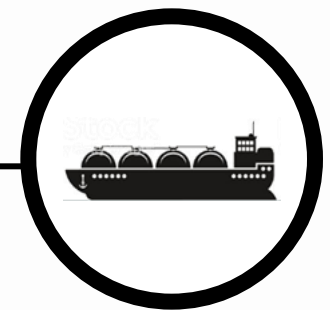


Global & Regional Market Analysis

Natural Gas

July 2022

24/08/2022





Stories of the recent weeks

Russian flows dropped to 0% on the NS1 during planned maintenance 11-21 July, after the works flows returned to 40% of capacity. Strike action in Norway was called off following the intervention of Norway's labour ministry.



On 11 July Canada exempted the turbine from sanctions and sent it to Germany after repair. On 25 July Germany released a statement saying all conditions had been satisfied regarding NS1 turbine issues, but Gazprom disagreed. On 27 July NS1 flows dropped to 20%.



On 14 July Gazprom declared force majeure on some European gas buyers e.g. German Uniper. German Uniper applied for government support to alleviate financial trouble caused by Russian gas supply cuts. On 30 July Gazprom suspended gas deliveries to Latvia.



On 13 July Hungary announced state of energy emergency and a 7-point energy security action plan. Hungarian gas TSO tariffs for entry and exit will increase from 1 October. Annual capacity auctions on Hungarian IPs took place in July.

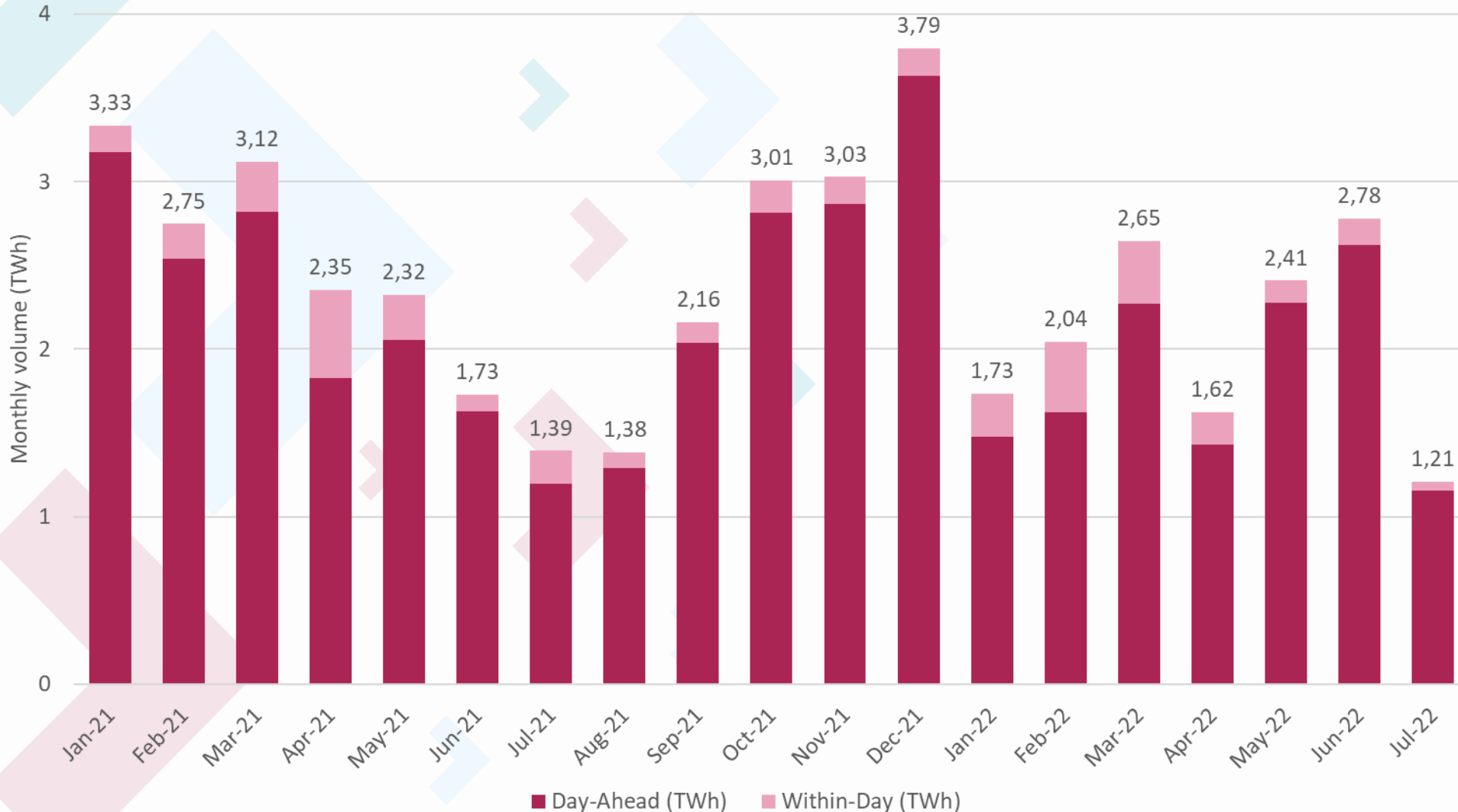


On 26 July EU energy ministers adopted 15% gas savings regulation with exemptions. Voluntary savings from Aug 1 until March 31 could amount to 45bcm of gas. EU parliament voted in favour of gas, nuclear inclusion in sustainable finance taxonomy.



CEEGEX monthly traded volumes

Source: CEEGEX

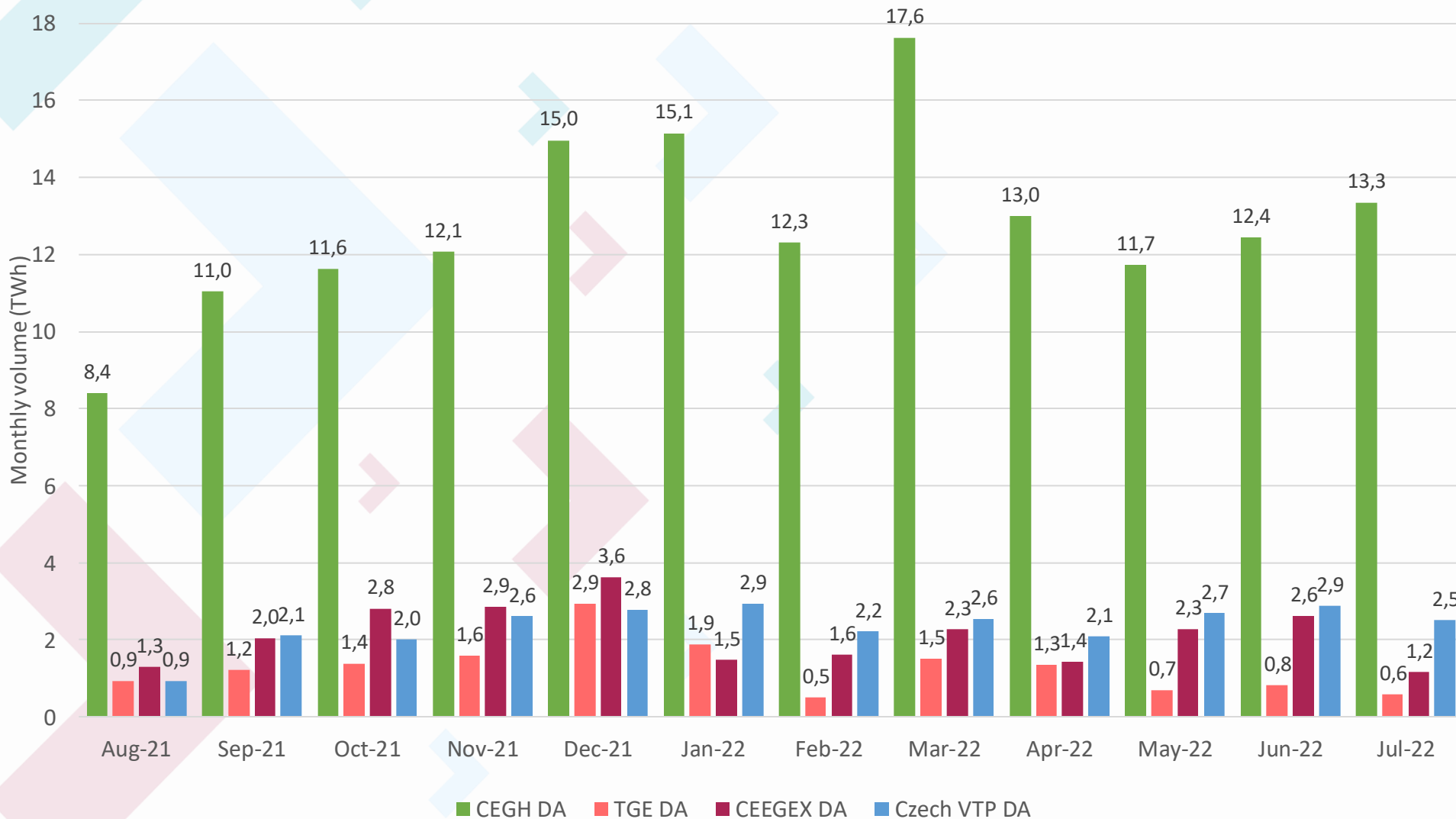


EXPERT OPINION:

- CEEGEX traded volumes decreased in July.
- Injections remained stable and the Winter-Summer spread was positive by mid July.
- Seasonally low demand combined with high prices resulted in moderated trading activity.
- Higher TTF FM-CX spread might have incentivized imports of LTC volumes instead of spot trading.

Regional scope DA markets

Source: CEEGEX, CEGH

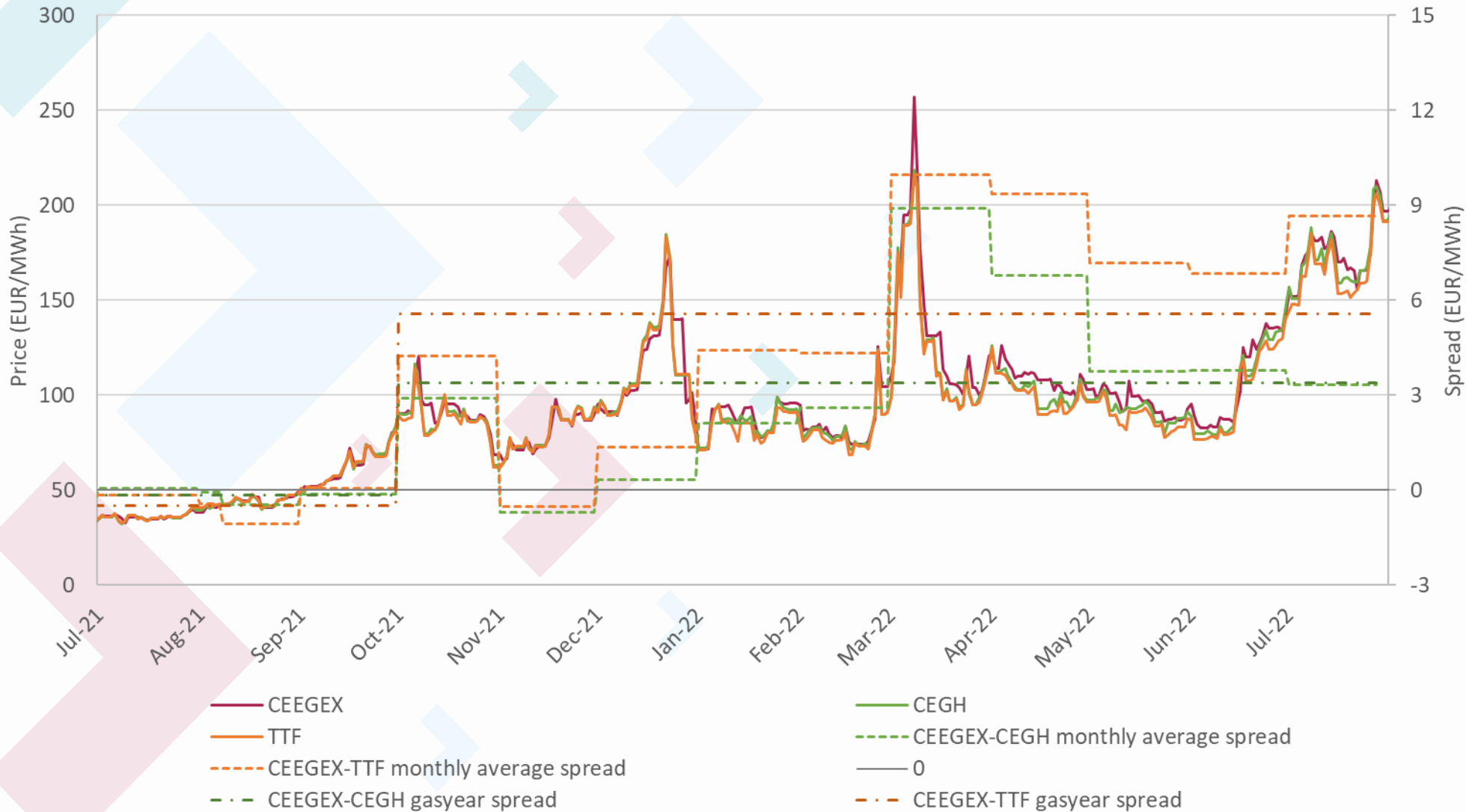


EXPERT OPINION:

- In July a similar decrease in volumes was observable on other regional markets, except for CEGH.

Regional prices and spreads

Source: CEEGEX, EEX, IEA

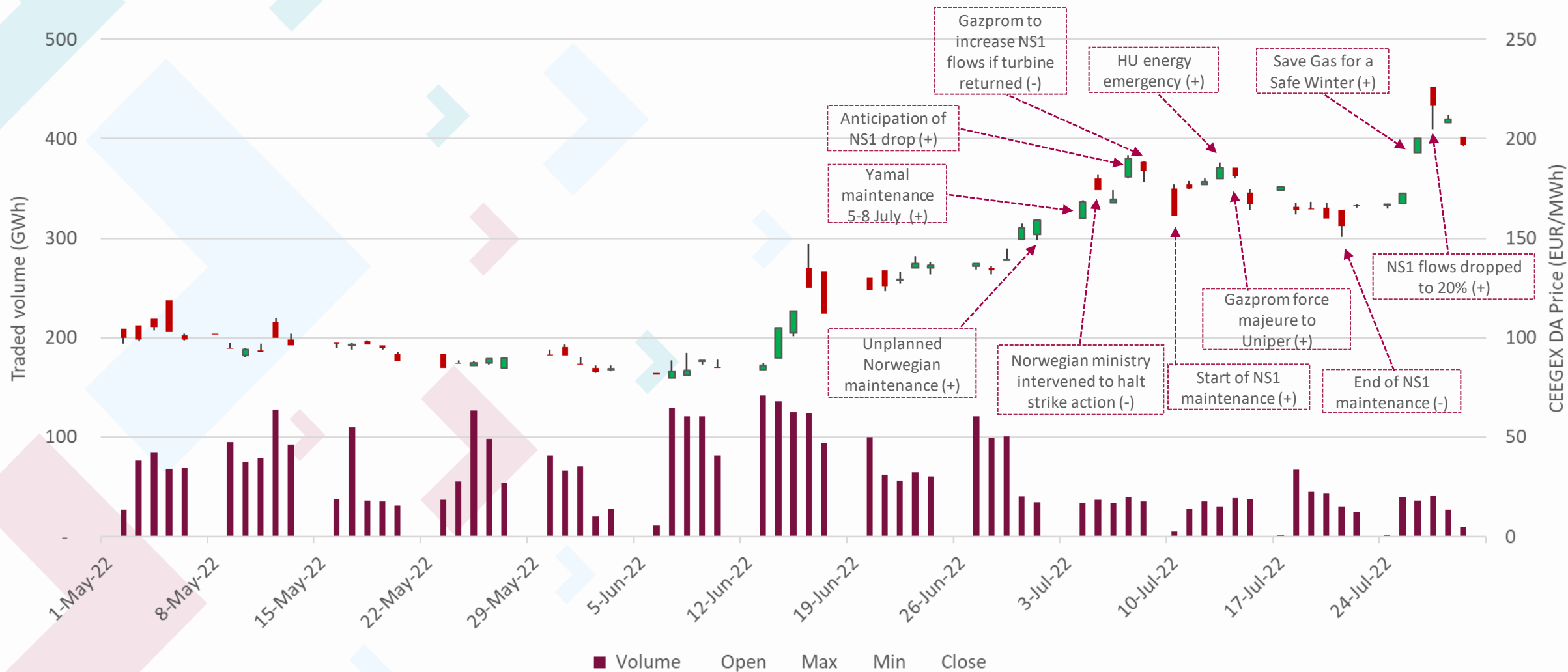


EXPERT OPINION:

- In July the spread increased due to price spikes related to subdued NS1 flows.
- CEE markets are more affected by any disruption in Russian flows due to high reliance on Russian pipeline gas supplies and poor access to LNG.

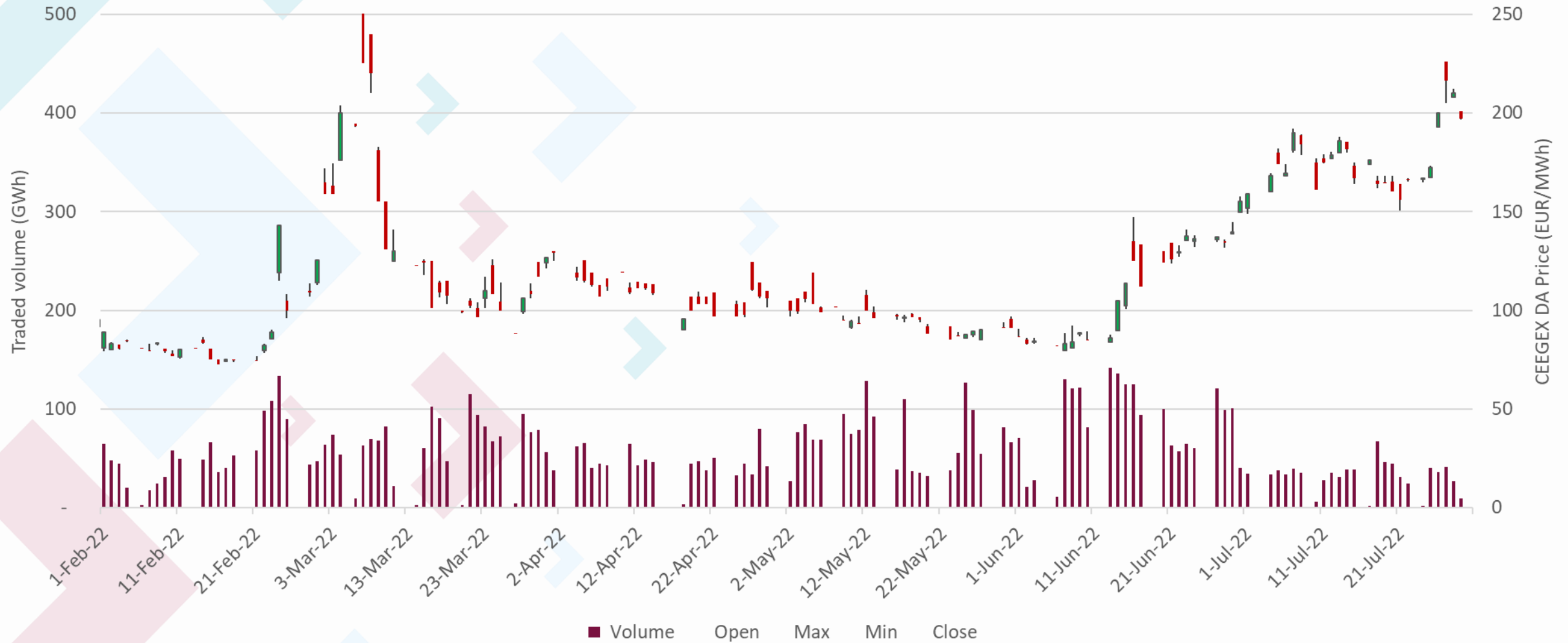
Japanese candles – last 3 months

Source: CEEGEX, ICIS



Japanese candles – post war price levels

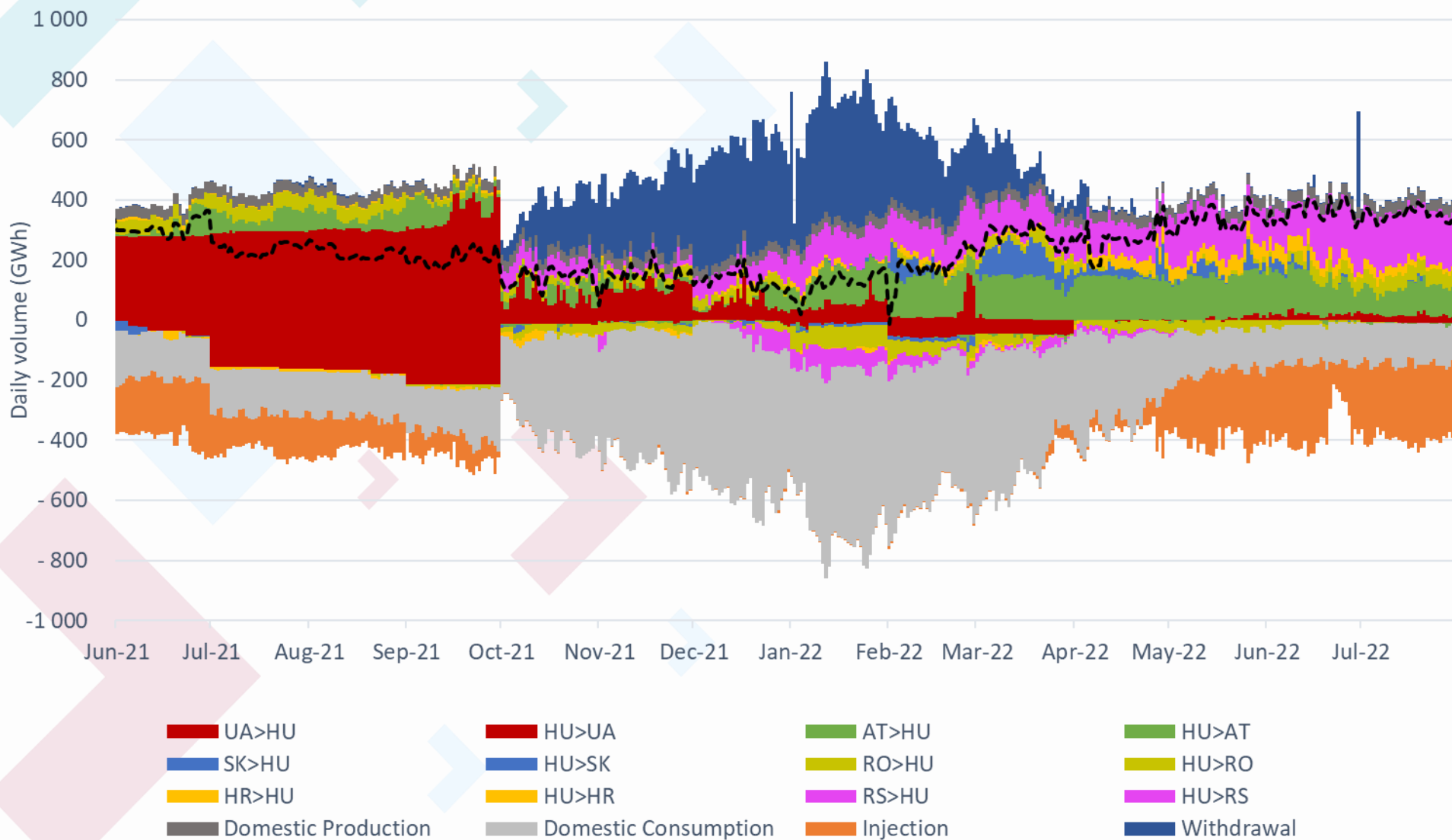
Source: CEEGEX, ICIS



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Hungarian gas market balance

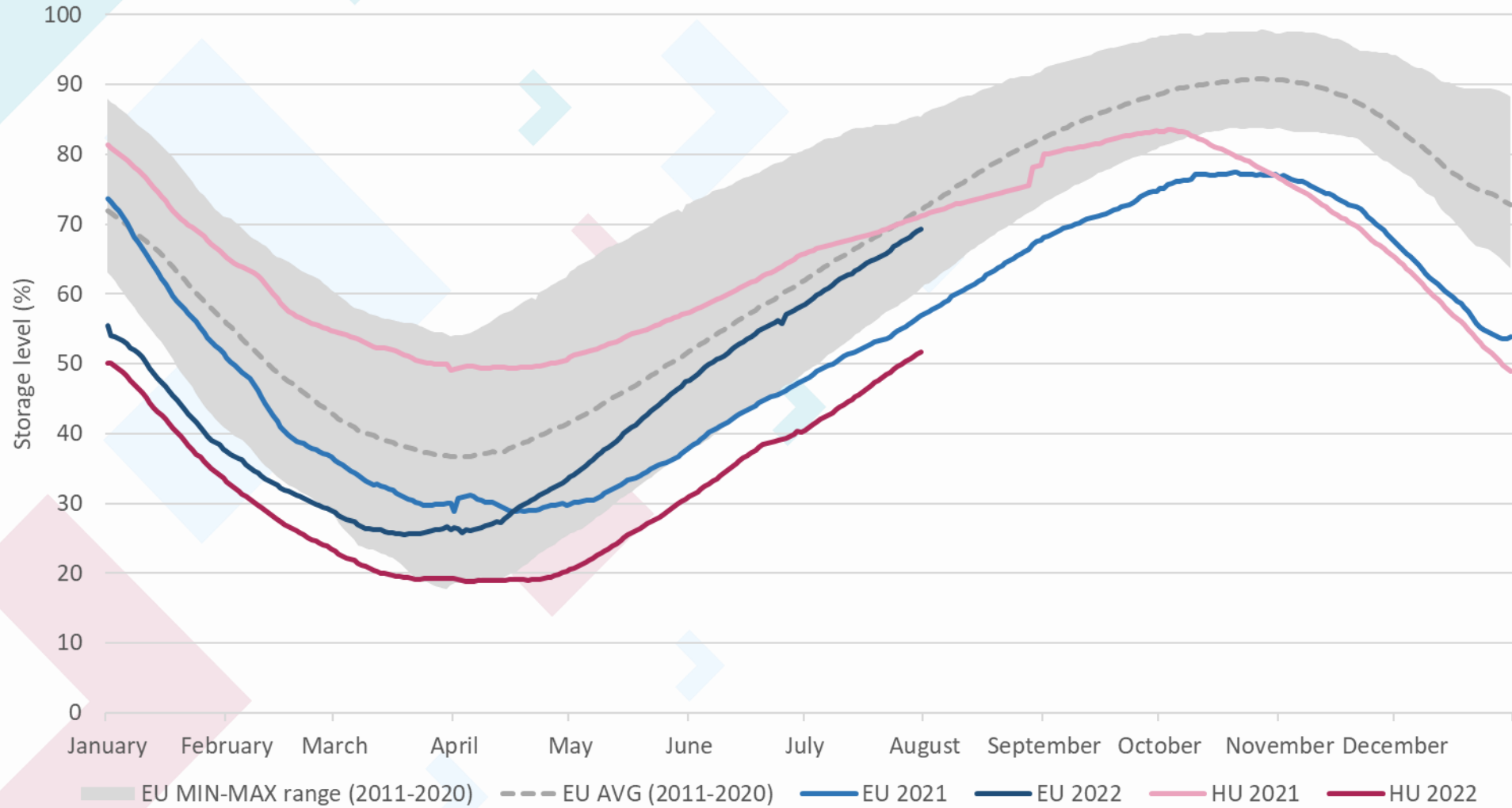
Source: AGSI, FGSZ



EXPERT OPINION:

- **Overall imports slightly decreased** in July, overall exports continued their decline (~3% of imports).
- **Domestic consumption remained on similar level**, so far no demand destruction was noted despite the announcement of higher residential energy prices or voluntary savings.
- **Injections were stable** during July and ramped up especially on days when the W-S spread was in the positive territory.
- **Flows from Serbia** are becoming the **dominant** import route.
- On overall **Austrian and Croatian flows decreased**, Slovakian imports disappeared.
- **Romanian imports were relatively high** in comparison to spring period.
- There were some Ukrainian imports and exports, but insignificant in comparison to historical flows before October.

Gas storage level in EU and HU



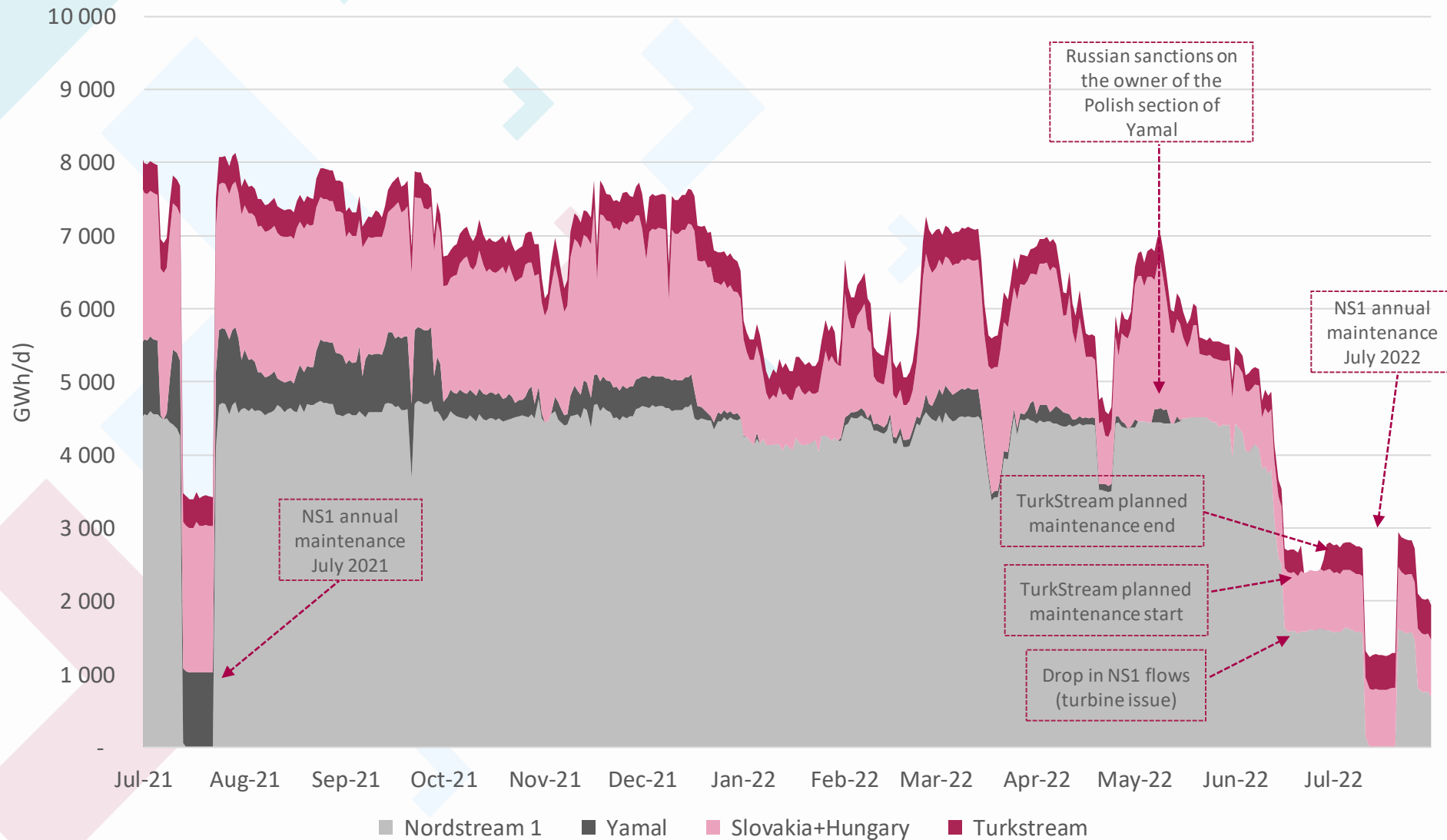
EXPERT OPINION:

- By the end of July European aggregated storage levels (excluding Ukraine) were at around 70% and almost surpassed the 10-year average.
- The pace of injections remained stable in July despite lower Russian flows, most probably due to lower seasonal demand.
- EU winter targets are on track and are possible to achieve if the current trajectory remains unchanged.

At the end of February Ukrainian storage operator temporarily halted withdrawals and suspended publishing storage data on its website in response to the emergency situation.

Gasflows from Russia

Source: ENTSOG, ICIS

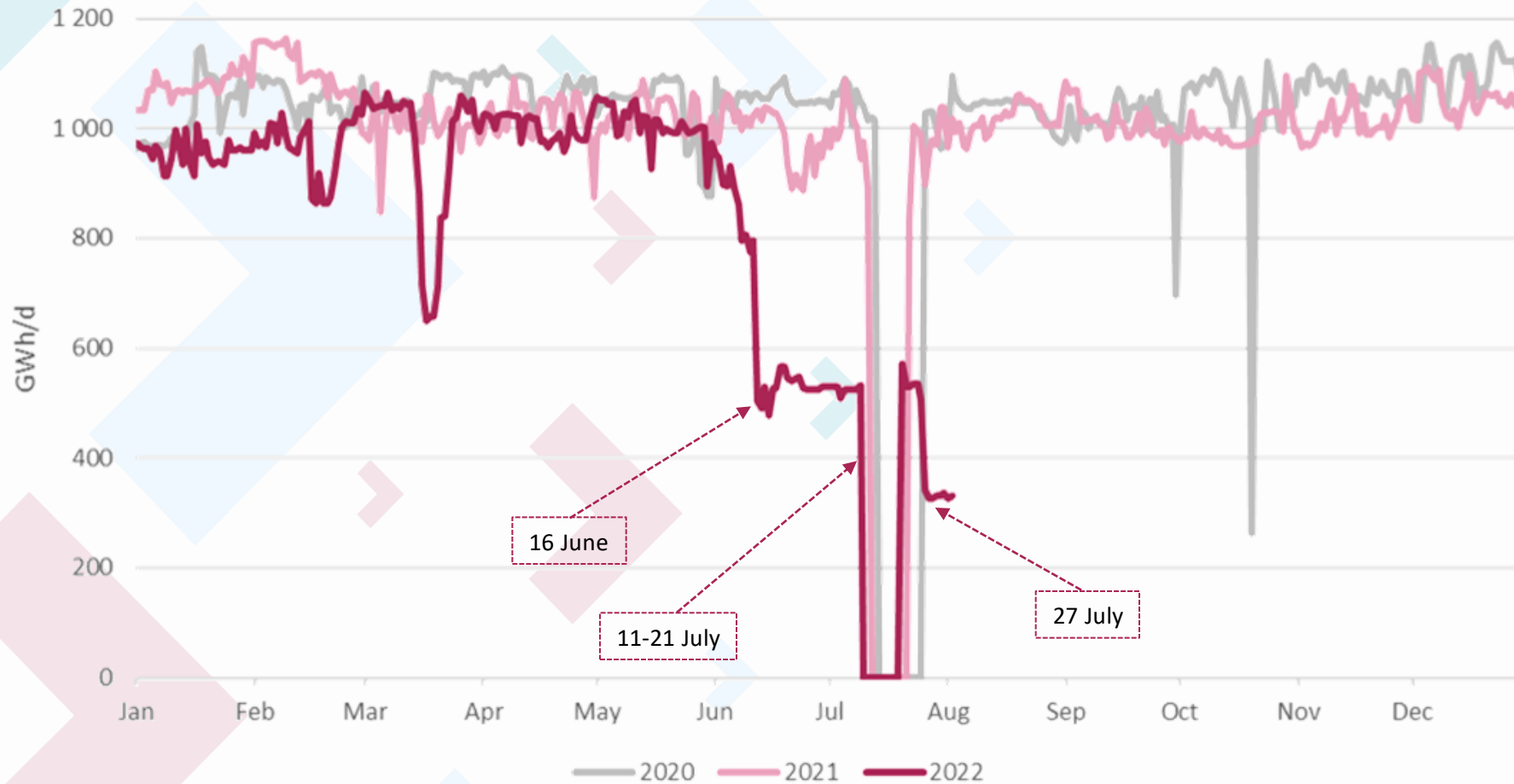


EXPERT OPINION:

- NS1 planned annual maintenance took place between 11-21 July.
- Yamal flows via Belarus disappeared after Russian sanctions in May. Planned annual maintenance took place 5-8 July, but it had no significant effect on already suspended flows.
- Flows from the Ukrainian direction lowered.
- Deliveries via TurkStream returned to pre-maintenance levels and remained stable. This route seems to be not affected by the Russian conflict.

Gasflows from Russia – Nord Stream

Source: ENTSOG, OIES, ICIS, Reuters

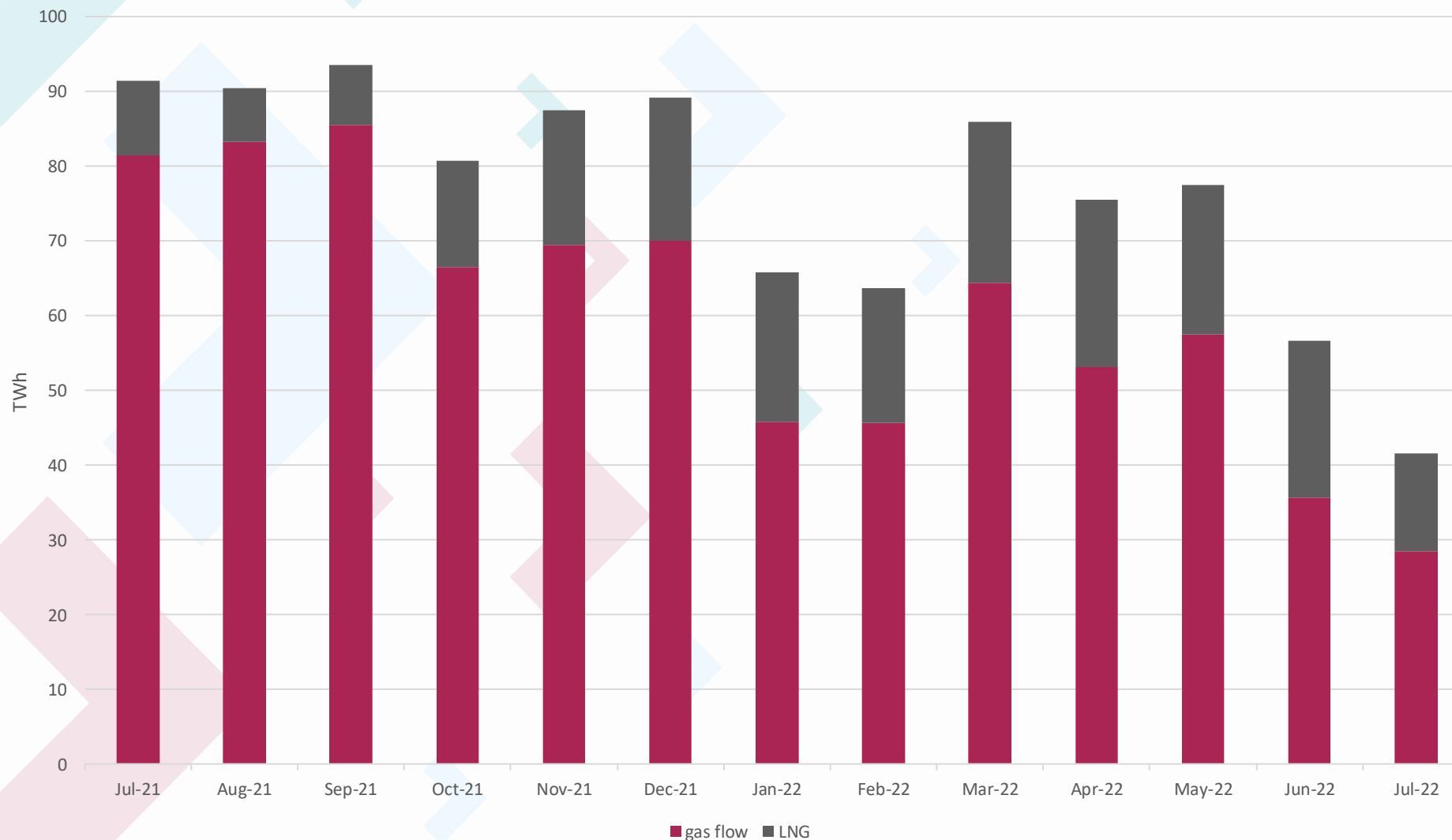


EXPERT OPINION:

- On 14 June: Gazprom announces it will **reduce** gas flow on Nord Stream to **100 mcm/d**
- 5 of 8 turbines removed, **3 remain operational**
- On 16 June, the flow was **reduced from 100 to 67 mcm/d** because another turbine was removed from the system
- On 11 July: planned annual maintenance of turbines, **Nord Stream completely shut down**
- After the maintenance nominations **returned from 0 mcm/d to 65 mcm/d**, but on 27 July **halved to 33 mcm/d**

Gas flows & LNG export from Russia

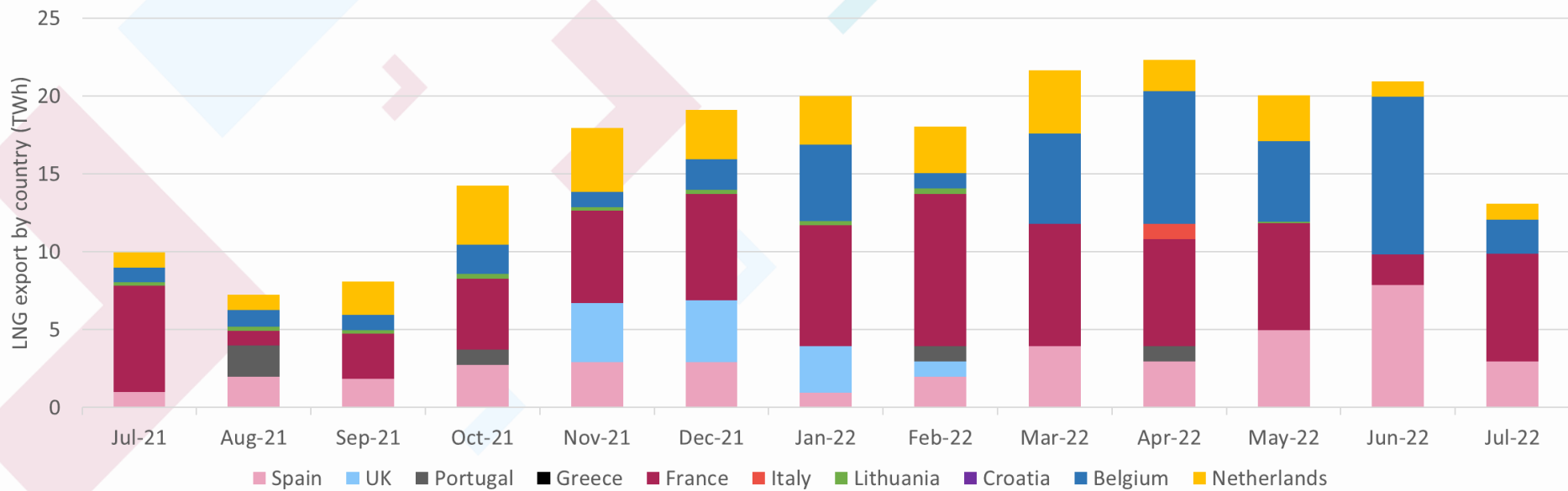
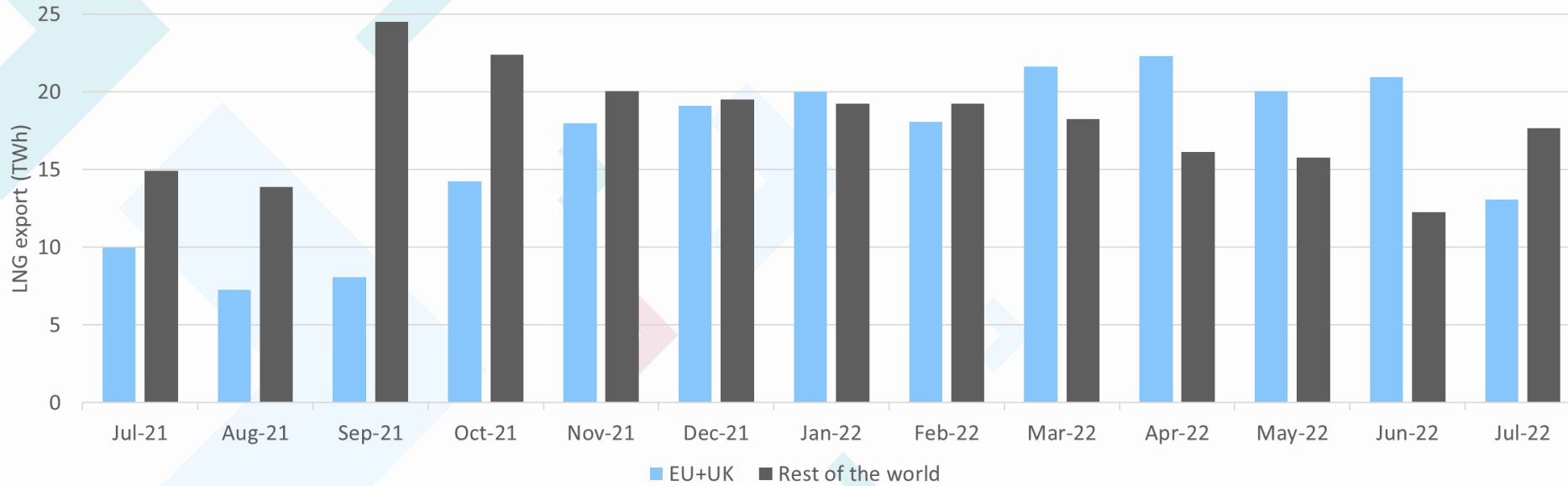
Source: Refinitiv, ENTSOG



EXPERT OPINION:

- Russian natural gas and LNG export to the EU and UK
- Gas flows through the pipelines decreased at the beginning of the year and it is continuously decreasing
- LNG export from Russia increased proportionally and added to the gas export, but at the last few months the Russian export dropped heavily.
- Based on last year data the LNG export from Russia increased by 10%.

Russian LNG export

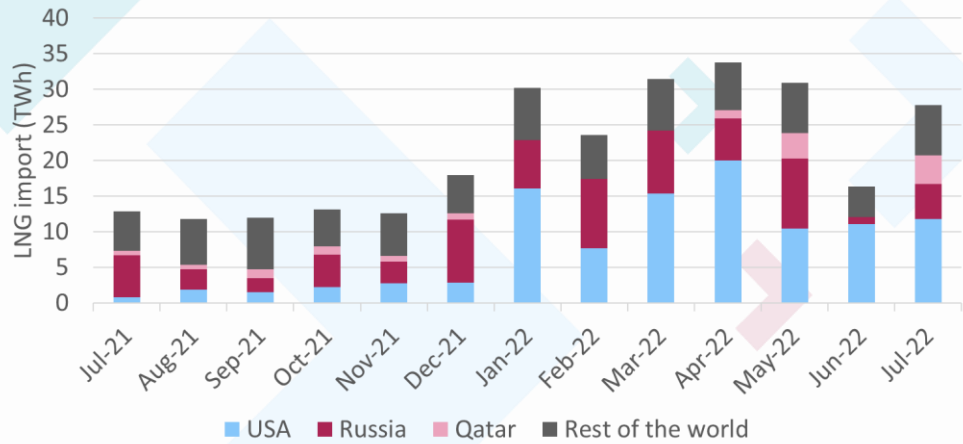


EXPERT OPINION:

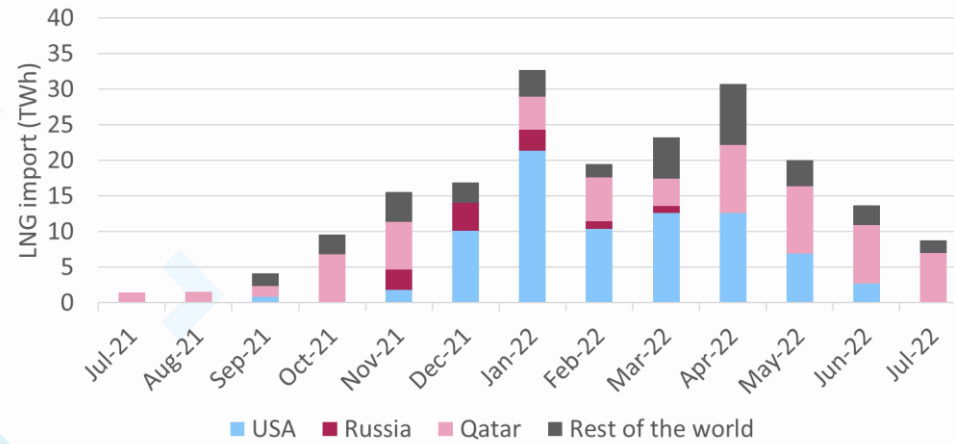
- Russian LNG to EU and UK started to increase in the last quarter of 2021.
- Despite the outbreak of the war and the sanctions across Europe, the LNG cargoes continue to arrive.
- From Russia’s point of view LNG export can be more profitable, than transporting gas through pipelines.
- The three main destinations for the cargoes are France, Spain and Belgium, as the United Kingdom is not allowing Russian LNG into the country due to sanctions.

Russian LNG import by countries

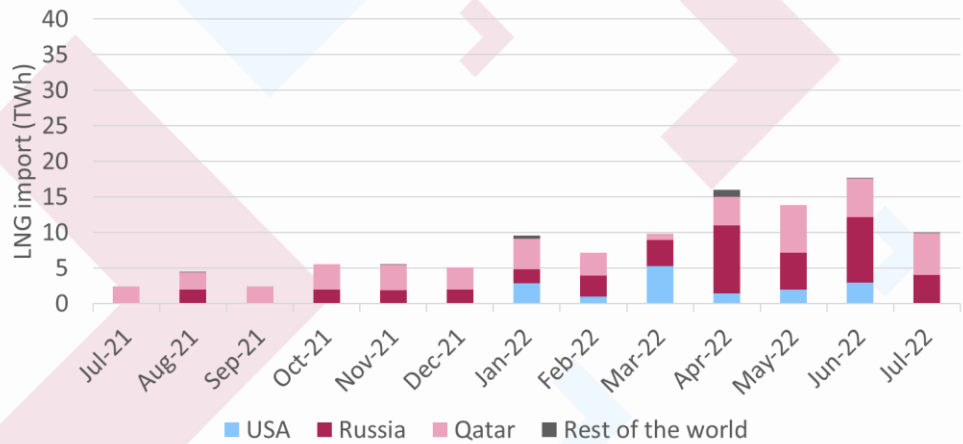
France



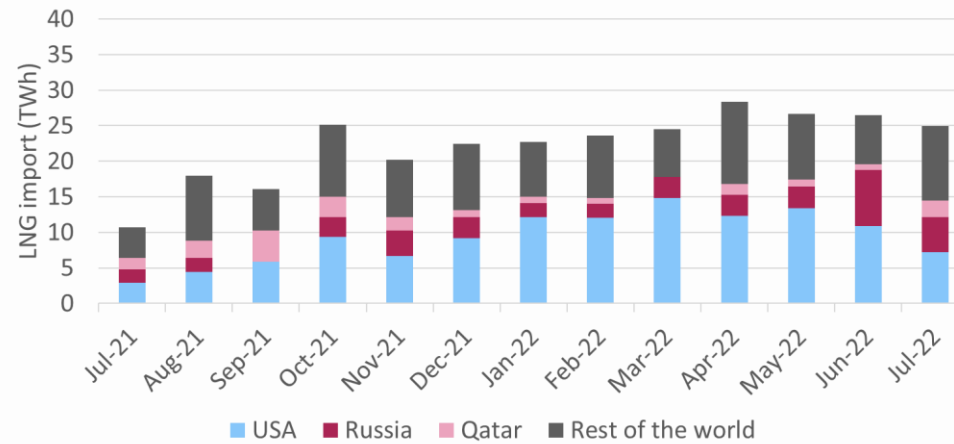
UK



Belgium



Spain

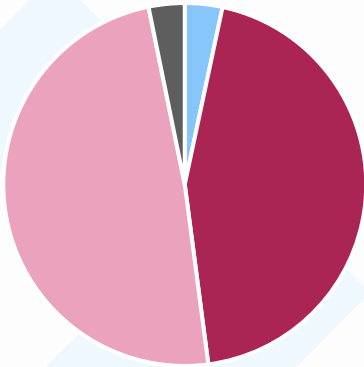


EXPERT OPINION:

- Most of Europe's LNG imports come from the USA, Russia and Qatar, but some African countries like Nigeria and Algeria are also major exporters.
- The volume of LNG imported from the USA has grown significantly since the end of 2021, and it increased further after the outbreak of the war.

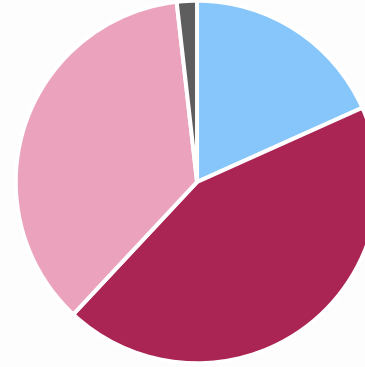
Importance of Russian LNG

Belgium - 2021



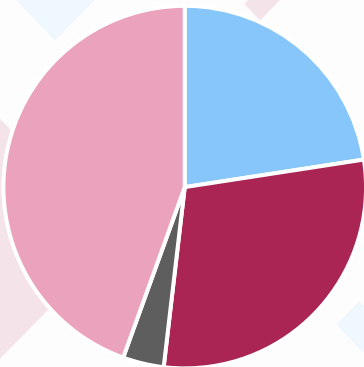
■ USA ■ Russia ■ Qatar ■ Rest of the world

Belgium - 2022 YTD



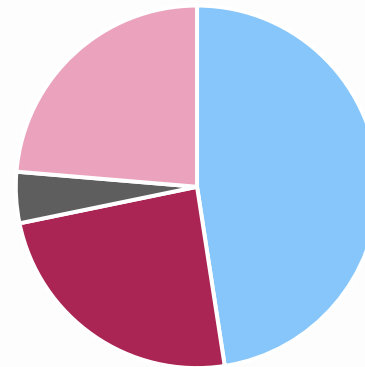
■ USA ■ Russia ■ Qatar ■ Rest of the world

France - 2021



■ USA ■ Russia ■ Qatar ■ Rest of the world

France - 2022 YTD



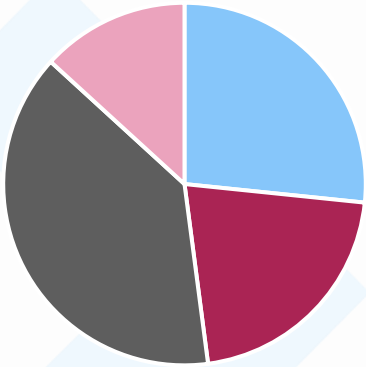
■ USA ■ Russia ■ Qatar ■ Rest of the world

EXPERT OPINION:

- In the majority of the largest European LNG importing countries, Russian LNG remains significant. In Belgium, for example, the share of Russian LNG has remained stable, however in the first 7 months of 2022, 40% more Russian LNG was imported than in the whole of last year.
- As in most countries, France has seen a significant increase in the share of US LNG while Russian LNG has remained stable. More Russian LNG is expected to arrive in France this year than all of last year

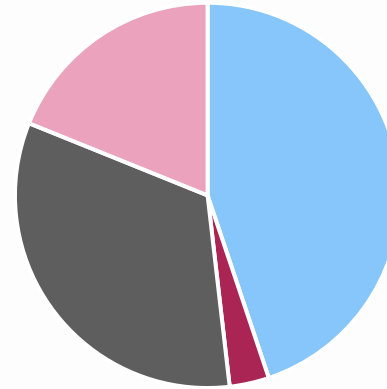
Importance of Russian LNG

UK - 2021



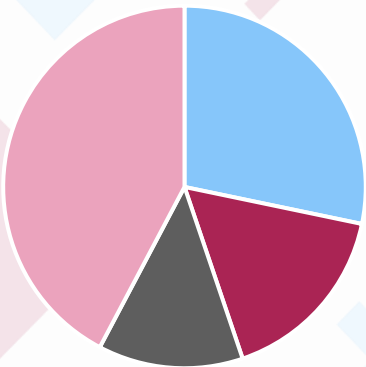
■ USA ■ Russia ■ Qatar ■ Rest of the world

UK - 2022 YTD



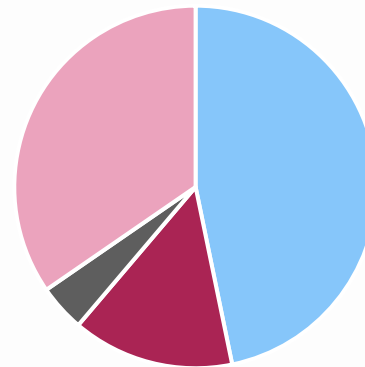
■ USA ■ Russia ■ Qatar ■ Rest of the world

Spain - 2021



■ USA ■ Russia ■ Qatar ■ Rest of the world

Spain - 2022 YTD



■ USA ■ Russia ■ Qatar ■ Rest of the world

EXPERT OPINION:

- The UK was the only country with a significant drop in Russian LNG. While last year the Russian source accounted for 21% of their LNG imports, this year it is 3% and is expected to fall further. Russian LNG has been replaced by US LNG in the UK.
- In Spain, the share of Russian LNG has also fallen slightly, but Russian-sourced LNG imports are expected to increase compared to last year.
- Basically, we see US LNG taking over the dominant role in the European market, while at the same time Russian LNG imports are increasing.

Regulatory updates - July

Sources: EC, ICIS, Lexology, Euractive, Platts



Save Gas for a Safe Winter Package:

- On 20 July the EC presented its plan with the aim of preparing for further gas supply disruptions.
- EC proposes that all MSs reduce gas demand by 15% this winter. These measures will be **voluntary at first, but would become mandatory if Russia orders a complete shut-down of gas supplies** to the EU, (possibility to call a 'Union Alert').
- Households, hospitals and other vulnerable consumers will be protected.
- The voluntary reduction plan will:
 - Encourage fuel switching away from gas, with a priority for renewables and cleaner fuels
 - Promote saving of non-critical gas for electricity and heat production
 - Incentivize consumption reduction by industry, for example through tenders or auctions for reduced gas use, interruptible contracts, and contract swaps
 - Promote reduced heating and cooling in buildings, including through MS awareness raising campaigns and action by individual citizens
 - Provide guidance to MS on prioritization of industry sectors in case of curtailments



EU energy ministers adopt 15% gas savings regulation with exemptions:

- On 26 July EU energy ministers have agreed to these voluntary gas demand reductions with **potential exemptions for critical sectors** (such as fertilizers, food production, metals, petrochemicals and glass) for MSs if the cuts are made obligatory under emergency conditions.
- Voluntary **savings of 15% from Aug 1 until March 31, 2023 could amount to 45bcm of gas**. The exact details of how this is to be achieved are yet to be fully understood, but it is expected to focus on industrial users reducing their consumption where possible so that domestic and key users (such as hospitals) are not affected.
- MSs can also request a derogation if they have overshoot their gas storage filling targets, if they are heavily dependent on gas as a feedstock for critical industries or if their gas consumption has increased by at least 8% in the past year.



The voluntary reduction plan will test EU solidarity:

- The problem with the plan is the disparity in dependence on Russian gas: amongst the 27 EU MSs, 14 obtain more than 50% of their gas from Russia. With the exception of Hungary, EU accepted the need for European solidarity, noting the interdependence of industrial supply chains, and recognizing the impact a supply shock would have on all EU economies, some argued that the uniform 15% target failed to take account of differing national circumstances.

