

# Global & Regional Market Analysis

Natural Gas

Calendar year 2019

*20/01/2020*



# Top stories of the year

**Asian LNG demand stall:** with the demand growth rate of 10-15% between 2016-2018, Asia was on a steady growing track, but in 2019 the LNG demand growth was only 1%



**Oversupplied European gas markets:** with the expanding LNG supply coming to Europe instead of Asia storages were also filled up to almost 100% level as fear from potential supply disruption



**Record low gas prices:** even with the oversupplied gas markets it was hardly expectable to have bearish price levels stable as TTF 8 EUR, CEGH 10 EUR and CEEGEX 11 EUR



**Brexit and CO<sub>2</sub>:** EUA started and finished the year around 25 EUR/t, however the price was hawkish between 20-30 EUR, mainly due to Brexit news, but price stabilized after the UK election



**Multi-year high clean spark spreads:** bearish gas markets, strong power and CO<sub>2</sub> prices led to huge growth of profitability of gas-fired power plants compared to coal-fired ones even for base load production in some cases



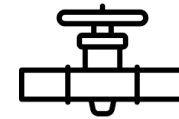


# Top stories of the year

**Nord Stream 2 and TurkStream:** while TurkStream has been built in time, US sanctions and delaying Danish permit wiped the chance to complete NS2 in 2019 and even in 2020 Q1



**Regional gas supply projects on various track:** while Croatian IP and LNG terminal progressed, investors started to withdraw from the Romanian production project



**Gas transit deal:** Russian-Ukrainian agreement loomed and delayed over the year with finally settled an agreement at the end of December for 65 bcm in 2020 and 40 bcm between 2021-2024



**Hungarian acquisitions:** While E.ON acquired Innogy, they sold ELMŰ-ÉMÁSZ to MVM and TITÁSZ to Opus, later Opus sold Mátra Power Plant to MVM, furthermore in the gas sector FGSZ acquired MGT

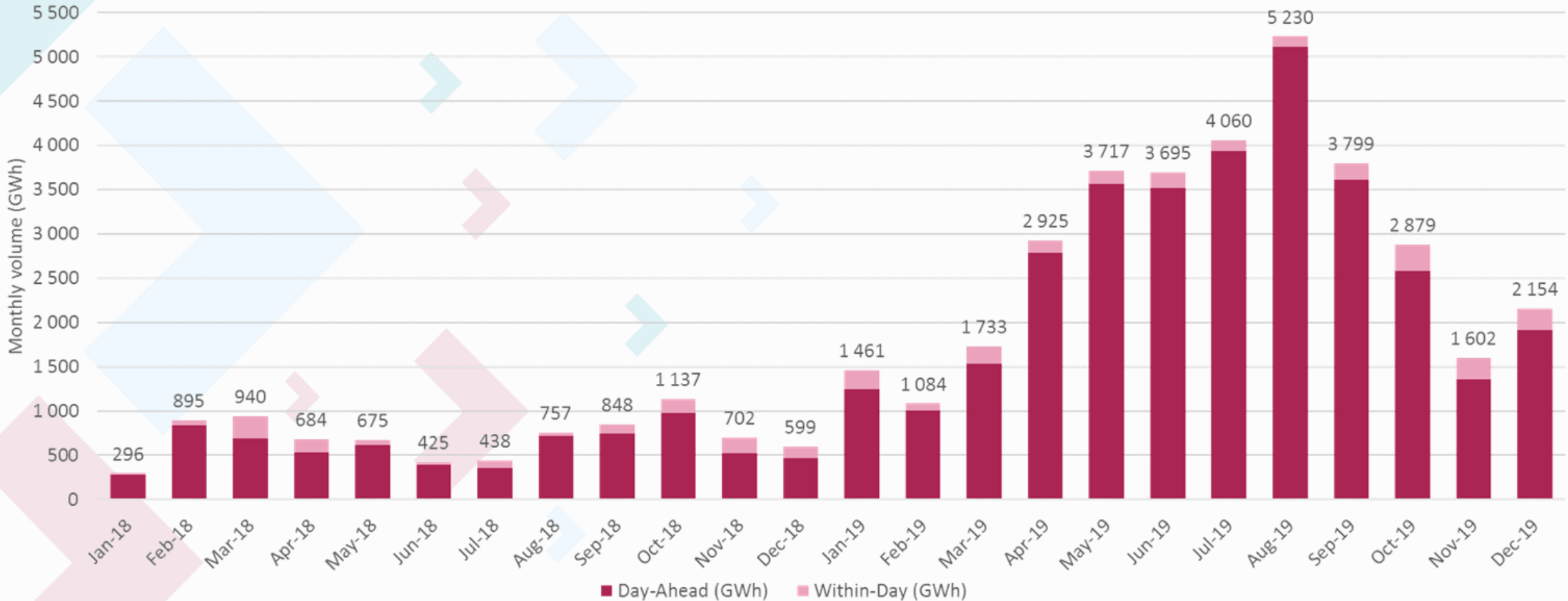


**The go-live of XBID:** which resulted record ID power volumes in every country of the 2nd wave joining: Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania and Slovenia



# Spot market monthly volumes of CEEGEX

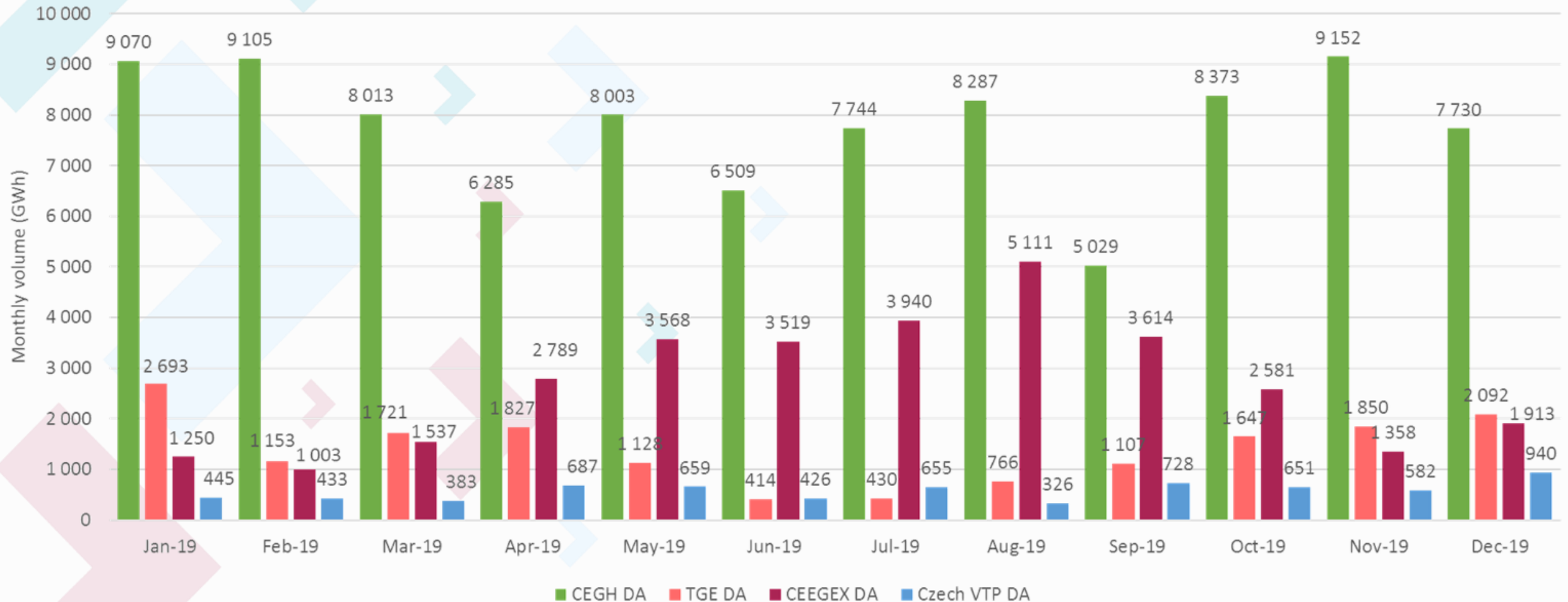
Source: CEEGEX



After declining since September, in December the traded volume on CEEGEX started rise again. The total traded volume on the CEEGEX spot market was 34.3 TWh in 2019

# Regional Day-Ahead monthly volumes

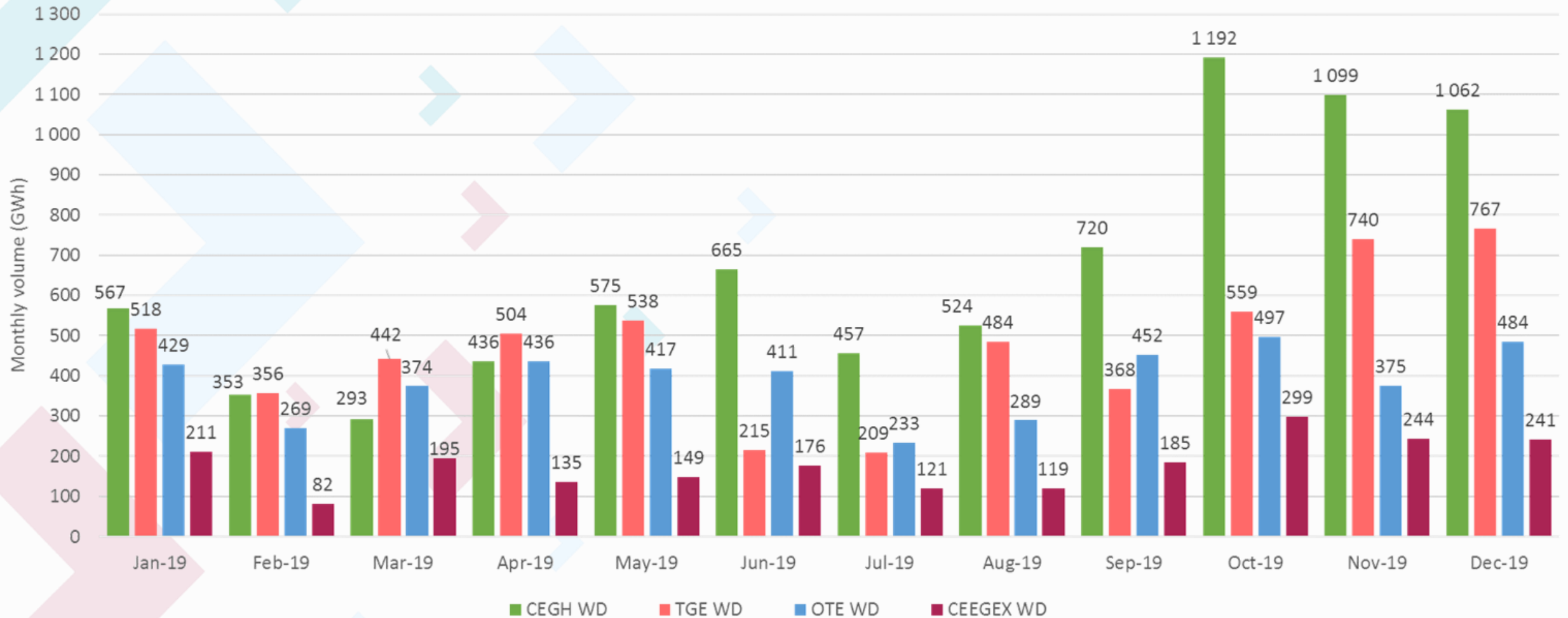
Source: CEGH, TGE, CEEGEX



CEEGEX quadrupled its liquidity for 3rd year in row with reaching 32 TWh DA volume, while CEGH DA reached 93 TWh, TGE DA 17 TWh and CEGH CZ VTP 7 TWh. The gas markets in the region are still emerging, as all of the organized natural gas markets observed increasing volumes

# Regional Within-Day monthly volumes

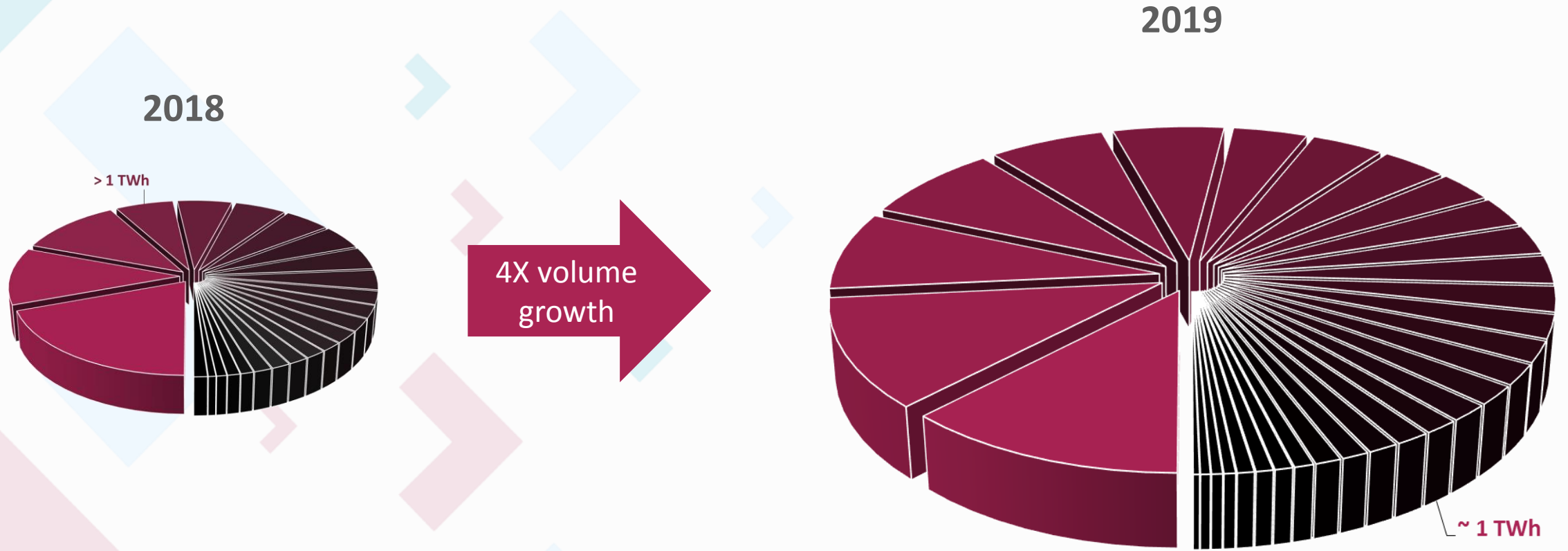
Source: CEGH, TGE, CEEGEX



CEEGEX Within-Day volumes grew 70% yoy to 2.2 TWh, especially in the second half of the year, but compared to similar sized countries there is still plenty of room for improvement

# CEEGEX yearly market share of 2018 and 2019

Source: CEEGEX

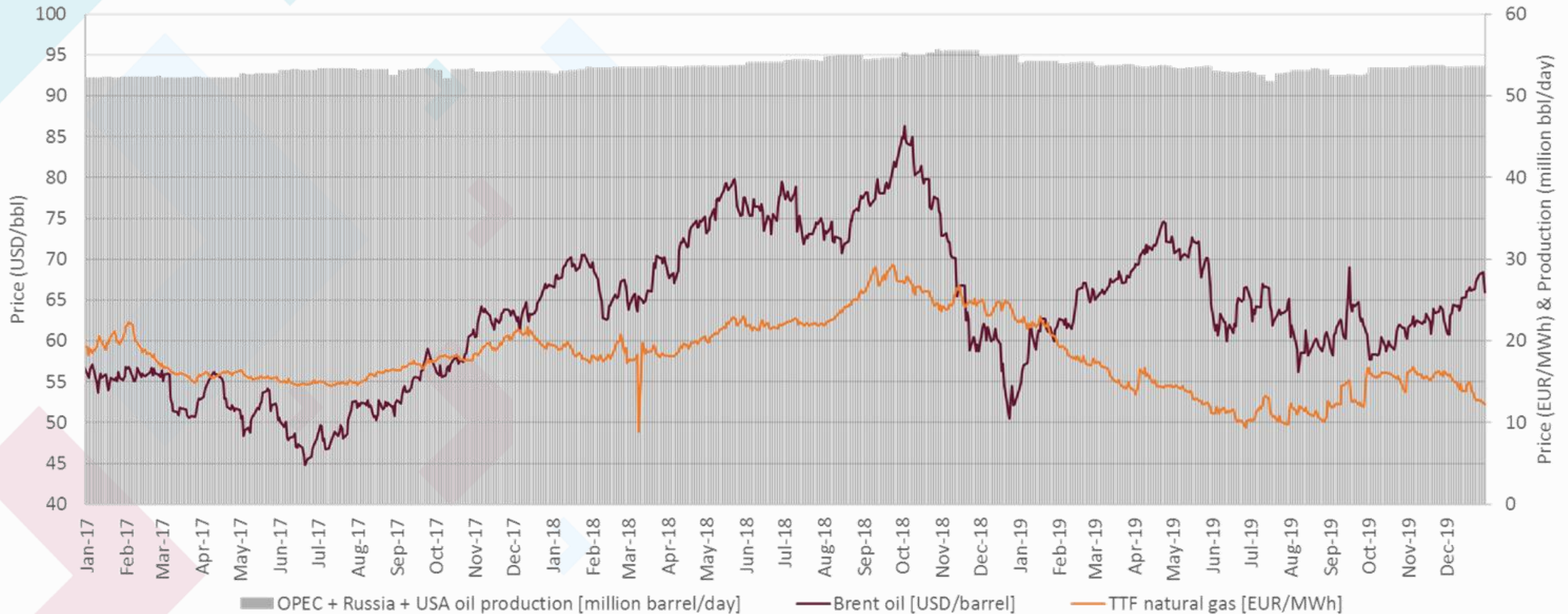


In 2019 the CEEGEX spot market was less concentrated among the biggest market participants compared to 2018 based on the traded volumes



# Oil and gas market decorrelation

Source: PEGAS, Thomson Reuters

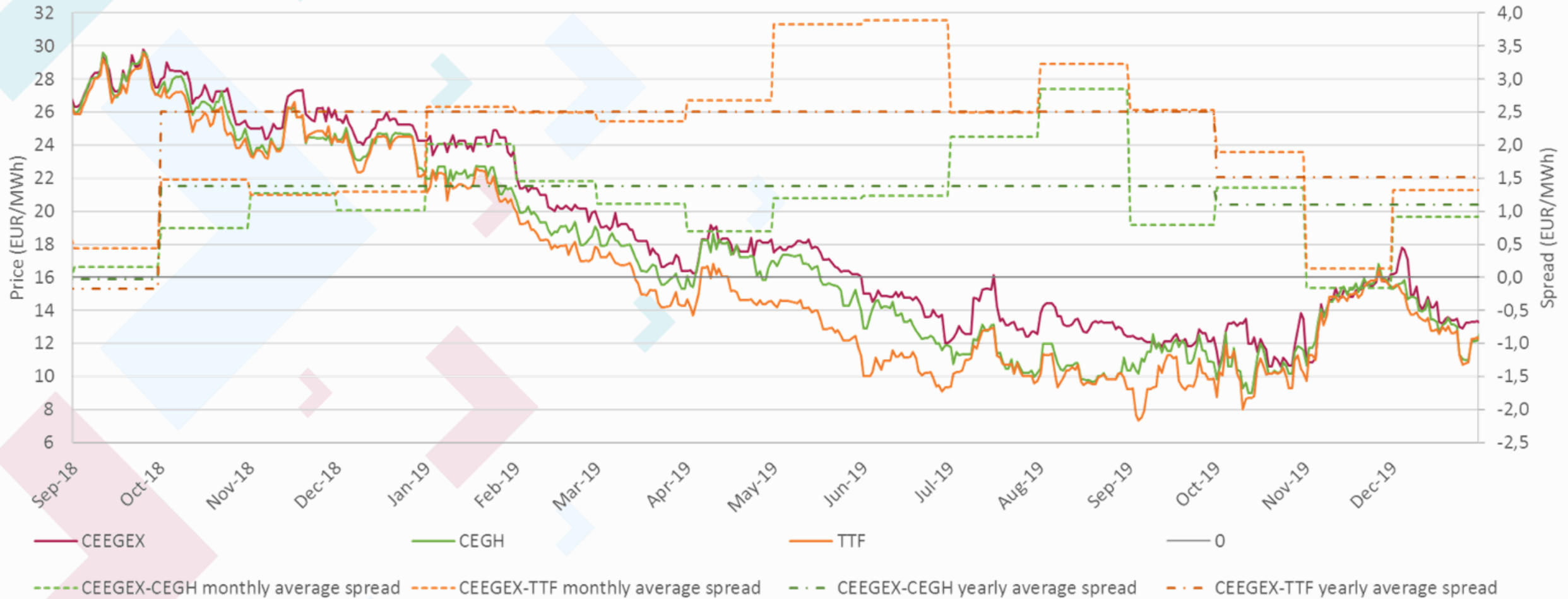


At the end of last year the oil and gas prices started to separate after a long and strong correlation. Oil supply couldn't expand further above 55 million barrel/day, while occasional events affected oil price spikes, which rallied between 50 and 75 USD in 2019



# Hungarian and benchmark spot gas prices

Source: PEGAS, CEEGEX



In 2019 never seen low prices as 11 EUR/MWh occurred on CEEGEX, while for the gas year the CEGH-CEEGEX spread averaged at 1.4 EUR. In the end of the year the prices got close to each other, resulting negative AT-HU spread on many days

# Technical analysis of CEEGEX DA prices

Source: CEEGEX



In 2019 the volatility of the trading sessions increased based on daily candles, while the bearish trend was also supported by the CEEGEX prices and the 20-day moving average remaining below the 100-day moving average for most of the year with crossing them only in November and December

# CEEGEX and HUDEX Natural Gas price spread

Source: CEEGEX, HUDEX

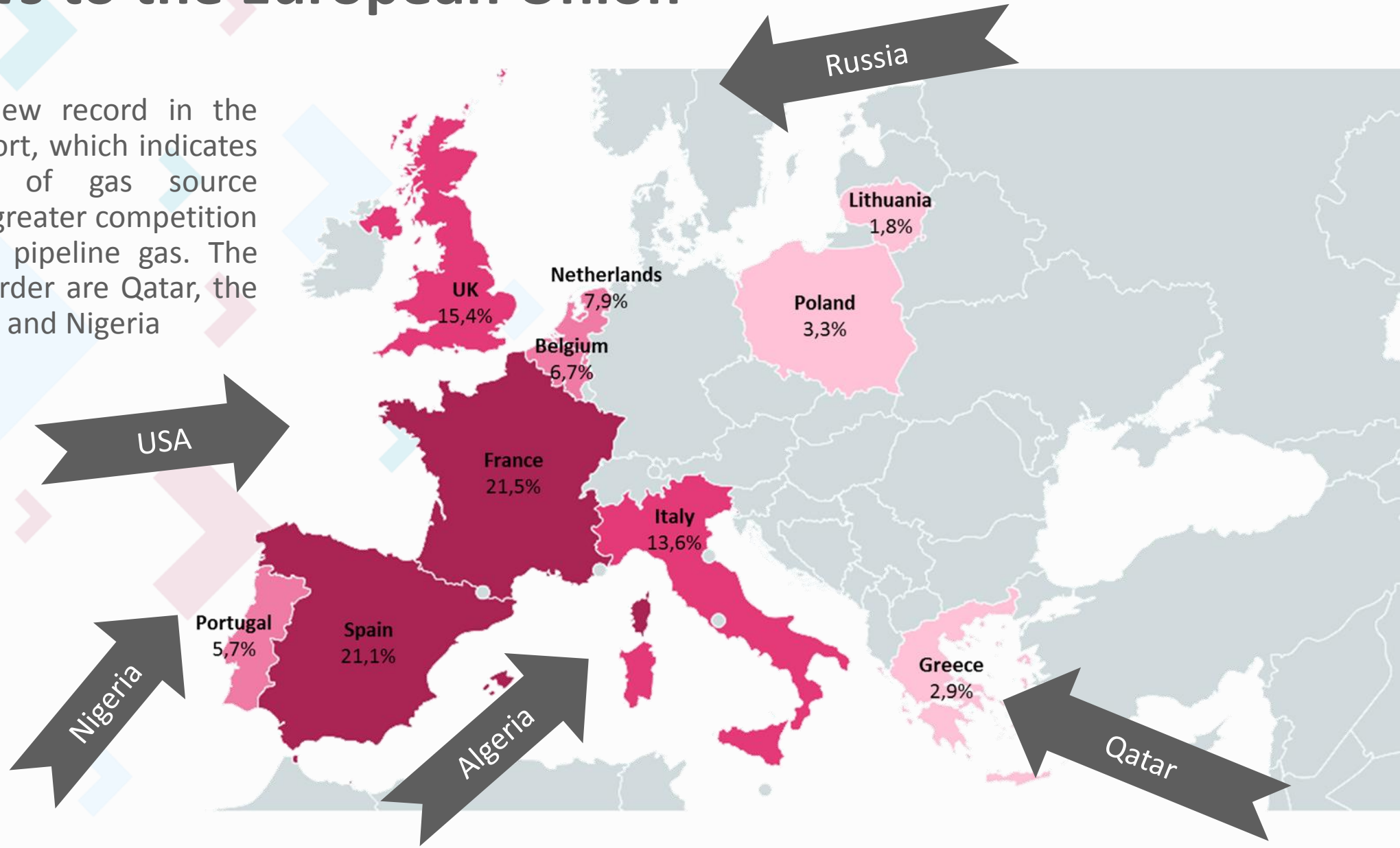


In the fall of 2019 as an expectation for the approaching winter and potential supply disruption, front month HUDEX Gas prices were higher each time than the CEEGEX spot prices developed, which resulted to an oversupplied market overall

# LNG inflows to the European Union

Source: ALSI, ICIS

2019 brought a new record in the European LNG import, which indicates further intention of gas source diversification and greater competition between LNG and pipeline gas. The main suppliers in order are Qatar, the USA, Russia, Algeria and Nigeria

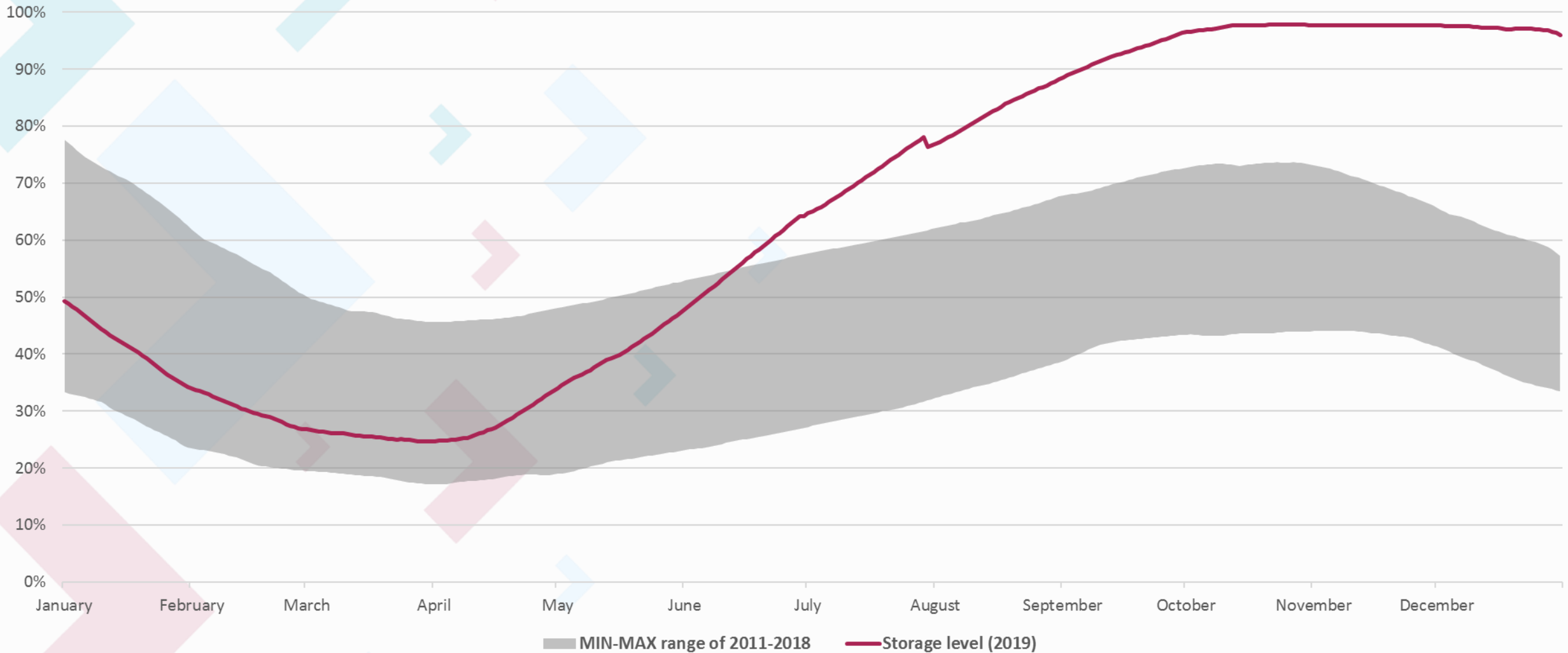


Main exporters  
to Europe

Share of EU  
import (%)

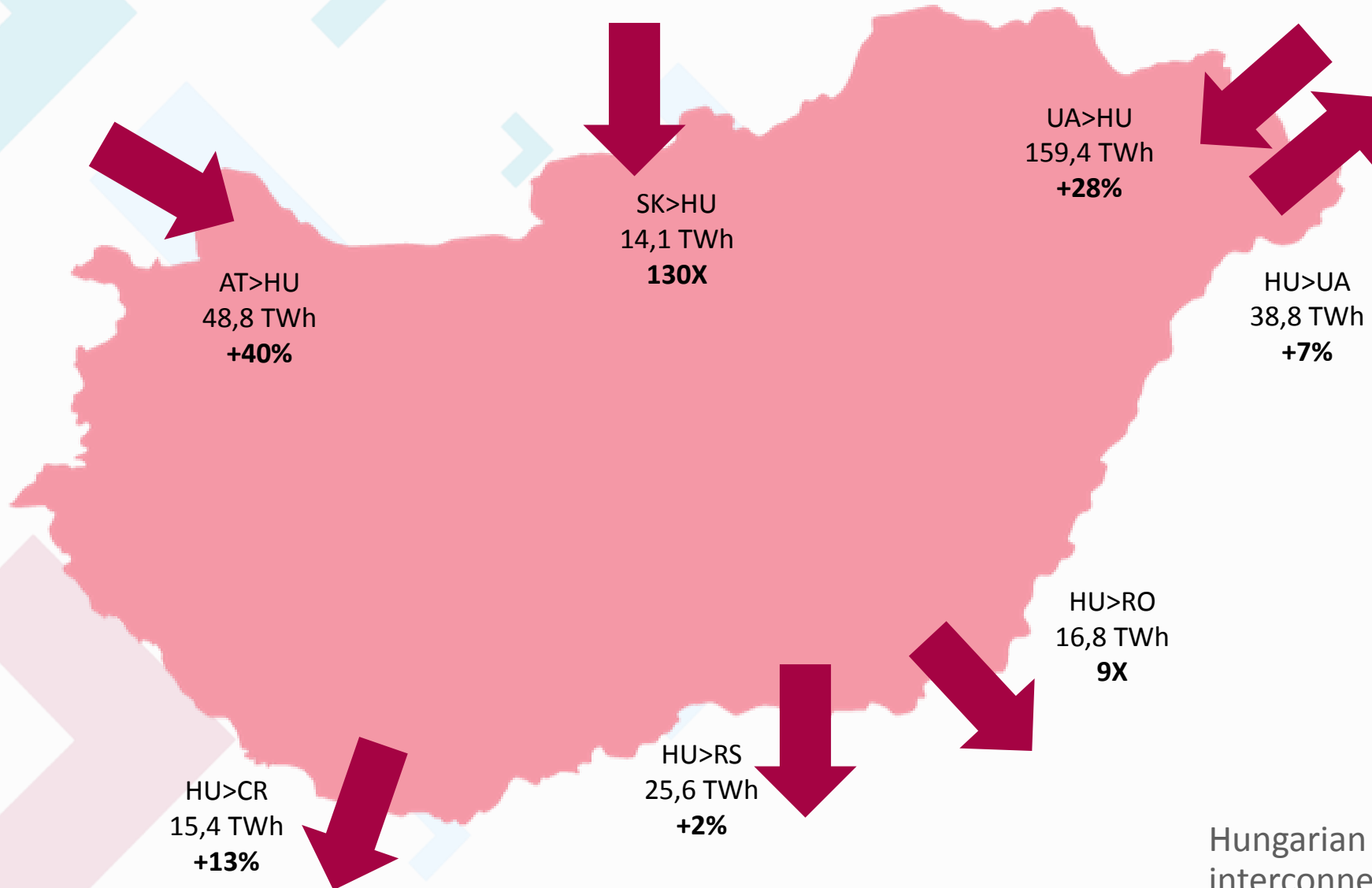
# Hungarian historic gas storage levels

Source: AGSI



Storage fulfillment levels hit record heights in 2019 due to the government directive for the safety of gas supplies. The uncertainties around the Russian-Ukrainian gas deal made the pace of UGS injection extreme high, working on maximum capacity in the summer period. In the CEE region the same trends can be observed among the countries, aiming for gas supply security

# Gas flows on Hungarian cross-border points



## Inflow summary

2018: 159,9 TWh

2019: 222,3 TWh

**+39%**

## Outflow summary

2018: 77 TWh

2019: 96,7 TWh

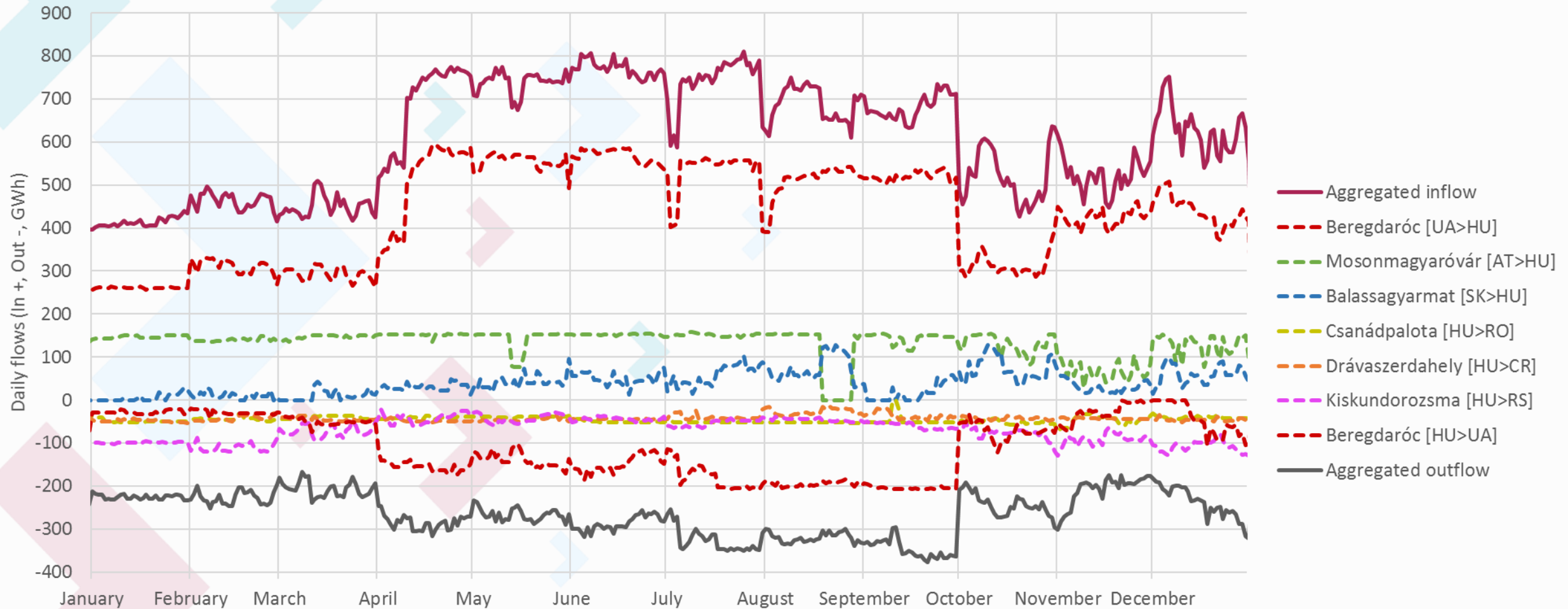
**+26%**

Hungarian gas flows increased through every interconnectors in 2019 compared to 2018



# Gas flows on Hungarian cross-border points

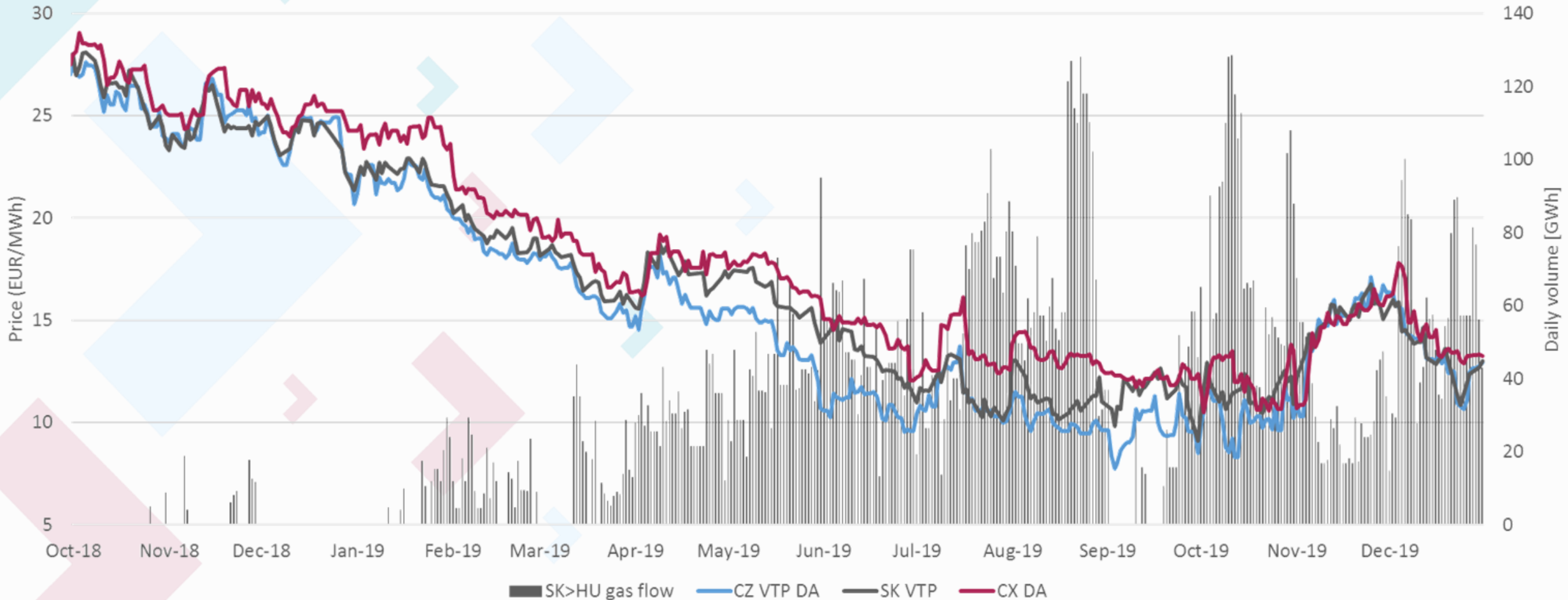
Source: FGSZ IP



The overall in- and outflows in 2019 were driven by the Ukrainian import and export quantities. Real quantities from Slovakia started to come this year, meanwhile the flows to Romania happened to operate on full capacity almost every time. The flows were driven by the gas price trends and the supply security goals of the CEE region

# Hungarian, Slovakian and Czech spot gas prices

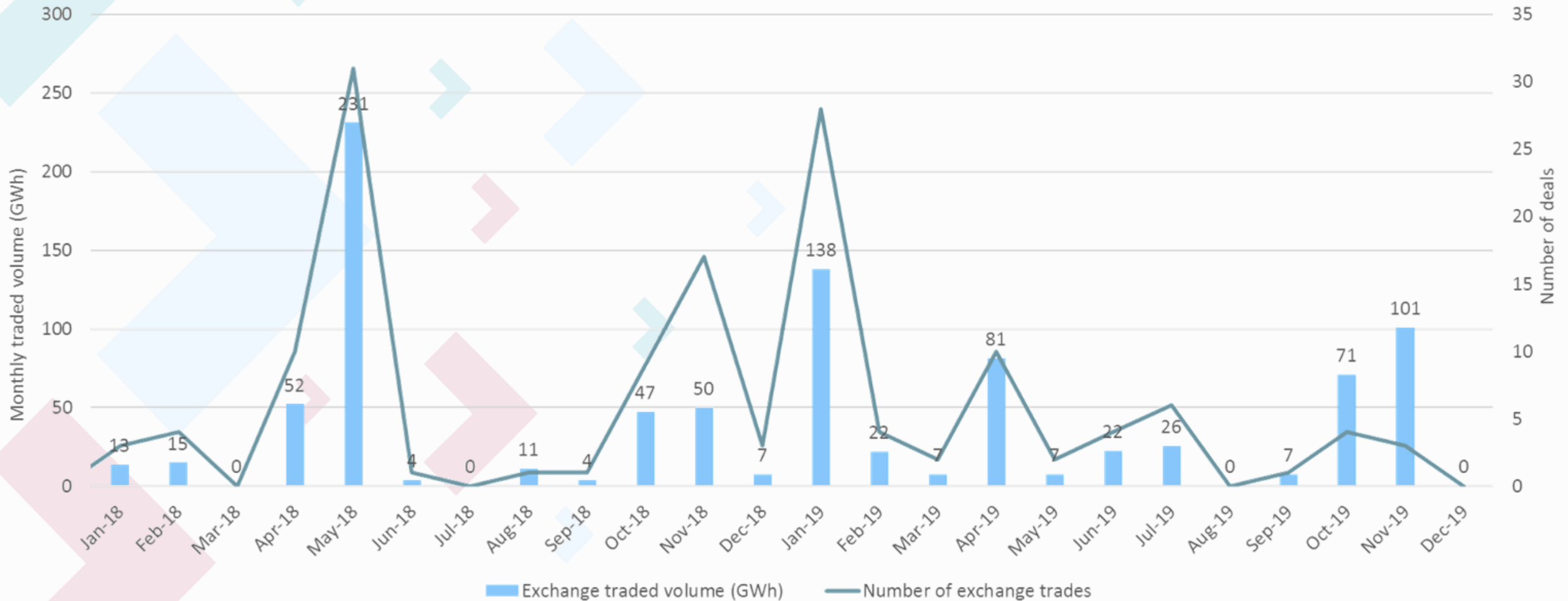
Source: CEEGEX, Thomson Reuters, ICIS



CEEGEX helped the start of gas flows via the SK>HU interconnector via its price signals, thus during the summer, when high SK-HU spread occurred, traders imported more gas from Slovakia and possibly even from Czech Republic to Hungary

# HUDEX Natural Gas Segment monthly volume

Source: HUDEX



64 deals were made on the HUDEX Natural Gas Segment totaling the traded volume to 483 GWh, which is an improvement after 434 GWh in 2018