investment conditions to be in place.

For more information, please visit the [website](#) of the CEHC project or directly contact the TSOs involved.

*Michal Mareš*

### Go-live of the new capacity management system (CAMS) planned later in 2023

#### PLATFORMS

Work on the implementation of the new NET4GAS capacity management system is going into its final phase with the go-live date of the system expected later this year.

We will keep you informed and provide you with relevant instructions before deployment of the system.

*Petr Vaněk*

### Central & South-Eastern Europe Decarbonisation Report 2022

#### DECARBONISATION

Gas Infrastructure Europe (GIE), together with Deloitte, recently published the [CEE SEE Decarbonisation Report 2022](#) with a special focus on the role of gas in the energy transition.

The report outlines the status of the energy transition in 14 EU Member States in Central-Eastern and South-Eastern Europe and presents, inter alia, for each of the countries:

- Key energy market figures,
- Current emissions and target emissions figures,
- The main decarbonisation challenges and strategies.



Furthermore, a comparative analysis of the national energy markets in the region is also provided.

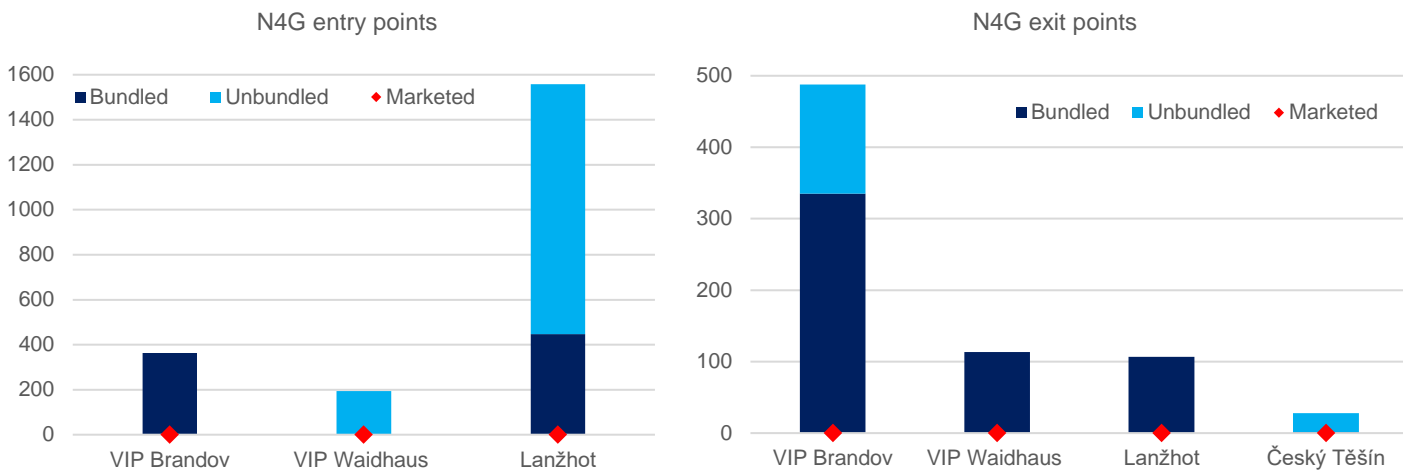
It is based on publicly available data and is divided into two main parts – ‘Regional Analysis’ and ‘Country Analysis’ that also include examples of cross-border and national decarbonization projects.

For more information and to download the report, please use the links or the QR code above.

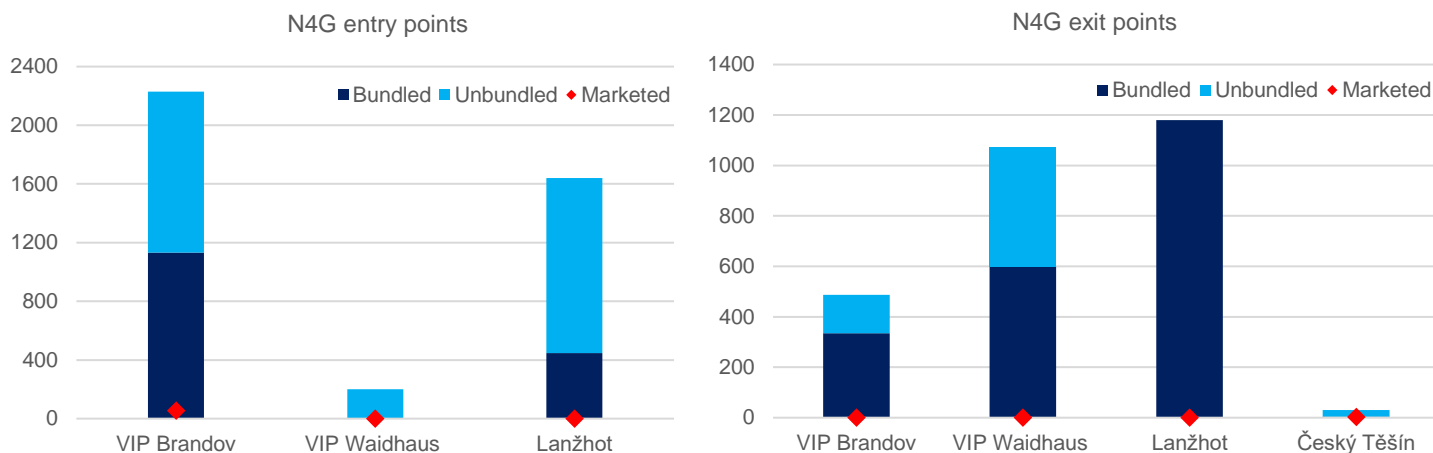
*Drahomíra Glacová*

## NET4GAS capacity offer and utilization

### NET4GAS capacities offered and booked in monthly auctions for January 2023 in GWh/d



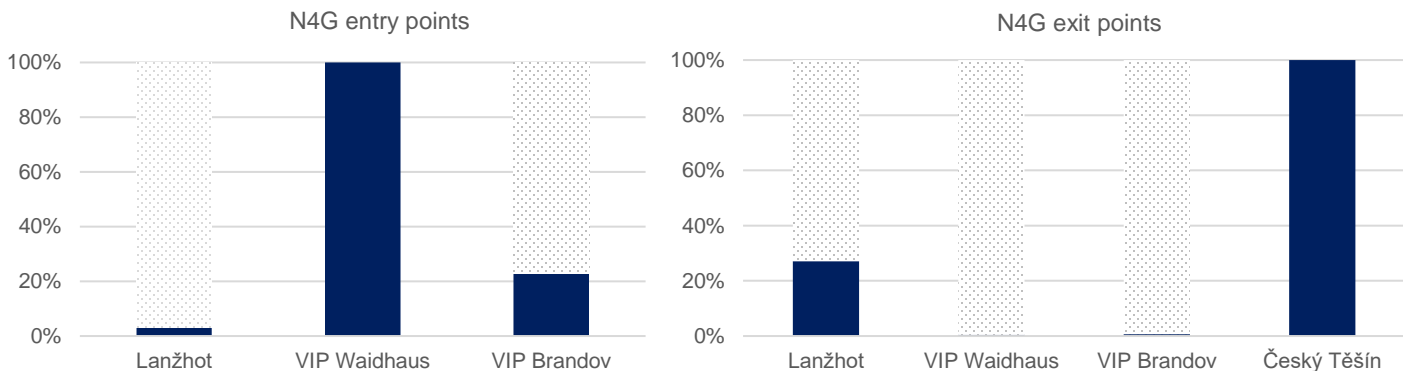
### NET4GAS capacities offered and booked in daily auctions in GWh/d for the period 1 – 10 January 2023 \*)



Note: Hatched charts represent unbundled capacities offered on an interruptible basis.

\*) Charts represent the daily maximums offered and marketed during the respective time period. Marketed also includes interruptible capacities which are on a day-ahead basis offered for all NET4GAS entry and exit points.

### Maximum daily technical capacity utilization at border points for the period September - November 2022





## Planned maintenance work of NET4GAS infrastructure

### SHUTDOWNS

Please find below a rough overview of the currently planned maintenance up to March 2023. All and complete planned maintenance work and consequent firm capacity interruptions at all entry and exit points of NET4GAS infrastructure for every gas day are available on our [website](#). The final maintenance plan is announced 42 days in advance in line with the legislation.

### Entry points

Month	Entry point	Technical capacity [GWh/d]	Maximum daily interruption [GWh/d]	Maximum available daily firm capacity [GWh/d]
January	No planned maintenance			
February	No planned maintenance			
March	VIP Brandov	2,546.338	190.943	2,546.338

### Exit points

Month	Exit point	Technical capacity [GWh/d]	Maximum daily interruption [GWh/d]	Maximum available daily firm capacity [GWh/d]
January	No planned maintenance			
February	No planned maintenance			
March	No planned maintenance			

The last two columns show the maximum daily interruption and the maximum available daily firm capacity in a given month during maintenance, i.e. in case the maintenance affects infrastructure only during some days of the month, the maximum available daily firm capacity equals the whole technical capacity.

## Upcoming auctions of NET4GAS capacities

### AUCTIONS

All upcoming auctions can be found in the auction calendar on the [PRISMA](#) platform. Find all monthly and quarterly auctions to be published in the coming months in the table below:

Publication date	Auctions start	Auction type	Product runtime	Capacity types
23 January 2023 9:00	6 February 2023 9:00	Quarterly	1 April 2023 – 1 July 2023	Firm
6 February 2023 9:00	13 February 2023 9:00	Monthly	1 March 2023 – 1 April 2023	Firm
14 February 2023 7:00	21 February 2023 9:00	Monthly	1 March 2023 – 1 April 2023	Interruptible
27 February 2023 7:00	6 March 2023 9:00	Quarterly	1 April 2023 – 1 July 2023	Interruptible
13 March 2023 09:00	20 March 2023 09:00	Monthly	1 April 2023 – 1 May 2023	Firm
21 March 2023 07:00	28 March 2023 09:00	Monthly	1 April 2023 – 1 May 2023	Interruptible
10 April 2023 09:00	17 April 2023 09:00	Monthly	1 May 2023 – 1 June 2023	Firm
17 April 2023 9:00	2 May 2023 9:00	Quarterly	1 July 2023 – 1 October 2023	Firm
18 April 2023 7:00	25 April 2023 09:00	Monthly	1 May 2023 – 1 June 2023	Interruptible
29 May 2023 7:00	5 June 2023 9:00	Quarterly	1 July 2023 – 1 October 2023	Interruptible

Daily auctions for firm capacity always start at 4:30 PM on the day before the gas day, and the auctions for interruptible capacity always start at 5:30 PM on the day before the gas day. Within-day auctions start at 7:00 PM on the day before the gas day. Bidding windows open at the start of an auction and start every hour  $H$ , with bids to be placed for the remaining part of the gas day starting at hour  $H+4$ .